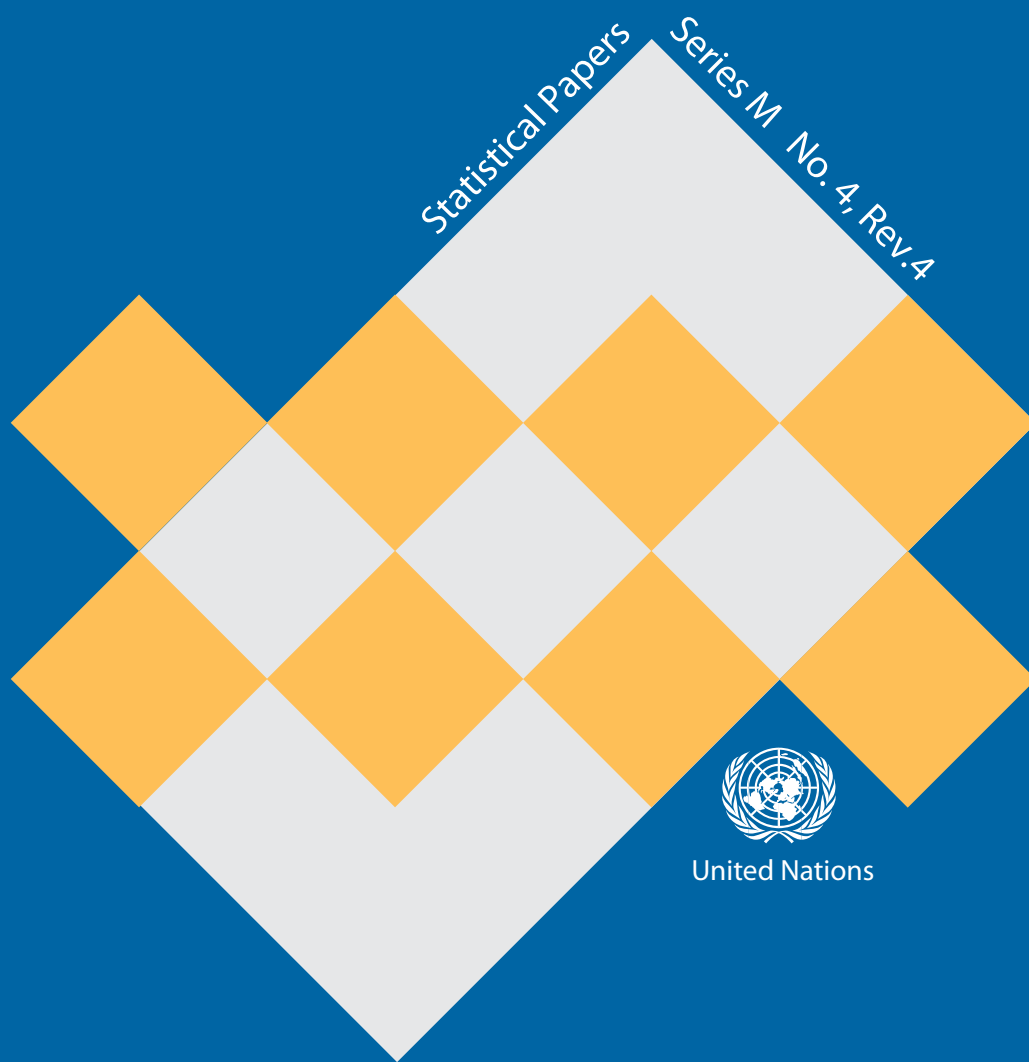




# International Standard Industrial Classification of All Economic Activities (ISIC), Rev.4





Department of Economic and Social Affairs  
Statistics Division

Statistical papers

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# **International Standard Industrial Classification of All Economic Activities**

## **Revision 4**



United Nations  
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# Department of Economic and Social Affairs

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## Preface

The International Standard Industrial Classification of All Economic Activities (ISIC) is the international reference classification of productive activities. Its main purpose is to provide a set of activity categories that can be utilized for the collection and reporting of statistics according to such activities.

Since the adoption of the original version of ISIC in 1948, the majority of countries around the world have used ISIC as their national activity classification or have developed national classifications derived from ISIC. ISIC has therefore provided guidance to countries in developing national activity classifications and has become an important tool for comparing statistical data on economic activities at the international level. Wide use has been made of ISIC, both nationally and internationally, in classifying data according to kind of economic activity in the fields of economic and social statistics, such as for statistics on national accounts, demography of enterprises, employment and others. In addition, ISIC is increasingly used for non-statistical purposes.

This fourth revision of ISIC (ISIC, Rev.4) is the outcome of a review process that spanned several years and involved contributions from many classifications experts and users around the world. This process resulted in an ISIC structure that is more detailed than the previous version, responding to the need to identify many new industries separately. This is especially applicable in the case of services. Moreover, the relevance of the Classification has been enhanced with the introduction of new high-level categories to better reflect current economic phenomena. A new section entitled "Information and communication" (see part three, sect. J) is one such innovation. Comparability has also been enhanced with a number of other regional activity classifications, thus making this version of ISIC a much improved tool for international data comparison.

A number of alternate aggregations have been included in the present publication. They provide analytical tools for areas which, for conceptual reasons, do not lend themselves to aggregation within the existing ISIC structure. Among the alternate aggregations included in this version of ISIC are aggregations for information and communications technology, the informal sector and non-profit institutions, as well as two aggregations for national accounts-type analysis, one at very aggregated and another at an intermediate level of ISIC.

The structure of the fourth revision of ISIC was considered and approved by the Statistical Commission at its thirty-seventh session, in March 2006,<sup>1</sup> as the internationally accepted standard. It now replaces the third revision of the classification<sup>2</sup> and its update, Revision 3.1,<sup>3</sup> which have been in use since 1989 and 2002, respectively.

<sup>1</sup> See *Official Records of the Economic and Social Council, 2002, Supplement No.4 (E/2006/24)*, chap. I, para. 3, item 37/105 (a).

<sup>2</sup> *Statistical Papers, No.4, Rev.3* (United Nations publication, Sales No. E.90.XVII.11).

<sup>3</sup> *Statistical Papers, No.4, Rev.3.1* (United Nations publication, Sales No. E.03.XVII.4).



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## Historical background

The original version of the International Standard Industrial Classification of All Economic Activities (ISIC)<sup>4</sup> was adopted in 1948. In that connection, the Economic and Social Council adopted resolution 149 A (VII) of 27 August 1948, which read:

*“The Economic and Social Council,*

*“Taking note of the recommendation of the Statistical Commission regarding the need for international comparability of economic statistics, and,*

*“Taking note of the International Standard Industrial Classification of All Economic Activities which the Statistical Commission has developed with the advice and assistance of Member Governments,*

*“Recommends that all Member Governments make use of the International Standard Industrial Classification of Economic Activities either by:*

*“(a) Adopting this system of classification as a national standard, or*

*“(b) Rearranging their statistical data in accordance with this system for purposes of international comparability”.*

Wide use has been made of ISIC both nationally and internationally in classifying data according to kind of economic activity in the fields of economic statistics, such as for production or national income, employment, population and others. A number of countries have utilized ISIC as the basis for developing their national industrial classifications. Substantial comparability has been attained between the industrial classifications of many other countries and ISIC by ensuring, as far as practicable, that the categories at detailed levels of national classifications fitted into only one category of ISIC. An increasing number of countries have adapted their national activity classifications or can provide statistical series according to ISIC. The United Nations, the United Nations Industrial Development Organization (UNIDO), the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO) and other international bodies use ISIC when publishing and analysing statistical data.

Experience in the use of ISIC has revealed the need for periodic review of the structure and definition of its categories and underlying principles. Changes take place in the organization of economic activities and new types of economic activities become important, while new analytical requirements develop for data classified according to kind of economic activity. Over the decades, continuing experience in the use of ISIC and the corresponding national classifications reveal aspects that should be amplified, clarified or improved in other ways. For these reasons, the Statistical Commission initiated reviews and revisions of ISIC in 1956, 1965, 1979 and again in 2000. While continuity, i.e., comparability between the revised and preceding versions of ISIC, has always been a major concern expressed by the Commission, the accumulating changes in the economic structure and production patterns around the world require a careful balancing of continuity with the need for relevance of ISIC and its comparability with other existing industry classifications.

<sup>4</sup> *Statistical Papers*, No. 4, Lake Success, New York, 31 October 1949.

<sup>5</sup> *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev.1 (United Nations publication, Sales No. E.58.XVII).

<sup>6</sup> *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev.2 (United Nations publication, Sales No. E.68.XVII.8).

<sup>7</sup> *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev.3 (United Nations publication, Sales No. E.90.XVII.1).

<sup>8</sup> *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev.3.1 (United Nations publication, Sales No. E.03.XVII.4).

The first revision of ISIC (ISIC, Rev.1) was issued in 1958, after having been considered by the Statistical Commission at its tenth session.<sup>5</sup> The second revision (ISIC, Rev.2) was issued in 1968 after proposals for the revision had been considered and approved by the Commission at its fifteenth session, in 1968.<sup>6</sup> The third revision of ISIC (ISIC, Rev.3) was considered and approved by the Commission at its twenty-fifth session, in 1989, and issued in 1990.<sup>7</sup> The update to the third revision (ISIC, Rev.3.1) was considered and approved by the Commission at its thirty-third session, in 2002, and issued in 2004.<sup>8</sup>

The third and fourth revisions of ISIC put increased emphasis on harmonization with other activity classifications and product classifications, adding considerable complexity and constraints that did not apply in earlier revisions of ISIC. As ISIC occupies a central position in the international comparison and analysis of a wide range of statistics, a great deal of attention was devoted to ensuring that ISIC would be compatible with both the economic structure and the statistical practice and needs of the different countries of the world. Both revisions have also introduced an increasing level of detail, especially in the part dealing with service activities, reflecting the growth of this sector of the economy in most countries of the world. In addition, harmonization with other classifications has improved the usefulness of ISIC for many analytical and descriptive purposes, such as within the context of the extended elaboration of services in the Central Product Classification (CPC).

## The fourth revision of ISIC

In the years since the publication of the third revision of ISIC, the economic structure in many countries of the world has changed at an unprecedented rate. The emergence of new technologies and new divisions of labour between organizations has created new types of activities and new forms of industries, posing a challenge for both providers and users of statistical data. In response to their growing demands, the Expert Group on International Economic and Social Classifications, at its fourth meeting in 1999, considered the need for a revision of ISIC to better reflect changed structures and analytical requirements. Realizing that a full revision would require a longer time to complete, the Expert Group recommended an update to the third revision of ISIC, which became Revision 3.1 scheduled for 2002, to address some smaller immediate concerns regarding the classification and at the same time start preparation for the fourth revision of ISIC, which would be completed in 2006.

The objectives of the fourth revision of ISIC were formulated in terms of improving and strengthening its relevance and comparability with other classifications, while considering its continuity. Relevance reflected the need to incorporate new economic production structures and activities, while comparability determined the identified need for a convergence of the Australian and New Zealand Standard Industrial Classification (ANZSIC), the General Industrial Classification of Economic Activities within the European Communities (NACE), the North American Industry Classification System (NAICS) and other activity classifications used around the world. This underscored the realization that comparability should be a very important factor for the fourth revision of ISIC. Continuity reflected the important restriction that changes should only be made where the benefits in terms of relevance or comparability outweighed the costs in terms of changes made to the previous versions of the classification. In later stages of the revision process, it became more and more clear that continuity was an important element for many countries.

The development work of different versions of the ISIC, Rev.4 draft, the questionnaires and related materials was carried out by United Nations Statistics Division in consultation with the Technical Subgroup of the Expert Group on International Economic and Social Classifications. The process benefited from the guidance of the Statistical Commission and the Expert Group, which met three times between June 2001 and 2005. At each meeting, the Statistical Commission and the Expert Group reviewed the process employed and progress made during the revision and set or confirmed new guidelines for the next steps in the revision process.

The Technical Subgroup met for a total of 10 (usually week-long) meetings to elaborate the details of the classification. Additional input in this process was provided through seven regional workshops conducted or initiated by the United Nations Statistics Division, meetings with the Food and Agriculture Organization of the United Nations (FAO), the Working Party on Indicators of the Information Society, the Association of South-East Asian Nations (ASEAN) and the Observatoire économique et statistique d'Afrique subsaharienne (AFRISTAT) on specific subjects, as well as through several meetings of the NAICS-NACE convergence project, which the Statistics Division attended. These meetings and workshops allowed countries and specialized agencies to provide additional input and also served as a way to inform them about the progress and challenges of the ISIC revision process.

Following the recommendations by the Expert Group, the Statistical Commission confirmed that the consultation with all member countries in the revision process should be a priority. This consultation included not only convening the above-mentioned workshops and meetings, but also disseminating questionnaires seeking input from all countries during different stages of the revision process. On the one hand, this consultation allowed the direct involvement of all major stakeholders, in particular those involved with research already carried out on the convergence of industry classifications; on the other hand, it allowed the deliberation of different viewpoints arising out of different economic settings, which needed to be considered to ensure the relevance of ISIC, Rev.4 as an international reference classification.

Three rounds of country consultations were undertaken and detailed questionnaires were prepared for each round, covering successively more detailed issues and spanning a range from conceptual and broad structure issues to boundary questions, the detailed classifications structure and explanatory notes.

While some of the rules for the application of ISIC, Rev.4 have been changed and the criteria for the construction of the classification and the formulation of explanatory notes have been reviewed, the overall characteristics of ISIC remain unchanged. The detail of the classification has substantially increased. For service-producing activities, this increase is visible at all levels, including the top level, while for other activities, such as agriculture, the increase in detail has affected mostly the lower levels of the classification.

In this fourth revision of ISIC, great efforts have been made to address the need for convergence between existing activity classifications at the international and multi-national levels. Experience with the implementation of classifications and development work on classifications carried out in countries around the world have greatly contributed to ISIC, Rev.4. Explanatory notes have been extended to provide additional detail, allowing for more accurate interpretation of the content and boundaries of individual classes, which should lead to a less ambiguous application of ISIC, Rev.4.

The rationale for the final ISIC, Rev.4 structure, together with illustrative examples of the interpretation of the classification, will be discussed in the forthcoming *Companion Guide to ISIC and CPC*.

## Acknowledgements

In carrying out the revision process, the active participation of the Statistical Commission, the Expert Group on International Economic and Social Classifications and its Technical Subgroup were all vital to the development work that was done.

Further inputs into the revision process were obtained from regional workshops and meetings with international and regional agencies, such as the Food and Agriculture Organization of the United Nations (FAO), the Working Party on Indicators of the Information Society, the Association of South-East Asian Nations (ASEAN) and the Observatoire économique et statistique d'Afrique subsaharienne (AFRISTAT), as well as the NAICS-NACE convergence project.

During the critical years of the finalization of ISIC, the process benefited from the coordination and support of the Chairman of the Technical Subgroup, Paul Johannis of Statistics Canada, and the following members of the Subgroup: Mara Riestra (Argentina), Carlos Rossi (Argentina), Mike McGrath (Australia), Gillian Nicoll (Australia), Branco Vitas (Australia), Norbert Rainer (Austria), Alice Born (Canada), Emile Bruneau (France), V. Arora (India), Vijay Goel (India), A. C. Kulshreshtha (India), Rajeev Lochan (India), Ajay Mehra (India), Swaraj K. Nath (India), Akira Genba (Japan), Kazuhiko Matsuo (Japan), Koki Toida (Japan), Kenichi Takenaga (Japan), Hans van Hooff (Netherlands), Albert Jacques (Netherlands), Khalid Al Mudhafar (Oman), John Murphy (United States), Niels Langkjaer (Eurostat), Alice Zoppè (Eurostat), Xiaoning Gong (FAO), Robert Mayo (FAO), Margaret Fitzgibbon (IMF), Nataliya Ivanik (IMF), William Cave (OECD), Shaila Nijhowne (UNWTO).

Final coordination of ISIC was undertaken by Ivo Havinga of the United Nations Statistics Division, in close collaboration with Ralf Becker, also of the United Nations Statistics Division, who was directly responsible for the different stages of the revision process, including the organization of the classification, the preparation of the text of the explanatory notes; and the organization of meetings and consultation rounds. Mr. Becker was assisted by several other staff members of the Statistics Division, including Karen Cassamajor, Jurgen Schwarzler, Gulab Singh, Adriana Skenderi and Herman Smith.

## Support for ISIC users

The United Nations Statistics Division is responsible for the development and maintenance of ISIC, Rev.4. The developers of national activity classifications and other institutions using ISIC may find it in their interest to establish contact with the Statistics Division. Users of ISIC may thus receive notification about plans for updates or revisions, information concerning interpretations and rulings, and general technical support in applying the classification. Users are encouraged to bring to the attention of the Statistics Division any difficulties they encounter in the implementation of ISIC. They are also encouraged to request clarification, share their experience and remarks with regard to the adequacy of the classification, and provide ideas or proposals for enhancing its usefulness.

A *Companion Guide to ISIC and CPC* is being published as a supplementary publication to ISIC, Rev.4. The Companion Guide will address in detail the scope of ISIC and the rationale for the chosen ISIC structure, providing explanations and, where possible, illustrative material on the application of the rules and structure of the classification. It will also address in detail some of the new or newly defined areas of interest in the classification, as well as the overall description in terms of activities involved and products produced and transacted, thus elaborating on the link between ISIC and CPC. The *Companion Guide to ISIC and CPC* is expected to be a useful tool in assisting national statistical offices and other users in implementing the classification.

Updated information on ISIC, indexes, proposals for revisions and the revision process are available in the Classifications Registry on the United Nations international economic and social classifications web site at <http://unstats.un.org/unsd/class>.

Communications should be addressed to the Director, United Nations Statistics Division, Attention: Economic Statistics and Classifications Section, by mail:

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## Acronyms and abbreviations

AFRISTAT	Observatoire économique et statistique d'Afrique subsaharienne
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASEAN	Association of South-East Asian Nations
COFOG	Classification of the Functions of Government
CPC	Central Product Classification
EBOPS	Extended Balance of Payments Services Classification
FAO	Food and Agriculture Organization of the United Nations
GDP	gross domestic product
HS	Harmonized Commodity Description and Coding System
ICNPO	International Classification of Non-Profit Organizations
ILO	International Labour Organization
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
ISIC	International Standard Industrial Classification of All Economic Activities
NACE	Statistical Classification of Economic Activities in the European Community
NAICS	North American Industry Classification System
SINAP	Integrated System of Classifications of Activities by Products
SITC	Standard International Trade Classification
SNA 93	System of National Accounts, 1993
TSA	Tourism Satellite Account
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNIDO	United Nations Industrial Development Organization
UNWTO	World Tourism Organization



PART ONE

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## **Introduction**



# Chapter I

## Overview

1. The International Standard Industrial Classification of All Economic Activities (ISIC) consists of a coherent and consistent classification structure of economic activities based on a set of internationally agreed concepts, definitions, principles and classification rules. It provides a comprehensive framework within which economic data can be collected and reported in a format that is designed for purposes of economic analysis, decision-taking and policy-making. The classification structure represents a standard format to organize detailed information about the state of an economy according to economic principles and perceptions.

2. In practice, the classification is used for providing a continuing flow of information that is indispensable for the monitoring, analysis and evaluation of the performance of an economy over time. In addition to its primary application in statistics and subsequent economic analysis, where information needs to be provided for narrowly defined economic activities (also referred to as “industries”), ISIC is increasingly used also for administrative purposes, such as in tax collection, issuing of business licenses etc.

3. This fourth revision of ISIC enhances the relevance of the classification by better reflecting the current structure of the world economy, recognizing new industries that have emerged over the past 20 years and facilitating international comparison through increased comparability with existing regional classifications.

### Main features of the classification

4. The scope of ISIC in general covers productive activities, i.e., economic activities within the production boundary of the System of National Accounts (SNA).<sup>9</sup> A few exceptions have been made to allow for the classification of activities beyond the production boundary but which are of importance for various other types of statistics.<sup>10</sup>

5. These economic activities are subdivided in a hierarchical, four-level structure of mutually exclusive categories, facilitating data collection, presentation and analysis at detailed levels of the economy in an internationally comparable, standardized way. The categories at the highest level are called sections, which are alphabetically coded categories intended to facilitate economic analysis. The sections subdivide the entire spectrum of productive activities into broad groupings, such as “Agriculture, forestry and fishing” (section A), “Manufacturing” (section C) and “Information and communication” (section J). The classification is then organized into successively more detailed categories, which are numerically coded: two-digit divisions; three-digit groups; and, at the greatest level of detail, four-digit classes.

6. The classification is used to classify statistical units, such as establishments or enterprises, according to the economic activity in which they mainly engage. At each

<sup>9</sup> The 1993 SNA has been revised in 2008. New concepts introduced in the revised SNA have been taken into account during the preparation of ISIC, Rev.4. All remarks citing SNA refer to the revised version of SNA as prepared in 2008. However, since the final print publication of the revised SNA (2008 SNA) was not available at the time of preparation of this introduction, no references to specific paragraphs or chapters in 2008 SNA could be given.

<sup>10</sup> See para. 29 below.

level of ISIC, each statistical unit is assigned to one and only one ISIC code, as set out below. The set of statistical units that are classified into the same ISIC category is then often referred to as an industry, such as “the furniture industry”, which would refer to all units classified in ISIC division 31 (Manufacture of furniture), or the “construction industry”, which would refer to all units classified in ISIC section F (Construction). This standardized categorization or subdivision of the complete set of producing units in an economy makes ISIC an important tool for socio-economic statistics that need to be arranged in accordance with the productive system of the economy.

### **Principles, definitions and classification rules**

7. All categories at each level of the classification are mutually exclusive. The principles and criteria that have been used to define and delineate these categories have not changed from previous versions of ISIC and are based on the inputs of goods, services and factors of production; the process and technology of production; the characteristics of outputs; and the use to which the outputs are put. Economic activities that are similar in respect of these criteria have been grouped together in the categories of ISIC. At the most detailed level of the classification, preference has been given to the process and technology of production to define individual ISIC classes, particularly in the classes related to services. At higher levels, characteristics of outputs and the use to which outputs are put become more important to create analytically useful aggregation categories. For many analytical purposes and for reasons of historical continuity, a strict application of these criteria has not proven useful. The weight that has been applied to each of these criteria will therefore invariably change throughout the classification. In addition, practical considerations, such as the organization of economic production in most countries and the need for stability of the classification, are factors that have also influenced the way categories have been defined at different levels of the classification.

8. The content and scope of each category in the classification is defined through a detailed explanatory note, which also highlights boundary issues by providing examples of activities that may appear similar but are classified elsewhere in ISIC.

9. In order to apply the classification to a particular statistical unit, information on the activity in which the unit engages has to be obtained. This information is then used to find the category in ISIC that corresponds to this activity, based on the definitions provided in the explanatory notes.

10. In practice, it will often be the case that a statistical unit (no matter how narrowly defined) engages in a variety of activities, which may be linked to each other or be completely independent. In order to arrive at a single ISIC code for these units, ISIC provides a set of rules that have to be applied in the process of classifying a given unit. Section II.C below outlines these rules and gives examples for their application in special cases.

### **Harmonization with other statistical classification systems**

11. ISIC has a central position among existing classifications of economic activities, as well as other economic classifications, such as those for products. ISIC provides the internationally accepted standard for categorizing producing units within an economy, which allows for data comparison at the national and international levels. During the revision process of ISIC, Rev.4, special attention was paid to improving the links between existing activity classifications, especially at the regional level, to

facilitate future international data comparison. In the course of this revision, a review of other activity classifications was undertaken, and subsequent changes to ISIC were introduced to further harmonize these existing classifications with ISIC. This harmonization has led to the adoption of new concepts in ISIC that were developed and tested in other classifications, as well as a review of individual category definitions (in ISIC and other classifications) to improve the comparability of these classifications with ISIC.

12. Harmonization of ISIC with other classifications that have conceptual linkages to some part or all of the economic structure has also been considered in the process of developing ISIC, Rev.4. This applies in particular to product classifications.

### **Aggregates of ISIC**

13. ISIC disaggregates the economy into the more detailed levels of industries and industry groups, as well as the more aggregated levels of divisions and sections. It can be used to examine particular industries or industry groups or to analyse the economy as a whole by disaggregating it to different levels of detail. For analytical purposes, it is important to implement ISIC at its lower levels of detail to be able to observe and analyse the economic interactions taking place between the different activities, allowing understanding of the interlinkages of the production of an economy.

14. The categories of ISIC (especially higher-level categories) have become an accepted way of subdividing the overall economy into useful coherent industries that are widely recognized and used in economic analysis, and as such they have become accepted groupings for data used as indicators of economic activity.

15. While ISIC provides a standard way of grouping economic activities, there is sometimes a need to provide data on other sets of economic activities that may cross the boundaries of existing high-level ISIC categories but have become of interest to the statisticians, economists and policy makers. An example of this is the interest in measuring the information economy, which includes activities from a wide range of ISIC sections, including section C (Manufacturing), section J (Information and communication) and others. Since such groupings cannot be built into the existing ISIC structure, additional alternative aggregations can be created to serve these special data needs and provide a standard way of presenting such data. The present publication provides a set of internationally agreed alternative aggregations that have been defined for ISIC, Rev.4.

### **International acceptance of ISIC**

16. ISIC was developed with rigorous consultation and collaboration among all stakeholders—national statistical offices, international organizations, academia and others. Through this inclusive revision process, it has been possible to include features in ISIC that make it useful and attractive for the majority of countries around the world. ISIC has been recommended to countries as an international standard and model in the development and/or adaptation of their national activity classifications.

17. While ISIC was developed with a view to categorizing economic activities for national accounts and other economic analysis purposes, its use extends to data collection, tabulation, analysis and presentation for a variety of social and environmental applications, such as the link between the economy, education and health sectors and the environment at the national and international levels. Moreover, at the

national level, ISIC and its national versions are increasingly used for administrative and business purposes, such as the categorization of revenues and expenditures.

18. Previous versions of ISIC have been used—either directly or through compatible national adaptations—by the majority of countries around the world. It is expected that ISIC, Rev.4 will continue to play this role as the only fully internationally accepted activity classification. Apart from the increasing number of countries that have adapted their national activity classifications or can provide statistical series according to ISIC, the classification is used by many international organizations when publishing and analysing statistical data by economic activity. Those organizations include the United Nations and its specialized agencies, the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the United Nations Industrial Development Organization (UNIDO), the International Monetary Fund (IMF), the World Bank and other international bodies.

19. In its function as the internationally accepted reference classification for economic activities and its strong link to other existing activity classifications, ISIC can be viewed as an effective tool for the harmonization of economic statistics.

### **Structure of this publication**

20. The present ISIC publication is organized into five parts, as follows:

**Part one** describes the underlying principles that are used in constructing the classification. Apart from facilitating the understanding of the current classification structure, the principles may assist in developing national classifications by applying criteria consistent with those of ISIC. Part one also describes the application rules that allow for the correct and consistent classification of any given production unit in ISIC. It concludes with a description of the relationship between ISIC and other classifications.

**Part two** shows the complete structure of the classification in a condensed form, allowing for easy viewing of the format in which ISIC subdivides economic activities.

**Part three** provides a detailed description of the classification, with full explanatory notes that describe the content of each ISIC category.

**Part four** shows a number of internationally agreed alternative aggregations that provide standard ways of presenting data on special topics that cannot be addressed in the ISIC structure itself.

**Part five** outlines the major changes in ISIC, Rev.4 as compared to the previous version (ISIC, Rev.3.1), covering both methodological and major structural changes.

21. While it may be intuitive to immediately use the detailed definitions of part three of this publication, users are strongly encouraged to first familiarize themselves with the application rules set out in part one so as to correctly understand and use the classification.

## Chapter II

# The underlying principles of the classification

### A. Purpose and nature of the classification

#### 1. General considerations

22. In the study of economic phenomena, taking all elements into account simultaneously is not always possible. For the purposes of analysis, certain elements need to be chosen and grouped according to particular characteristics. Thus, all economic phenomena that are to be described in the form of statistics require systematic classification. Classifications are, so to speak, the system of languages used in communication about, and statistical processing of, the phenomena concerned. They divide the universe of statistical data into categories that are as homogeneous as possible with respect to those characteristics that are the objects of the statistics in question.

23. ISIC is intended to be a standard classification of productive activities. Its main purpose is to provide a set of activity categories that can be utilized for the collection and presentation of statistics according to such activities. Therefore, ISIC aims to present this set of activity categories in such a way that entities can be classified according to the economic activity they carry out. Defining the categories of ISIC is as much as possible linked with the way the economic process is organized in units and the way in which this process is described in economic statistics.

24. ISIC provides categories for the classification of units based on the activities carried out by these units, but it does not per se provide categories for specific types of units. This conceptual underpinning has been retained in the fourth revision for two reasons. First, naming actual units may be ambiguous if the same title or name is used differently across countries. For example, a “board of education” may have completely different functions and carry out completely different activities in different countries. Another example is the use of the term “Internet café”. In some cases, this term refers to a restaurant that provides (wired or wireless) Internet access to its customers as an amenity; in other cases it refers to a business service centre renting time on PCs along with Internet access and related activities; while in still other cases, it refers to a unit providing entertainment services by offering games that can be played over the Internet. Such terminology may change from country to country or region to region. Therefore, creating categories for “board of education” or “Internet café” might lead to the classification of units in the same class that should not be compared. Second, the name or title of a unit may not reflect the activity carried out by the unit. For example, a shipyard is usually engaged in the building of ships. However, the same infrastructure can be used for the dismantling of ships. If such a shipyard carries out mostly the dismantling of ships, it should not be combined in the same class with other units that build ships. Therefore, classifying a unit based on its characteristic as being a “shipyard” (e.g., based on existing capital equipment) would be ambiguous.

Another example is gas stations that also operate convenience stores. A class “gas station with convenience store” would allow an easy classification of such units based on their appearance, but it would not reflect the actual activity carried out. In ISIC, such a unit would be classified according to its principal activity (see sect. III.C below), which could place it in “retail sale of automotive fuels” or “retail sale in non-specialized stores with food, beverages or tobacco predominating”. While both options may have merits, the consistent approach of classifying according to activities carried out has been followed in ISIC. Notwithstanding the above, in some cases a unit-type description has been employed, such as in new ISIC classes that exceed the previous scope of the classification.

25. In this context, it would be best if there were as many categories in ISIC as there are possible activities or if each production unit carried out only one activity, so that a unit could be unequivocally classified in a certain category. For practical reasons, however, ISIC can have only a limited number of categories. Carrying out only one activity may often be in conflict with the organization of activities and, as a result, with bookkeeping practices. In addition, for units undertaking several economic activities, some types of data, such as financial data, are often only available for the unit as a whole, which consequently is not homogeneous in respect of economic activity. Another aspect of homogeneity is the distribution in geographical areas, which is particularly important for regional statistics. Although the geographical aspect has, in principle, little to do with the activity classification, it does affect the formation of statistical units. Therefore, the homogeneity of units relates to both activity and location.

26. The requirements for homogeneity and data availability are sometimes in conflict with each other because the smaller or more homogeneous the unit, the less likely that the required data are available. It is suggested (see sect. III.B below) that this problem be solved by using different units for different statistics, defined in such a way that each larger unit consists of a number of complete smaller units. As a result, comparisons can be made between the various statistics even when they use different units.

27. The detail required in the classification of data by kind of economic activity differs from country to country. Differences in the geographical and historical circumstances and in the degrees of industrial development and organization of economic activities result in differences in the degree of elaboration with which various countries find it necessary or feasible to classify their data according to kind of economic activity. National analysis often requires greater detail than is required or possible for international comparison purposes. Section IV below explains how ISIC can be used or adapted for national purposes.

## 2. Scope of the classification

28. ISIC is a classification according to kind of economic activity and therefore its scope has historically been restricted to the classification of units engaged in economic production as defined by SNA, which states: “Economic production is an activity, carried out under the responsibility, control and management of an institutional unit, that uses inputs of labour, capital, and goods and services to produce outputs of goods and services”.<sup>11</sup>

29. The scope of the present version of ISIC is defined by the production boundary of the System of National Accounts, with one exception—activities in ISIC class 9820 (Undifferentiated services-producing activities of private households for own use). This type of activity, in combination with class 9810 (Undifferentiated goods-

<sup>11</sup> SNA still refers only to goods and services and does not explicitly recognize the existence of products that fail to meet the strict definitions of goods or services in its classification. The revised CPC, however, now recognizes such products and includes a more detailed discussion of them. When we refer to products or economic production in ISIC, we use this expanded understanding of “goods and services”.



producing activities of private households for own use), is used for measuring subsistence activities of households that can not otherwise be captured in the classification. These categories, however, cover only a subset of all households, because households with clearly identifiable economic activities (whether market or for own final use) are classified in other parts of ISIC. These two categories have been created for special purposes, such as labour-force surveys, to cover combinations of household activities that would otherwise be difficult or impossible to assign to a single ISIC category. These two categories are generally not used in business surveys.

### 3. Differences from other types of classifications

30. ISIC is a classification according to kind of productive activity, and not a classification of goods and services. The activity carried out by a unit is the type of production in which it engages. This is the characteristic of the unit according to which it will be grouped with other units to form industries. An industry is defined as the set of all production units engaged primarily in the same or similar kinds of productive activity.

31. ISIC is distinctively different in nature and purpose from the classifications of goods and services, ownership, institutional units or other types of classifications.

32. As it is in general not possible to establish a one-to-one correspondence between activities and products, ISIC is not designed to measure product data at any detailed level. For this purpose, a separate classification exists, namely, the Central Product Classification (CPC). Although each category in CPC is accompanied by a reference to the ISIC class in which the goods or services are mainly produced (criterion of industrial origin), this does not imply that all units producing these goods or services are classified here. By contrast, the classification of products is based on the intrinsic characteristics of the goods or the nature of the services rendered (see also sect. IV.C below), which results in a classification structure that is different from that used for ISIC.

33. Notwithstanding the above, it is often possible to use the classification of outputs in CPC as a tool for identifying the principal activity of a unit. The *Companion Guide to ISIC and CPC* will include a more detailed discussion of the link between ISIC and CPC.<sup>12</sup>

34. ISIC does not draw distinctions according to kind of ownership of a producing unit, type of legal organization or mode of operation because such criteria do not relate to the characteristics of the activity itself. Units engaged in the same kind of economic activity are classified in the same category of ISIC, irrespective of whether they are unincorporated enterprises, (part of) incorporated enterprises or government units, foreign controlled or have a parent enterprise that consists of more than one establishment. Therefore, a strict link between ISIC and the Classification of Institutional Sectors in SNA does not exist.

35. Similarly, manufacturing units are classified according to the principal kind of economic activity in which they engage, whether the work is performed by power-driven machinery or by hand, or whether it is done in a factory or in a household. The distinction between modern and traditional production methods is not a criterion for ISIC, although that distinction may be useful in some statistics. Special considerations are necessary in cases where a unit sells manufactured goods under its own name but has the actual production (fully on in part) outsourced to other units. Guidelines for these cases are described in section III.C.5 below.

<sup>12</sup> *Companion Guide to ISIC and CPC*, Statistical Papers, Series F, No. 101 (United Nations publication, forthcoming).

36. In addition, ISIC does not distinguish between formal and informal or between legal and illegal production. Classifications according to kind of legal ownership, kind of organization or mode of operation may be constructed independently of the classification according to kind of economic activity. Cross-classification with ISIC can provide useful extra information.

37. In general, ISIC does not differentiate between market and non-market activities. However, it should be emphasized that this distinction continues to be an important feature of SNA. A breakdown of economic activities according to this principle is useful wherever data on value added are collected for activities that take place on both a market and a non-market basis. This criterion should then be cross-classified with the categories of ISIC. Non-market services are most frequently provided by government organizations or non-profit institutions serving households in the field of education, health, social work etc.

## **B. Principles used in constructing the classification**

38. The principles and criteria used to define and delineate classification categories at any level depend on many factors, such as the potential use of the classification and the availability of data. These criteria will also change depending on the level of aggregation considered. In an activity classification, the criteria for detailed levels of the aggregation will inevitably consider similarities in the actual production process, while at more aggregated levels of the classification, this is largely irrelevant.

39. ISIC is built on a production-oriented or supply-based conceptual framework that groups producing units into detailed industries based on similarities in the economic activity, taking into account the inputs, the process and technology of production, the characteristics of the outputs and the use to which outputs are applied. The weights assigned to these types of criteria may vary from one category to another and between different levels of the classification. The criteria were intended to ensure that it will be practical most of the time to use the classes of ISIC for the industrial classification of establishments, and that the units falling into each class will be as similar as is feasible in respect of the kind of activity in which they engage.

40. In general, the fourth revision of ISIC has tried to apply a more consistent approach, namely the use of the production process to define categories at the most detailed level. Thus, activities that share a common process in producing goods or services and use similar technologies are grouped together. As in many other cases, however, the strong need for continuity, i.e., comparability with previous versions of the classification, may override changes in the classification that could be made from the viewpoint of a consistent application of such a rule.

41. In addition, in a number of instances, such as food manufacturing, the production of machinery and equipment or the service industries, the various aspects of activities are so highly correlated that the need to assign weights to the criteria or restrict them to the technology of production only does not arise.

42. Since there is also a strong interest in relating activities and their outputs, the classes of ISIC are defined so that as far as possible the following two conditions are fulfilled:

(a) The production of the category of goods and services that characterizes a given class accounts for the bulk of the output of the units classified to that class;

(b) The class contains the units that produce most of the category of goods and services that characterize it.

These conditions are required in order that establishments or similar units may be classified according to kind of economic activity uniquely and easily, and in order that the units included in a given class will be as similar to each other as is feasible.

43. The two conditions set limits to the detail of classification that may be achieved in the classes of ISIC. These classes must be defined in terms of the activities in which establishments customarily engage in various countries of the world. Establishments may, in practice, carry out a number of different activities, and the range of these activities will differ from one unit to another even though they engage in the same general kind of economic activity. These differences will exist in the case of establishments within one country and will be more pronounced in the case of establishments in different countries. It should be emphasized that the fact that the organization of production differs from country to country makes it likely that the classes of ISIC do not reflect the structure in each individual country.

44. Another major consideration in forming categories in ISIC was the relative importance of the activities to be included. In general, separate classes are provided for kinds of activity that are prevalent in most countries, or that are of particular importance in the world economy or at regional level.

45. Unlike for ISIC classes, the actual production process and technology used become less important as a criterion for grouping activities at more aggregated levels. At the section, division and group levels, not only the general characteristics of the goods and services produced but also the potential use of the statistics, for instance in the SNA, become more important. Attention was also given to the range of kinds of activity frequently carried out under the same ownership or control and to potential differences in scale and organization of activities and in capital requirements and finance that exist between enterprises. Finally, existing patterns of categories at various levels of national classifications have been used as additional criteria in establishing divisions and groups in ISIC.

### **C. Structure and coding system of the classification**

46. The fourth revision of ISIC provides substantially more detail at all levels than the previous versions of the classification. This increased detail responds to requests by both producers and users of statistics. However, the basic coding system of the classification has not been changed.

47. New needs that had emerged during the fourth revision have prompted the creation of more categories at the highest level—the section level—especially for service activities. Since the number of sections exceeds 10, as in the previous revision of ISIC, the use of capital letters for coding the sections was continued in order to avoid having to change the ISIC coding structure to a five-level structure.

48. While the need for more high-level categories was most prominent, it also emerged that for some specific purposes a high-level structure with less categories, presumably about 10, was necessary. While this was further pursued for the classification (see part four below), it was decided to make this high-level structure not a part of the ISIC coding structure, therefore preserving the four-level coding structure of the previous version of the classification.

49. The names given to the categories at the different levels in ISIC, Rev.4 remain unchanged from those in the previous revision. The tabulation categories, identified by letters, are called “sections”, the 2-digit categories “divisions”, the 3-digit categories “groups” and the 4-digit categories “classes”. As in the previous version of

ISIC, the use of letters for the section level of the classification is complemented by the use of a purely numerical system at the division (2-digit), group (3-digit) and class (4-digit) levels.<sup>13</sup>

<sup>13</sup> It is recognized that the connection between sections, on the one hand, and divisions, groups and classes, on the other, is not very intuitive, but it does allow the preservation of a four-level ISIC structure. The current system uses letters only for the high-level sections, while coding and data entry are carried out completely with a numerical system. Other options considered, such as a purely numerical coding system or a system that combines section and class codes (e.g., "A0111"), would either expand the coding system to more levels, expand the code itself to a 5-digit code or create mixed alphanumerical codes that might be difficult to use in basic data entry.

50. While some of the categories in ISIC have remained unchanged from the previous revision, others have been split to give appropriate weight to new activities, often elevating the level of existing categories.

51. At the highest level of ISIC, some sections can be easily compared to the previous version of the classification. Unfortunately, the introduction of a number of new concepts at the section level of ISIC (e.g., section J, "Information and communication") make it impossible to achieve an easy overall comparison between ISIC, Rev.4 and the previous version of the classification. Correspondence tables to assist in this process will be provided separately.

52. Due to the increased number of 2-digit categories, the divisions are coded consecutively. However, some "gaps" have been provided to allow countries to introduce division-level categories without a complete change of the ISIC coding. These gaps have been introduced in sections where the need for additional divisions at the national level is most likely to arise. For this purpose, the following division code numbers have been left unused: 04, 34, 40, 44, 48, 54, 57, 67, 76, 83 and 89.

53. While the sections are assigned capital letters, the Arabic numbers assigned to a given category of ISIC may be read as follows: the first and second digits, taken together, indicate the division in which the category is included; the first three digits identify the group; and all four digits indicate the class. ISIC now comprises 21 sections, which are then further subdivided into a total of 88 divisions, 238 groups and 419 classes. The added detail has considerably increased the number of these categories compared with ISIC, Rev.3.1.

54. Whenever a given level of the classification is not divided into categories of the next more detailed level of classification, "0" is used in the code position for the next more detailed level. For example, the code for the group "Other personal service activities" is 960 since the division "Other personal service activities" (code 96) is not divided into groups. Again, the code for the class "Manufacture of furniture" is 3100 because the division "Manufacture of furniture" (code 31) is divided neither into groups nor into classes. The class "Manufacture of pulp, paper and paperboard" is coded as 1701 since the division "Manufacture of paper and paper products" (code 17) is not divided into groups but the group "Manufacture of paper and paper products" (code 170) is divided into classes.<sup>14</sup>

<sup>14</sup> In computer applications, the "0" could also indicate that a total of all more detailed categories is being used. Hence, the code 2810 could be used for the total 2811-2819 and 2000 could represent the total 2011-2030. This could of course also be achieved by using the next higher level of the classification, but in some instances it may be appropriate to use the same format (i.e., number of digits) for all code numbers.

## Chapter III

# Application of the classification

### A. Principal, secondary and ancillary activities

55. In ISIC, the expression “activity” is used to identify productive activities. These activities are defined as the use of inputs (e.g., capital, labor, energy and materials) to produce outputs. The outputs that result from undertaking activities can be transferred or sold to other units (in market or non-market transactions), placed in inventory or used by the producing units for own final use.

56. Some activities separately identified in ISIC are simple processes that convert inputs to outputs, such as dyeing of fabric, while other activities are characterized by highly complex and integrated steps, such as automobile manufacturing or computer system integration.

57. The principal activity of an economic entity is the activity that contributes most to the value added of the entity, as determined by the top-down method (see sect. III.C below). As a result of the top-down method, it is not necessary that the principal activity account for 50 per cent or more of the total value added of an entity or even that its generated value added exceed that of all other activities carried out by the unit, although in practice it will do so in the majority of cases. Products resulting from a principal activity are either principal products or by-products. By-products are products that are necessarily produced together with principal products (for example, hides produced when producing meat by slaughtering animals). In section III.C below, it will be explained how, in practice, the principal activity of a statistical unit should be determined when classifying according to ISIC.

58. A secondary activity is each separate activity that produces products eventually for third parties and that is not the principal activity of the entity in question. The outputs of secondary activities are secondary products. Most economic entities produce at least some secondary products.

59. Principal and secondary activities cannot be carried out without the support of a number of ancillary activities, such as bookkeeping, transportation, storage, purchasing, sales promotion, cleaning, repair and maintenance, security etc. At least some of these activities are found in every economic entity. Thus, ancillary activities are those that are undertaken to support the main productive activities of an entity by providing goods or services entirely or primarily for the use of that entity.

60. A distinction should be made between principal and secondary activities, on the one hand, and ancillary activities on the other. The output of principal and secondary activities, which are consequently principal and secondary products, is produced for sale on the market or for other uses that are not prescribed in advance; for example, they may be stocked for future sale or for further processing. Ancillary activities are undertaken in order to facilitate the principal or secondary activities of the entity.

61. There are a number of characteristics of ancillary activities that can generally be observed in practice and that help to identify them. The output is always intended for intermediate consumption within the same entity and is therefore usually not recorded separately. Although most ancillary activities produce services, some goods-producing activities may, by exception, be regarded as ancillary. The goods thus produced, however, may not become a physical part of the output of the main activity (examples are tools, scaffolding etc.). Ancillary activities are usually fairly small-scale compared with the principal activity they support.

62. If an establishment undertaking ancillary activities is statistically observable, in the sense that separate accounts for the production it undertakes are readily available, or if it is in a geographically different location from the establishments it serves, it may be desirable and useful to consider it as a separate unit and allocate it to the industrial classification corresponding to its principal activity. However, it is recommended that statisticians not make extraordinary efforts to create separate establishments for these activities artificially in the absence of suitable basic data being available.

63. Under the definition given in paragraph 59 above, the following activities are not to be considered ancillary:

(a) Producing goods or services as part of fixed capital formation. The type of units most affected are those doing construction work on the account of their parent unit. This approach is in accordance with the classification in ISIC of own-account construction units for which data are available to the construction industry;

(b) Producing output which, although also used as intermediate consumption by the principal or secondary activity, is for the greater part sold on the market;

(c) Producing goods that become a physical part of the output of the principal or secondary activity (for example, the production of boxes, tin cans or the like by a department of an enterprise as packaging for its own products);

(d) Research and development activities, which are considered part of fixed capital formation in the context of SNA.

## **B. Statistical units**

### **1. General remarks**

64. Economic statistics describe the activities of economic transactors and the transactions that take place between them. In the real world, economic entities engaged in the production of goods and services vary in their legal, accounting, organizational and operating structures. To create statistics that are consistent across entities and internationally comparable, it is necessary to define and delineate standard statistical units (whether as observation units or analytical units) that are suitable for data compilation and aggregation. The comparability of statistics is greatly enhanced when the units about which statistics are compiled are similarly defined and classified.

65. Economic entities have numerous characteristics and a variety of data are required about them that may be classified in many ways, among the most important of which are classification by (a) institutional sector, (b) activity and (c) location. The need to classify statistical units by these characteristics requires that they be as homogeneous as possible with respect to institutional sector, economic activity or location, and this plays an important role in their definition.

66. Statistical units may be defined as the entities about which information is sought and about which statistics are ultimately compiled. These may be identifiable legal or physical entities or statistical constructs.

67. Statistical units may be defined following many criteria, namely: legal, accounting or organizational criteria; geographical criteria; and economic criteria. The relative importance of these criteria depends on the type of unit concerned. A legal or institutional criterion helps to define units that are recognizable and identifiable in the economy. In some cases, legally separate units need to be grouped together because they are not sufficiently autonomous in their organization. In order to define some types of units, accounting or financial criteria also have to be applied. The availability of accounting criteria requires that an institutional unit maintain a complete set of accounts. In the case of the organizational criteria of an enterprise, the defining characteristic is that the organizational unit should have an appreciable degree of autonomy.

68. A unit can also be geographically identified. Observational and analytical units are defined in such a way as to permit data to be compiled for local, regional and national economies. The rule regarding geographical criteria is helpful in order to permit consolidation and avoid omissions or duplications of units.

69. Activity criteria suggest that entities engaged in similar economic activities be grouped together because this makes it easier to analyse goods and services produced in the economy using a homogeneous production technology.

70. Economic statistics are required by different users for various types of analysis. The System of National Accounts (SNA) is a principal user and it has particular requirements, but there are also other users, including policy analysts, business analysts and businesses that use economic data for studying industrial performance, productivity, market share and other issues. Since different units within an economic entity are suitable for the compilation of different types of data, the type of data that are required is another factor that influences the definition and delineation of statistical units.

#### (a) Legal entities

71. Most societies provide for the legal recognition of economic entities, under laws that enable them to define and register themselves as legal entities. Legal entities are recognized by law or society, independently of the persons or institutions that own them. The characteristics of a legal entity are: they own goods or assets, they incur liabilities and they enter into contracts. The legal unit always forms, either by itself or sometimes in combination with other legal units, the legal basis for the statistical unit.

72. An example of a legal entity is a corporation that owns or manages the property of the organization, enters into contracts, receives and disposes of its income, and maintains a complete set of accounts, including profit and loss accounts and balance sheets.

#### (b) Institutional units

73. Institutional units are the core unit of SNA. All subsequent definitions embody the definition of this basic unit. Institutional units are transactors in the SNA and must therefore be capable of engaging in the full range of transactions in their own right and on their own behalf.

74. An institutional unit is defined as an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and transactions with other entities. It may own and exchange goods and assets, is legally responsible for the economic transactions that it carries out and may enter into legal contracts. An important attribute of the institutional unit is that a set of economic accounts exists or can be compiled for the unit. This set of accounts includes consolidated financial accounts and/or a balance sheet of assets and liabilities.

75. Institutional units include persons or groups of persons in the form of households and legal or social entities whose existence is recognized by law or society independently of the persons or other entities that may own or control them.

## **2. Statistical units in the System of National Accounts**

76. The systematic description of the economy, as represented by SNA, analyses two interrelated types of transactors and transactions that require two levels of statistical units. The establishment, in combination with ISIC and CPC, is used for the analysis of transactions in goods and services and for compilation of the production account. The enterprise is used as the statistical unit for compilation of income accounts, accumulation accounts and balance sheet accounts, as well as in the institutional sector classification of economic entities.

### **(a) Enterprise**

77. An institutional unit in its capacity as a producer of goods and services is known as an enterprise. An enterprise is an economic transactor with autonomy in respect of financial and investment decision-making, as well as authority and responsibility for allocating resources for the production of goods and services. It may be engaged in one or more productive activities.

78. An enterprise may be a corporation (or quasi-corporation), a non-profit institution or an unincorporated enterprise. Corporate enterprises and non-profit institutions are complete institutional units. On the other hand, the term “unincorporated enterprise” refers to an institutional unit—a household or government unit—only in its capacity as a producer of goods and services.

79. The enterprise is the level of statistical unit at which all information relating to its transactions, including financial and balance-sheet accounts, are maintained, and from which international transactions, an international investment position (when applicable), consolidated financial position and net worth can be derived.

### **(b) Establishment**

80. SNA describes the statistical unit to be defined and delineated for industrial or production statistics as the establishment. The establishment is defined as an enterprise or part of an enterprise that is situated in a single location and in which only a single (non-ancillary) productive activity is carried out or in which the principal productive activity accounts for most of the value added.

81. ISIC is designed for grouping units engaged in similar activities for the purpose of analysing production and compiling production statistics. Although it is possible to classify enterprises according to their principal activity using ISIC and to group them into industries, some of the resulting industries are likely to be very heterogeneous when enterprises have secondary activities that are very different from their principal activities. It therefore becomes necessary to partition large and complex



enterprises into more homogeneous units, for which production data can be compiled. This is particularly important for enterprises that account for a large proportion of the value added of particular industries or the economy as a whole.

82. Although the definition of an establishment allows for the possibility that there may be one or more secondary activities carried out, they should be small in magnitude compared with the principal activity. If a secondary activity within an establishment is as important, or nearly as important, as the principal activity, then the unit is more like a local unit (see paras. 86 and 87 below). It should be subdivided so that the secondary activity is treated as taking place within an establishment separate from that in which the principal activity takes place.

83. In the case of most small and medium-sized businesses, the enterprise and the establishment will be identical. Large and complex enterprises that are engaged in many economic activities belonging to different ISIC industries will be composed of more than one establishment, provided that smaller, more homogeneous production units can be identified for which production data can be compiled.

### 3. Other statistical units

84. The concept of the establishment combines both a kind-of-activity dimension and a locality dimension. The concept is based on the assumption that the aim of the statistical programme is to compile data that is classified both by activity and by geographical region. In circumstances in which precision in either the geographic or the activity dimension is not required, there are other units that may be used as statistical units for the compilation of production or production-related statistics.

#### (a) Kind-of-activity unit

85. A kind-of-activity unit is an enterprise or part of an enterprise that engages in only one kind of productive activity or in which the principal productive activity accounts for most of the value added. Compared with the establishment, in the case of such a unit, there is no restriction on the geographic area in which the activity is carried out but it is characterized by homogeneity of activity.

#### (b) Local unit

86. Enterprises often engage in productive activity at more than one location, and for some purposes it may be useful to partition them accordingly. Thus, a local unit is defined as an enterprise or a part of an enterprise (for example, a workshop, factory, warehouse, office, mine or depot) which engages in productive activity at or from one location. The definition has only one dimension, in that it does not refer to the kind of activity that is carried out.

87. When the criterion of kind-of-activity unit and the local unit are combined, the resulting concept corresponds to the operational definition of the establishment.

#### (c) Unit of homogeneous production

88. Units that are defined to be optimal for a particular type of analysis are described as analytical units. Establishments are designed to be units that are more suitable for analysis of production in which the technology of production plays an important role. However, the appropriate analytical unit for the purposes of input-output analysis is a unit of homogeneous production that is defined as a production

unit in which only a single (non-ancillary) productive activity is carried out. Units of homogeneous production are independent of the location of the activity.

89. If it is desired to compile production accounts and input-output transaction tables by region, it is necessary to treat units of homogeneous production located in different places as separate units even though they may be engaged in the same activity and belong to the same institutional unit.

#### **4. Delineating statistical units**

90. The universe of economic entities is composed of large and complex enterprises engaged in many different activities, whether horizontally or vertically integrated, that may be undertaken at or from many geographical locations, as well as small enterprises engaged in one or very few activities that are undertaken at or from a single geographical location.

91. Enterprises have production units at which or from which they undertake the economic activity of producing goods and services. Production can take place at a particular location—for example, at a mine, a factory or a farm, or in the case of production of services from a certain location. For example, either transportation services deliver the product from the farm or factory gate to the purchaser or the product is delivered by means of a network that operates over a wide geographical area. Either way, it is assumed that the service originates from a certain location. Similarly, other services, such as those of engineering consultants, originate at a certain location from which they may be delivered to the location of the customer.

92. The need to delineate statistical units arises for large and complex economic entities whose activities fall into different classes of ISIC or whose production units are located in different geographical areas.

93. In large and complex entities, the units at which or from which production takes place are grouped for management, administrative and decision-making purposes into hierarchical structures. Higher-level organizational units own, control or manage the lower-level production units where production decisions are made or production takes place. Management of the financial affairs of the business usually occurs at a higher organizational level than does management of production operations. The accounting systems of businesses usually reflect this management structure by mirroring the hierarchy of management responsibility for the operations of the business. The accounts required to support the management and decision-making functions, whether financial or production, are usually maintained for the corresponding level of management responsibility.

94. Enterprises also have a legal structure that may constitute units or groups of units that form the legal base of the business. An enterprise derives its autonomy from the common ownership and control of its resources, irrespective of the number of legal units under which it registers them.

95. In small enterprises, the operational and legal structures often coincide and may even be embodied in a single unit. For large enterprises, the operational structure may be different from the legal structure, coinciding with it only at the highest level of the business. In such cases, the organizational and production units of the enterprise's operational structure may differ from the units of their legal structure.

96. The statistical units of large and complex institutional units may be delineated through a process referred to as profiling. Profiling identifies the enterprise, its legal structure, its operating structure, and the production and organizational units that are used to derive the statistical units. Once identified, the enterprise and its con-

stituent establishments comprise the statistical units of the statistical structure. In delineating the statistical structure, functional or other groups in the organizational structure may be ignored and the constituent units regrouped to form the units of the statistical structure. For multi-establishment enterprises, the statistical structure may not coincide with the legal structure in which ownership of assets is registered.

97. The source of information for production statistics and income statistics is often the management and cost accounts of businesses. These accounts record operating revenues earned from the sale of goods and services produced and the associated costs, wages and salaries, depreciation and operating profits. Countries that are more interested in the higher level of autonomy in the structure of enterprises than in the geographical location of the activity may prefer to delineate and use the kind-of-activity unit. On the other hand, if they are more interested in compiling comprehensive production statistics at a subnational level of geographic detail, then it will be necessary to delineate the smallest unit (*a*) that is as homogeneous as possible in terms of activity and geography, and (*b*) for which statistics on revenues from the sale of goods and services, associated costs, value added and gross fixed capital formation undertaken can be compiled or estimated. This is the level at which the establishment (local kind-of-activity unit) is delineated as the statistical unit.

98. Whenever the legal structure and the statistical construct based on production units do not coincide, statistical agencies will need to articulate the statistical structure and compile data with the help of surveys. The legal structure may consist of units created purely for tax purposes that are completely irrelevant to the producing units of the enterprise. However, if it is necessary to draw on tax records for the required data or if survey data need to be supplemented with tax data, statistical agencies will have to decide whether (*a*) they can find a way to map the legal and statistical structure of the enterprise, or (*b*) they prefer to use the legal structure selectively as a proxy for the statistical structure.

99. The statistical structure delineates and identifies the units about which data are to be compiled. However, the data may have to be collected from higher- or lower-level units, which are then described as collection entities. As a result of globalization, some multinational global enterprises are keeping integrated accounting records at the global or the regional levels only; it may thus be increasingly difficult to separate and extract complete accounts for all the activities taking place within each domestic economy if such data are not obtained from the main or regional head office of the global enterprise.

## 5. National differences in selecting statistical units

100. An establishment undertakes an activity at or from a particular location. Thus, the concept of the establishment combines two dimensions—an activity dimension and a locality dimension. The concept is based on the assumption that the aim of the statistical programme is to compile data that is classified both by activity and by location, e.g., by geographical region. However, ISIC can be used to classify many other variables needed to analyse production and industrial performance. In examining the accounting and operating structures of enterprises, it is possible that producing units with differing levels of homogeneity with respect to activities and geographical precision will be found and that they may be suitable for the compilation of data on selected variables, such as number of persons employed; they may even be suitable for the compilation of production statistics if all the information needed with respect to meaningful operating profit is available.

101. Many different factors play a role in defining the best statistical unit for a given form of data collection, such as the structure of the legal system in a country, including regulations for the organization of businesses; the particular structure of the industries involved; the type of data collection involved; and the purpose and targeted level of data collection. The statistical units discussed in this section can be taken to serve as models, but the actual choice of the type of statistical unit to be used by countries would depend upon national specifics and the type and the purpose of data collection involved.

102. Finally, it should be noted that in order to ensure reliability and comparability of data in delineating statistical units, such units should be defined in a consistent manner. The consistent definition of these units is equally as important as their accurate classification.

## **C. Classification of statistical units**

### **1. General guidelines**

103. In the following paragraphs, a number of general rules of interpretation are given that should be followed when classifying more complex statistical units. It should be noted that the explanatory notes to some sections and divisions of ISIC (see part three below) also indicate how to treat such cases.

104. A unit may perform one or more economic activities falling into one or more categories of ISIC, Rev.4. Units are classified according to their principal activity. In practice, the majority of production units perform activities of a mixed character. The identification of a principal activity is necessary to allocate a unit to a particular ISIC, Rev.4 category.

105. The activity classification of each unit is determined by the ISIC class in which the principal activity—or range of activities—of the unit is included. All activities are considered when determining the principal activity, but only the principal activity is used to classify a unit. The principal activity of the unit in general can usually be determined from the goods that it sells or ships or the services that it renders to other units or consumers. However, the descriptions and explanatory notes of the individual classes in ISIC (see part three below) should be used to determine the activities carried out in terms of ISIC categories, using not only the output structure but also the input structure and most importantly the production process.

106. Ideally, the principal activity of the unit should be determined with reference to the value added to the goods and services produced. The relevant valuation concept is gross value added at basic prices, defined as the difference between output at basic prices and intermediate consumption at purchaser's prices.

#### **(a) Value-added substitutes**

107. In order to determine the principal activity of a unit, the shares of value added by that unit to the activities falling into different categories of ISIC, Rev.4 have to be known. In practice, however, it is often impossible to obtain the information on value added of the different activities performed and the activity classification has to be determined by using substitute criteria, such as:

(a) Substitutes based on output, such as:

(i) The gross output of the unit that is attributable to the goods or services associated with each activity;

- (ii) The value of sales or shipments of those groups of products falling into each category of activity;
- (b) Substitutes based on input, such as:
  - (i) Wages and salaries attributable to the different activities;
  - (ii) Hours worked attributable to the different activities;
  - (iii) Employment according to the proportion of people engaged in the different activities of the unit.

108. Such substitute criteria can be used as proxies for the unknown value-added data to obtain the best approximation possible compared to the result which would have been obtained on the basis of the value-added data. The use of substitute criteria does not change either the methods used to determine the principal activity or the rules of the top-down method. Substitutes are only operational approximations of value added.

109. The simple use of the above listed substitute criteria may sometimes be misleading, however; this will always be the case when the structure of the substitute criteria is not directly proportional to the (unknown) value added.

#### (b) Problems with output substitutes

110. When using sales (turnover) or shipments as a proxy for value added, it immediately becomes evident that in certain cases turnover and value added are not proportional. For example, trade turnover usually has a much lower share of value added than a manufacturing activity. Other examples are turnover of forwarding agents or of general contractors. Even within manufacturing, the relation between sales and the resulting value added may vary between and within activities. If a significant portion of production goes into inventory and is therefore not sold within the same reporting period, the value of sales may grossly underestimate the value added. In addition, in some cases a turnover figure makes no sense or does not exist, e.g., for financial intermediation activities or insurance activities. Similar considerations should be borne in mind when using gross output data as substitute criteria.

111. Many units perform trade and other activities. In such cases, trade turnover figures are the most unsuitable indicators for the unknown value-added share of the trade activity. A much better indicator is the gross margin (difference between the trade turnover and purchases of goods for resale adjusted by changes in stocks). The trade margins may vary within a single wholesale or retail trade activity, however, and may also vary between trade activities. In addition, the specific classification rules for retail trade should be considered as set out below.

#### (c) Problems with input substitutes

112. Similar precautions have to be considered when input-based substitute criteria are applied. The proportionality between wages and salaries or employment and value added is not reliable if the capital intensity of the various activities is different. Higher capital intensity normally implies higher depreciation and a lower share of wages and salaries in the gross value added. Capital intensity varies substantially between different economic activities and also between activities of the same ISIC, Rev.4 class. For example, the activity of producing items by hand will have a lower capital intensity than the mass production of the same item in an industrial plant; both activities, however, fall in the same ISIC, Rev.4 class.

## 2. Treatment of mixed activities

113. Instances may arise in which considerable proportions of the activities of a unit are included in more than one class of ISIC. These cases may result from the vertical integration of activities (for example, tree felling combined with sawmilling or the manufacture of textiles with subsequent production of wearing apparel); the horizontal integration of activities (for example, the manufacture of hides and skins in slaughterhouses); or any combination of activities that cannot be separated at the level of the statistical unit. In such situations, the unit should be classified according to the rules set out below.

114. Although typically applied at the class level, the rules set out below are valid for applying the classification at any level of the coding structure.

### (a) Treatment of independent multiple activities

115. If a unit is engaged in several types of independent activities but cannot itself be segregated into separate statistical units (when, for example, manufacture of bakery products is combined with manufacture of chocolate confectionery), the unit should be classified according to the activity that contributes most to the value added of the unit (i.e., the principal activity), as determined by the “top-down” method described in paras. 123–131 below.

116. The “top-down” method also applies wherever a unit performs only one activity or one activity accounts for more than 50 per cent of the value added. However, in such cases the classification of the unit is rather straightforward and no step-by-step application of the “top-down” method is necessary. In such cases, the unit will be classified to the single ISIC category representing the activity carried out, or in the latter case, to the ISIC category that represents the activity that accounts for more than 50 per cent of the value added.

### (b) Treatment of vertical integration

117. The vertical integration of activities occurs wherever the different stages of production are carried out in succession by the same unit and the output of one process serves as input to the next. Examples of common vertical integration include tree felling and subsequent on-site sawmilling, a clay pit combined with a brickworks or production of synthetic fibres in a textile mill.

118. In ISIC, Rev.4, vertical integration should be treated like any other form of multiple activities, so that a unit with a vertically integrated chain of activities should be classified to the class corresponding to the principal activity within this chain, i.e., the activity accounting for the largest share of value added, as determined by the top-down method. This treatment has changed from previous versions of ISIC. It should be noted that the term “activity” in this context is used for each step in the production process that is defined in a separate ISIC class, even though the output of each step may not be intended for sale.

119. If value added or substitutes for the individual steps in a vertically integrated process cannot be determined directly from accounts maintained by the unit itself, comparisons with other units (e.g., based on market prices for intermediate and final products) could be used. The same precautions for using substitutes as listed above apply here. If it is still impossible to determine the share of value added (or its substitutes) for the different stages in the chain of production activities, default assignments for typical forms of vertical integration can be applied. The *Companion Guide to ISIC and CPC* provides a set of examples for such cases.<sup>15</sup>

<sup>15</sup> *Companion Guide to ISIC and CPC*, Statistical Papers, Series F, No. 101 (United Nations publication, forthcoming).

(c) Treatment of horizontal integration

120. Horizontal integration occurs when an activity results in end-products with different characteristics. This could theoretically be interpreted as activities carried out simultaneously using the same factors of production, in which case it would often be impossible to separate such activities statistically into different processes, assign them to different units or generally provide separate data for them, nor would rules relying on allocation of value added or similar measures be applicable. Alternative indicators, such as gross output, might sometimes be applicable, but there is no general rule for identifying the single activity that best represents the mix included in this horizontal integration. Since patterns of horizontal integration have been considered in the preparation of the classification, in many cases commonly integrated activities are included in the same class of ISIC even though their outputs have quite different characters.

121. For example, the production of crude glycerol is classified in ISIC class 2023 (Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations), while the production of synthetic glycerol is classified in class 2011 (Manufacture of basic chemicals). Crude glycerol is a by-product of soap manufacturing and therefore the production process of crude glycerol cannot be separated from the production process of soap; as a result, both productive activities have to be classified in the same ISIC class, even though their physical output is quite different. On the other hand, the production of synthetic glycerol is a chemical process quite distinct from the production of crude glycerol and these two activities are classified separately even though their physical output is quite similar. Another example would be the production of electricity through a waste-incineration process. The activity of waste disposal and the activity of electricity production cannot be separated in this case and ISIC assigns them, by convention, to class 3821.

122. In some cases, activities are carried out using the same factors of production but the activities also exist independently, i.e., neither one provides input into the other nor could it be considered as producing a by-product of the other activity. An example would be the combined transport of passengers and freight. Since both activities independently have a substantial size in most economies and are separately of interest for analytical purposes, they have not been combined in a single ISIC class. In this case, value-added substitutes should be used to determine the primary activity of the unit in question if both activities are carried out simultaneously.

(d) The “top-down” method

123. The top-down method follows a hierarchical principle: the classification of a unit at the lowest level of the classification must be consistent with the classification of the unit at the higher levels. To satisfy this condition the process starts with the identification of the relevant category at the highest level and progresses down through the levels of the classification in the following way:

*Step 1.* Identify the section that has the highest share of the value added.

*Step 2.* Within this section, identify the division that has the highest share of the value added.

*Step 3.* Within this division, identify the group that has the highest share of the valued added (see below for exception in the case of wholesale and retail trade activities).

*Step 4.* Within this group, identify the class that has the highest share of value added.

## Box 1

**Example: Identifying the principal activity of a unit using the top-down method**

A reporting unit may carry out the following activities:

Section	Division	Group	Class	Description of the class	Share of value added (percentage)
	25	251	2512	Manufacture of tanks, reservoirs and containers of metal	7
		281	2816	Manufacture of lifting and handling equipment	8
			2821	Manufacture of agricultural and forestry machinery	3
C	28	282	2822	Manufacture of metal-forming machinery and machine tools	21
			2824	Manufacture of machinery for mining, quarrying and construction	8
	29	293	2930	Manufacture of parts and accessories for motor vehicles	5
G	46	461	4610	Wholesale on a fee or contract basis	7
		465	4659	Wholesale of other machinery and equipment	28
M	71	711	7110	Architectural and engineering activities and related technical consultancy	13

The principal activity is then determined as follows:

*Step 1.* Identify the section

Section C	Manufacturing	52
Section G	Wholesale and retail trade; repair of motor vehicles and motorcycles	35
Section M	Professional, scientific and technical activities	13

*Step 2.* Identify the division (within section C)

Division 25	Manufacture of fabricated metal products, except machinery and equipment	7
Division 28	Manufacture of machinery and equipment n.e.c.	40
Division 29	Manufacture of motor vehicles, trailers and semi-trailers	5

*Step 3.* Identify the group (within division 28)

Group 281	Manufacture of general-purpose machinery	8
Group 282	Manufacture of special-purchase machinery	32

*Step 4.* Identify the class (within group 282)

Class 2821	Manufacture of agricultural and forestry machinery	3
Class 2822	Manufacture of metal-forming machinery and machine tools	21
Class 2824	Manufacture of machinery for mining, quarrying and construction	8

The principal activity is therefore **2822 (Manufacture of metal-forming machinery and machine tools)**, although the class with the biggest share of value added is class 4659 (Wholesale of other machinery and equipment).

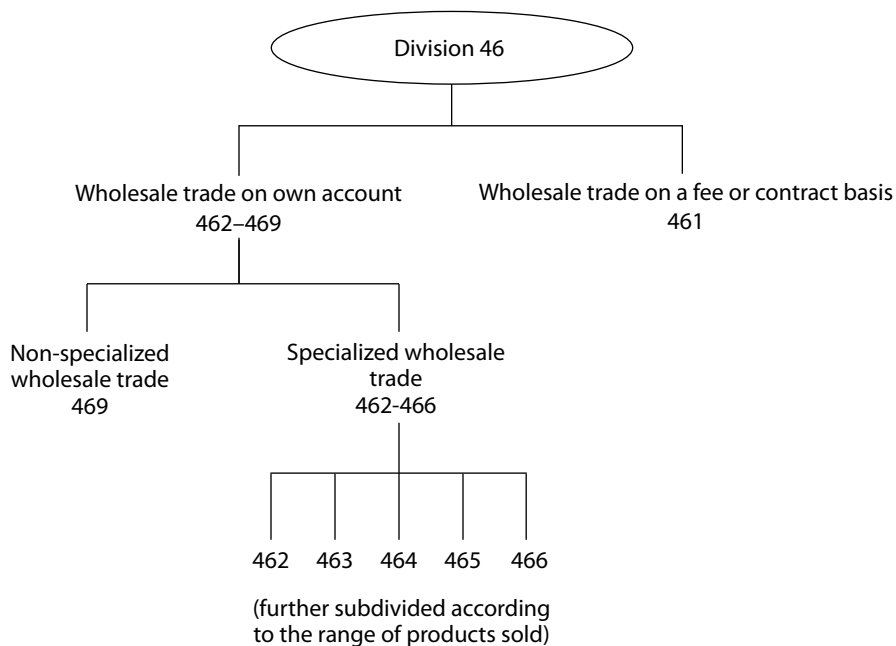
If a “bottom-up” approach is used, the reporting unit would be classified to wholesale trade in class 4659 (Wholesale of other machinery and equipment), based on the single largest share of value added at the class level. This would result in a reporting unit with a value added share in manufacturing of 52 per cent being classified outside of manufacturing.



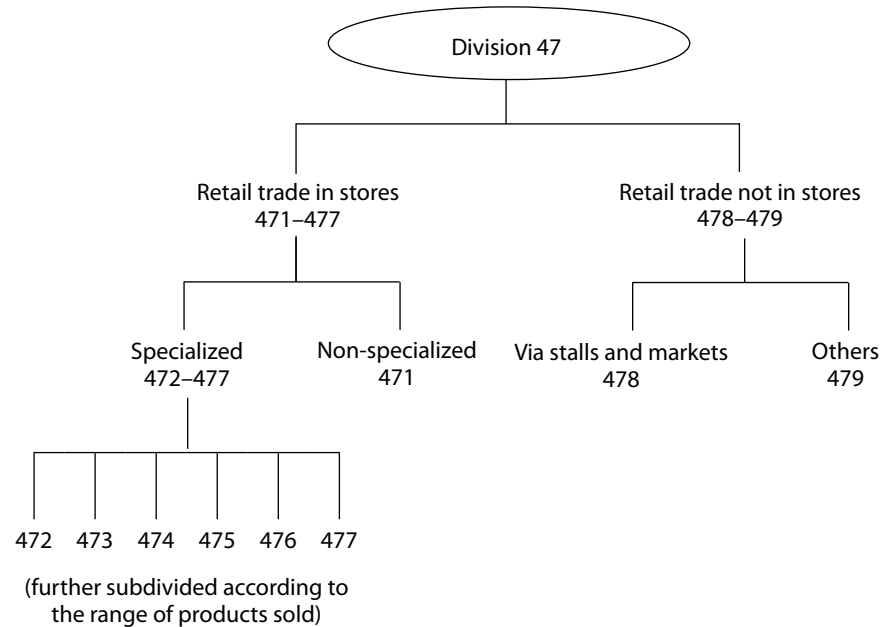
The top-down method may apply to only a small part of the statistical universe, depending on the selection of the statistical unit, especially if the selected units are defined so that they carry out only one activity.

124. If none of the ISIC classes accounts for at least 50 per cent of the value added, in the case of wholesale and retail trade activities, additional steps are being considered in step 3 of the above process, which can be considered to correspond to additional levels in the classification. For practical reasons, these levels have not been reflected as separate levels in the classification structure itself but rather consist of clusters of ISIC, Rev.4 groups. For wholesale activities, these additional steps relate to (a) the distinction between commission and own-account trade and (b) the distinction between specialized and non-specialized trade. For retail trade activities, these additional steps relate to (a) the distinction between store and non-store retail trade, (b) the distinction between specialized and non-specialized trade (for in-store retail trade activities) and (c) the distinction between trade via stalls and markets and other trade (for non-store retail trade activities). These distinctions must be considered as additional levels (within step 3) and must be applied when using the top-down method. After determining the correct group in step 3, the determination of the class representing the principal activity is carried out in accordance with step 4 above.

125. Following the additional criteria provided in paragraph 124 above, the following figure represents the decision tree to be used for the allocation of a unit within ISIC division 46 (Wholesale trade, except of motor vehicles and motorcycles):



126. Following the additional criteria provided in paragraph 124 above, the following figure represents the decision tree to be used for the allocation of a unit within ISIC division 47 (Retail trade, except of motor vehicles and motorcycles):



127. No attempt is made to reflect other possible aspects of retail activity, such as the kind of service (e.g., traditional service or self-service), outlets run by voluntary services or purchasing associations, or to distinguish between cooperative and other retail trade. Units whose main activity in terms of value added is obviously retail trade from shop premises must be allocated to one of the classes 4711 to 4774.

128. When choosing between specialized retail trade in ISIC groups 472-477 and non-specialized retail trade in ISIC group 471, the outcome will depend on the number of ISIC, Rev.4 classes involved, irrespective of the group-level importance. The following rules apply to make that determination (similar considerations apply to specialized vs. non-specialized wholesale trade activities):

(a) If the products sold comprise up to four classes in ISIC, Rev.4 groups 472 to 477, none of which accounts for a share of 50 per cent or more in terms of value added but each of which represents 5 per cent or more of value added, a specialized trade is still involved. It is then necessary only to determine the focus of the activities on the basis of value added. Selecting first the main group and then the class within that group will determine the allocation of the principal activity;

(b) If the products sold comprise five or more classes in groups 472 to 477, each representing 5 per cent or more of value added but none of which accounts for a share of 50 per cent or more, the unit should be classified as a non-specialized store and allocated to group 471. If food, beverages and tobacco represent at least 35 per cent of value added, allocation will be made to ISIC, Rev.4 class 4711. In all other cases, allocation should be to class 4719;

(c) The above allocation rules are always based exclusively on the retail activity of the unit. If, in addition to its retail trade, a unit has a secondary activity that also provides services or produces goods, the allocation of the unit to the appropriate class of division 47 is determined only by the composition of its retail activity. In other words, the 5 per cent rule provided above applies to 5 per cent of the value added of all retail sale activities, not 5 per cent of the value added of all activities of the unit.

## Box 2

**Example: Identifying the principal activity of a unit using the top-down method within wholesale and retail trade**

A reporting unit may carry out the following activities:

Section	Division	Group	Class	Description of the class	Share of value added (percentage)
G	46	465	4651	Wholesale of computers, computer peripheral equipment and software	10
			4741	Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores	8
	47	474	4742	Retail sale of audio and video equipment in specialized stores	15
			4759	Retail sale of electrical household appliances, furniture, lighting equipment and other household articles in specialized stores	4
			476	4761	Retail sale of books, newspapers and stationary in specialized stores
	4762	Retail sale of music and video recordings in specialized stores		12	
		479	4791	Retail sale via mail order houses or via Internet	35
N	77	772	7722	Renting of video tapes and disks	13

The principal activity is then determined as follows:

**Step 1. Identify the section**

Section G	Wholesale and retail trade; repair of motor vehicles and motorcycles	<b>87</b>
Section N	Administrative and support service activities	13

**Step 2. Identify the division (within section G)**

Division 46	Wholesale trade, except of motor vehicles and motorcycles	10
Division 47	Retail trade, except of motor vehicles and motorcycles	<b>77</b>

**Step 3. Identify the group (within division 47)****Step 3a. Identify store or non-store trade (within division 47)**

Groups 471–477	Retail trade in stores	<b>42</b>
Groups 478–479	Retail trade not in stores	35

**Step 3b. Identify specialized or non-specialized trade (within groups 471-477)**

Recalculate shares of value added relative to total retail trade:

Class 4741	= 8% / 77%	10
Class 4742	= 15% / 77%	19
Class 4759	= 4% / 77%	5
Class 4761	= 3% / 77%	4
Class 4762	= 12% / 77%	16

Only four classes account for a share of 5 per cent or more. Therefore the unit is classified to specialized retail sale.

## Step 3c. Identify the group (within specialized retail trade)

Group 474	Retail sale of information and communications equipment in specialized stores	23
Group 475	Retail sale of other household equipment in specialized stores	4
Group 476	Retail sale of cultural and recreation goods in specialized stores	15

Note: To identify the largest share, it does not matter if the original or recalculated figures for value added are being used

## Step 4. Identify the class (within group 474)

Class 4741	Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores	8
Class 4742	Retail sale of audio and video equipment in specialized stores	15

The principal activity is therefore **4742 (Retail sale of audio and video equipment in specialized stores)**.

129. If value added cannot be determined for the activities involved, approximations as set out above can be used, provided that their application to the different activities is consistent.

130. The top-down method satisfies the principle that at the lower levels the activity classification is in conformity with the principal activity of the unit from the point of view of the upper levels of the activity classification. At lower levels of the classification, the share of value added of the category of ISIC, Rev.4 that results from using the top-down method will not necessarily account for more than 50 per cent of total value added of that unit. The more one proceeds from the upper to the lower levels of the hierarchical structure of ISIC Rev.4, the more often will this be the case. Theoretically, at the highest hierarchical level of ISIC, Rev.4 no section might account for more than 50 per cent of the value added of a unit.

131. In principle, the top-down method permits determination of the principal activity of a unit down to the lowest level of the hierarchical activity classification; in practice, it is only necessary to apply the method to the lowest level that is actually used in a specific application, such as the division or group level, depending on the respective rules of the specific application. Whatever the case, the top-down method ensures that the classification of the unit is consistent at every level.

### 3. E-commerce

132. Production units receive orders and transact the sale of goods and services produced by a variety of means, such as by telephone, fax, television or over the Internet. Many countries have chosen to describe as e-commerce any business transaction that transfers the ownership of the goods or service through the Internet or by other electronic means.

133. There are three stages in the transfer of the ownership of a good or service: (a) the placement of the order, (b) the payment and (c) the delivery of the good or service. E-commerce transactions may be defined to include situations where only the first stage, only the first and second stages, or all three stages are conducted through the Internet or by other electronic means.

134. For many production units, e-commerce is just one of a variety of means by which sales are transacted. The rules for the classification of such units in ISIC remain unchanged: they are classified to the industry of their principal activity. Increasingly,

however, business units that sell goods and supply services exclusively through the Internet are coming into existence. Such units should also be classified to the industry of their principal activity. Production units engaged in e-commerce will therefore be found in any industry of ISIC. There is one notable exception to this rule: in retail trade, units that undertake their sales exclusively or predominantly through the Internet are classified within ISIC, Rev.4 class 4791 (Retail sale via mail order houses or via Internet).

#### 4. Repair and maintenance

135. ISIC, Rev.4 now provides separate categories for the repair of all kinds of goods. However, no single high-level category exists that would cover all repair activities. Based on the type of good repaired, the activities are classified as follows:

- Repair of motor vehicles and of motorcycles are classified in classes 4520 and 4540, respectively.
- Repair of computers and communication equipment is classified in group 951.
- Repair of personal and household goods is classified in group 952.
- Repair of other machinery and equipment is classified in group 331.
- Repair of buildings and other structures is classified in division 43.

#### 5. Outsourcing / activities on a fee or contract basis

136. In some cases, units sell goods or services under their own name but the actual production, such as the physical transformation process in the case of manufacturing, is carried out fully or in part by others through specific contractual arrangements. This section describes how units involved in such arrangements should be classified in ISIC.

137. In this section, the following terminology is applied:

(a) The *principal*<sup>16</sup> is a unit that enters in a contractual relationship with another unit (here called contractor) to carry out some part (or all) of the production process;

<sup>16</sup> Elsewhere sometimes known as “contractor” or “converter”.

(b) The *contractor*<sup>17</sup> is a unit that carries out a specific production process based on a contractual relationship with a principal. The activities performed by the contractor are denominated “on a fee or contract basis”.

<sup>17</sup> Elsewhere sometimes known as the “subcontractor”.

(c) *Outsourcing* is a contractual agreement according to which the principal requires the contractor to carry out a specific production process. The term “subcontracting” is sometimes used as well.<sup>18</sup> In this context, the production process also includes supporting activities.

<sup>18</sup> Elsewhere, the terminology of “insourcing” and “outsourcing” (referring to relationships between units involved) or “offshoring” (referring to transactions between economic territories) may be used; those distinctions have no bearing on the guidelines in this section and are not used here.

138. The principal and the contractor may be located in the same economic territory or in different economic territories. The actual location does not affect the classification of either one of these units.

##### (a) Classification of the contractor

139. Contractors, i.e., units carrying out an activity on a fee or contract basis, are usually classified in the same ISIC category as units producing the same goods or services for their own account. Exceptions to this rule exist for trade activities, for which separate categories for such outsourced activities exist.

**(b) Classification of the principal***Outsourcing of parts of the production process*

140. If only part of the production process is outsourced, the principal is classified to the class that corresponds to the activity representing the complete production process, i.e., it is classified as if it were carrying out the complete process, including the contracted work, itself.

141. This applies not only to the outsourcing of support functions in the production process, such as accounting or computing activities, but also to the outsourcing of parts of the core production process, such as parts of a manufacturing process.

*Outsourcing of the complete production process*

142. In general, if the principal outsources the complete production process of a good or service, it is classified as if it were carrying out the production process itself. This applies in particular to all service-producing activities, including construction. In the case of manufacturing, however, the following special considerations apply.

143. In manufacturing, the principal provides the contractor with the technical specifications of the manufacturing activity to be carried out on the input materials. The input materials (raw materials or intermediate goods) can either be provided (owned) by the principal or not.

144. A principal who completely outsources the transformation process should be classified into manufacturing if and only if it owns the input materials to the production process—and therefore owns the final output.

145. A principal who completely outsources the transformation process but does not own the input materials is in fact buying the completed good from the contractor with the intention to re-sell it. Such an activity is classified in section G (Wholesale and retail trade), specifically according to the type of sale and the specific type of good sold.<sup>19</sup>

<sup>19</sup> The final classification of the principal may also depend on other activities that are carried out in the same unit.

**6. Government activities**

146. ISIC does not make any distinction regarding the institutional sector to which a statistical unit belongs. For instance, there is no category that would describe all activities carried out by a government as such. Activities carried out by government units that are specifically attributable to other areas of ISIC should be classified in the appropriate class of ISIC and not in division 84 (Public administration and defence; compulsory social security). For instance, public hospitals will be classified in class 8610.

147. It is true that ISIC division 84 includes activities of a governmental nature that are normally carried out by the public administration, including the enactment and judicial interpretation of laws and their pursuant regulation; the administration of programmes based on them; legislative activities; taxation; national defence; public order and safety; immigration services; foreign affairs; and the administration of government programmes. Nevertheless, the legal or institutional status is not, in itself, the determining factor for an activity to belong in that division.

## 7. Classification of enterprises

148. Since the activities of an enterprise sometimes cover a large variety of ISIC groups or classes, it may be appropriate for certain statistics to classify them at the division level only. In any case, when such a unit is to be classified at a lower level of the classification, the top-down approach, as set out in paragraphs 123–131 above, should be used.

149. The classification of a multi-activity enterprise should be determined by the value added generated by its constituent units. In other words, the ISIC category should be selected according to the kinds of activity of the constituent units that account for the principal share of value added, following the top-down method.

## 8. Classification of households

150. ISIC includes a category for the classification of households when they are employers of domestic personnel. This includes households employing maids, gardeners, cooks etc. As employment is generated, data on these units have been collected for various statistics, usually outside of general business statistics, i.e., using sample frames with households as collection units rather than businesses as collection units.

151. Outside this existing category, the need to describe activities of households for own use has emerged in data collections, such as in labour-force surveys. While market activities should generally be described according to existing rules for identifying the correct ISIC code for an activity, the application of these rules for activities producing goods and services for own use has proved difficult. These activities might combine a mix of activities undertaken by household enterprises, such as agricultural activities, construction, textile manufacturing, repair and other service activities. In general, it is not possible to assign value-added ratios to these activities and reasonably identify a principal activity. To provide a place for these mixed activities in the classification, two groups in division 98 (Undifferentiated goods- and services-producing activities of private households for own use) have been designated. This division will not normally be relevant to business statistics but rather applies to data collections covering household and subsistence activities.

## 9. Changes in the classification of units

152. Units can change their principal activity either at once or gradually over a period of time. The principal activity may change within the year from one statistical period to the next, either because of seasonal factors or because of a management decision to vary the pattern of output. In each case, there will have been a fairly sudden change in the balance of activities. Alternatively, a change in the pattern of output or sales may take place gradually over several years. While all these cases call for the classification of the unit to be changed, if made too often such changes distort statistics to the extent of making interpretation extremely difficult.

153. To avoid frequent changes it is necessary to have a stability rule. Without such a rule, there would be apparent changes in the economic demography of the business population that would be no more than statistical artifacts. Such a stability rule is intended for units that engage in a mix of activities that are almost balanced and are thus subject to increased risk of changes for the principal activity resulting from only small changes in the ratio of the activities involved. In such cases, the ratio of activities over the past two to three years should be taken into account when determining the principal activity of the unit.

154. Changes in the classification of units for the purpose of statistical inquiries are made not more than once a year, either at fixed dates or as information becomes available. More frequent changes would result in inconsistency between short-term (monthly and quarterly) and longer-term statistics.

#### **D. Capturing information about the activity of units and coding it according to ISIC**

155. The quality and comparability of the statistics produced according to ISIC will depend largely on the correctness of the codes assigned to the statistical units. In turn, the correctness of the codes will depend on the information available for determining them and the tools and procedures used.

156. To some extent, the quality of the information will depend upon the type of statistical source. The quality of information collected for administrative registrations will depend on the extent to which that information has a function in the administrative procedures for which the registrations are being made. It will also depend on what kind of distinctions that function will require, such as, whether tax rules, social security regulations, the rules for investment credits or the services provided by employment agencies will require precise registration of the type of activity undertaken. The statistical offices will therefore frequently need to collect directly from the units the information needed to determine the activity codes of the units, even when the register used as the basis for their surveys is derived from, or developed in cooperation with, one or more of the administrative agencies.

157. Given the nature of ISIC, the information that is needed to code for the register as well as the surveys will have to describe the main inputs, processes and outputs of the units' productive activities. For units with a wide range of products, information about them will also be necessary to determine their contributions to the value added or other relevant factors by which to determine their main activity. This information must be obtained from the units and care must be taken to ensure that the individuals who provide the information on behalf of the units understand the type of information needed so that they can obtain it from the records of the units or their own knowledge. Thus, the testing of question formulations is as important for establishment surveys as it is for household surveys. For the registers as well as for the two types of surveys, finding the correct codes on the basis of product information will be greatly facilitated by a well organized and comprehensive coding index.



## Chapter IV

### Other topics

#### A. Use of ISIC in establishing related national classifications

158. As an international standard classification, ISIC is the primary tool for collecting and presenting internationally comparable statistics by economic activity. It is therefore of great importance that data collected at the national level, and therefore the classifications used at the national level, are compatible with ISIC.

159. The need for international comparability does not, however, imply that countries must adopt ISIC as a whole, without modification. The intention is rather to have countries use ISIC as a guide in adapting their national classifications to the international standard. Countries may choose to either use ISIC directly for their national purposes or develop their own national classification. Wherever countries lack the infrastructure required to develop and maintain their own activity classification, they may adopt ISIC as their national activity classification with little or no modification. This is often done by extending or collapsing the detail of ISIC while maintaining its general structure. Other countries may have historically developed a classification that suits their particular needs. Those countries should make efforts to adapt their classification in a way that allows for the provision of data according to ISIC without substantial loss of information.

160. In order to attain international comparability, it is suggested that all countries adopt, as far as individual requirements permit, the same general principles and definitions in their industrial classification schemes (for the principles and definitions that were developed for this purpose and are embodied in ISIC, see sect. II above). As a result, it should be feasible to rearrange and combine entire categories of national classifications so that they correspond to one or more categories of ISIC, although this may not always be possible since certain categories at the most detailed level of ISIC may not be distinguished in the industrial classifications of some countries.

161. Adapting ISIC to the specifics of the national economy while maintaining international comparability requires the observation of a number of rules as set out below.

##### 1. Aggregation and disaggregation of ISIC

162. When adapting ISIC to national circumstances, its categories may be aggregated or further detailed to better reflect the structure of the national economy of the country. If a particular economic sector is economically of great importance or has developed important specializations that are not separately identified in ISIC, the relevant part of the classification can be further disaggregated. If some other sector of the economy does not exist or is still undeveloped or unimportant in the economy as a whole, the relevant part of the classification can be treated at a more aggregated level. It is not the intention to suggest data collection for categories, which would require all

kinds of artificial or arbitrary splits of the existing statistical units. The calculation of homogeneity ratios may serve as a tool in determining the feasibility and usefulness of more detailed categories of the classification.<sup>20</sup>

<sup>20</sup> For a more detailed discussion of homogeneity ratios, see *Companion Guide to ISIC and CPC* (United Nations publication, forthcoming).

163. In order to make a national activity classification convertible to ISIC, the categories at the most detailed level of classification in the national scheme should on the whole coincide with, or be subdivisions of, the individual classes of ISIC. In other words, any most detailed category of the national classification should not cover selected portions of two or more classes of ISIC. When national categories have to represent combinations of two or more entire classes of ISIC, the classes should be part of the same group. In this way, the convertibility of the national classification to ISIC would not be affected by the position or the manner of grouping of the categories at the detailed level of the classification in the national scheme.

164. To serve national purposes, categories in the ISIC structure may be disaggregated by subdividing the relevant classes into subclasses. This may be done by appending decimal places to the four-digit code that identifies each class of ISIC. Alternatively, the subdivision of groups into classes in ISIC may be expanded by replacing the existing classes with a greater number of more detailed categories. In order to preserve comparability with the classes of ISIC, the more detailed classes should be delineated so that they may be aggregated to classes.

165. Extending the four-digit codes of ISIC may be unnecessary if, to meet national requirements, the only classes to be subdivided are those that are identical to groups. These classes of ISIC are identified by four-digit codes ending in "0" and may be replaced by as many as nine classes, identified by specific four-digit codes.

166. ISIC categories may be aggregated, for example, by combining the classes of selected groups into fewer less detailed classes or by entirely telescoping classes into groups. It may even, in certain instances, be desirable or necessary to have categories at the most detailed level of the national classification that combine classes of ISIC. This may be because the kinds of activity segregated by selected classes of ISIC are not important enough in a given country. Or it may be due to a much smaller degree of specialization in the activities of the statistical units than is required in order to use certain classes of ISIC in the national scheme. For example, some countries may not establish categories in their national classifications that are similar to the individual categories of divisions 26 to 28 (Manufacture of machinery), inasmuch as the majority of establishments engaging in activities of class X also carry out the activities of class Y and vice versa, thereby making it impractical to separate these activities in the national classification. They may need to combine some or all of the groups or classes into single categories at the most detailed level of their national classification.

167. It should be kept in mind that combining classes into higher aggregates, either at the group level or elsewhere, will limit the comparability of data at the international level to that level or to even higher aggregates. The latter can occur if countries decide to aggregate some of the four-digit classes within, for example, group 281. If two countries aggregate classes within group 281, the comparability of their data may not be available at their respective aggregated levels but only at the higher level of group 281. The combining of classes should therefore be carefully considered in respect of its possible impact on the comparability of data compiled according to these new categories.

## 2. Level of international comparability

168. Ideally, countries would be able to provide data according to ISIC at all levels of the classification for the purposes of international comparability. As men-

tioned above, however, not all detailed categories of the classification may be suitable for all countries and countries may wish to develop national classifications based on their own priorities. Still, the problem of international comparability remains and countries should make effort to use a classification that is as much as possible compatible with ISIC and for which data can be collected and reported.

169. At its thirty-seventh session, the United Nations Statistical Commission recommended that countries adapt their national classifications in a way that allows them to report data at least at the two-digit level of ISIC, Rev.4 without loss of information.<sup>21</sup> It is clear that the interest in more detailed internationally comparable information will remain, especially for specific studies.

<sup>21</sup> See *Official Records of the Economic and Social Council, 2002, Supplement No.4 (E/2006/24)*, chap. I, para. 3, item 37/105 (b).

## **B. Use of different levels of the classification for the presentation of statistics**

170. It may be desirable to utilize less detailed classification categories of kind of economic activity for some types of statistics than for other series, and the number and size of the categories for which reliable statistics are presented may depend on both their source and confidentiality considerations. For example, it may not be feasible to present data on employment gathered in household inquiries in as great detail as data on employment obtained from establishment inquiries. Or it may not be necessary to present data according to kind of economic activity in as great detail in national accounting as in industrial statistics. By providing for four levels of classification (sections, divisions, groups and classes), ISIC furnishes a framework for comparable classifications of data at different levels of detail. It is important to note, however, that the fact that a category has been defined at the class level in ISIC will not prevent it from being larger in a particular national economy than a category defined at the group level or even at the level of division or section, as will be the case, for example, for class 8521 (General secondary education) versus division 03 (Fishing and aquaculture) in many countries.

171. Similarly, for specialized surveys on a limited number of industries, the detail provided by ISIC, even at its most detailed level, will often not be sufficient for the required analysis. In such cases, ISIC classes can be further subdivided for specific purposes, as necessary. It is suggested, however, that the new detailed categories still be aggregated to the existing ISIC classes for comparability reasons.

## **C. Relationship with other classifications**

### **1. General remarks**

172. At its nineteenth session, the Statistical Commission had requested the Secretariat to prepare a set of classifications that together would form an integrated system for classifying activities, goods and services and could be used in different kinds of economic statistics. Using the Integrated System of Classifications of Activities and Products (SINAP) as a basis, the work resulted in the revision of ISIC and SITC and the development of CPC. These three classifications are strongly interrelated. ISIC represents the activity side of the system, CPC is the central instrument for classifying goods and services and SITC is the aggregated classification of transportable goods for international trade statistics for analytical purposes. Both CPC and SITC use the headings and subheadings of the Harmonized Commodity Description and Coding

System (HS) as building blocks for their categories. Subsequently, relationships with other classifications that may require a degree of comparability with ISIC have been added to these considerations.

## **2. Relationship with product classifications: CPC, HS and SITC**

173. The relationship between ISIC, on the one hand, and the product classifications HS, CPC and SITC, on the other, is based on the fact that the product classifications in principle combine in one category goods or services that are normally produced in only one industry as defined in ISIC. In HS, this origin criterion was respected as far as possible at the time of its development. In some cases – for instance, when it seemed impossible that a customs officer could make the distinction – the principle was not applied. Still, most headings and subheadings of HS contain goods that are generally produced in only one ISIC category. There are frequent exceptions in some areas, however, where outputs do not enter international trade to a large degree. For instance, raw and processed agricultural products may be combined in HS since the international trade of raw and unprocessed products is negligible. Still, raw and processed products are outputs of distinct industries in ISIC, which makes a strict link between these classifications impossible. In addition, the arrangement of headings and subheadings of HS follows criteria that are quite different from industrial origin and the structure of CPC or SITC.

174. The differences between CPC, HS and SITC result from the fact that they were created for different purposes. HS is the detailed classification for international trade of transportable goods, while SITC is a more aggregated classification for analytical purposes, with the same scope as HS. The scope of CPC exceeds that of HS and SITC, in that it is intended to cover the production, trade and consumption of all goods and services. Both CPC and SITC, Rev.3, regroup HS categories, albeit in different ways. SITC follows a traditional order in which the materials used, the stage of processing and the end-use are the main considerations. CPC arranges its categories in groups that are similar to ISIC categories. This does not mean, however, that all goods are grouped according to their industrial origin.

175. Although origin had been an important criterion when developing CPC, it was produced as a classification in its own right – one in which classification is based on the physical characteristics and intrinsic nature of goods or on the nature of the services rendered. For example, while meat and hides are both outputs of slaughterhouses (ISIC class 1010, “Processing and preserving of meat”), they appear in different sections of CPC. However, each type of good or service distinguished in CPC is defined so that it is normally produced by only one activity as defined in ISIC. As far as practically possible, an attempt is made to establish a correspondence between the two classifications, each category of CPC being accompanied by a reference to the ISIC class in which the good or service is mainly produced.

## **3. Other derived and related activity classifications**

176. The work on the fourth revision of ISIC has been driven by a strong desire to improve comparability among activity classifications around the world. In the process, the experiences obtained during recent or still ongoing revisions of national and regional classifications have been taken into account. It is clear, however, that needs for detail and structure, especially at the lower levels of the classification, differ from country to country and from region to region. The work of the Expert Group on International Economic and Social Classifications has continued these harmonization efforts

in its work on the International Family of Economic and Social Classifications. The need to converge existing activity classifications has been stressed again by the Statistical Commission and will be a key element in future work on these classifications.

177. The need for convergence does not diminish the need for regional classifications. The work on improved and tailored regional activity classifications, based on the reference classification as the international standard, is an important way to further the application of ISIC. These regional classifications should be derived from ISIC and adjusted to the regional specifics of a group of countries. They will allow for data comparability within the region and serve as more tailored guidelines for the development of national classifications.

178. The preamble of the International Family of Economic and Social Classifications lays out the foundations of these relationships between reference classifications (such as ISIC for economic activities) and derived and related classifications.

#### (a) Derived classifications

179. The revision of the General Industrial Classification of Economic Activities within the European Communities (NACE) has been developed based on the fourth revision of ISIC, continuing the strong relation between these two classifications. Categories at all levels of NACE have been defined to be either identical or to form subsets of single ISIC categories.

180. In addition, the coding systems used in classifications of the United Nations and the European Community are as far as possible the same. As a result, the data of both intergovernmental organizations have become widely compatible. ISIC and NACE are identical up to the two-digit level (divisions) of the classification. At lower levels, NACE has created more detail suitable for European users of the classification. The additional detail created can always be aggregated to ISIC categories at the three- and four-digit levels, within the same structure.

181. Work to create similar derived classifications is also being carried out in other regions.

#### (b) Related classifications

182. The North American Industry Classification System (NAICS) was developed in the mid-1990s and has undergone some changes to increase comparability among the three custodians of this classification. The research work carried out during the development of NAICS has been a major input into the ISIC revision process. The review of the NAICS structure and concepts by other countries has not only resulted in the desire to reflect some of the NAICS top-level categories, such as "Information" in ISIC, but has also initiated reviews of ISIC principles and encouraged detailed discussions on criteria to be applied for boundary decisions between existing categories.

183. Work on the development of a common top-level structure for both classifications has shown limitations in this effort arising from specific country needs; the desire to maintain continuity in each of the classifications; and the cost/benefit analysis of a complete change of the classifications involved. As a result, the structures of ISIC and NAICS seem substantially different. However, definitions of individual categories have been designed in a way that statistical data collected according to NAICS can be reaggregated into the two-digit divisions of ISIC, Rev.4, ensuring the comparability of data as described in paragraph 168 above. In many cases, more detailed links are possible.

184. The Australian and New Zealand Standard Industrial Classification (ANZSIC) has been revised in 2006 and broadly aligns with ISIC at the detailed level. As for ISIC, the conceptual approach for ANZSIC has been re-evaluated. The revised ANZSIC takes into account activities within Australian and New Zealand economic units. The ANZSIC structure broadly follows the ISIC structure, so that categories at the division and more detailed levels can be aggregated into the two-digit categories of ISIC.

#### 4. Relationship of other international classifications with ISIC

185. The following classifications developed by the United Nations or its subsidiary organs have some relationship with ISIC or make use of parts of ISIC in defining their own scope or categories; whether describing statistics on occupations, employment, expenditures, education, tourism or the environment: the Classification of the Functions of Government (COFOG), the International Standard Classification of Education (ISCED),<sup>22</sup> the International Standard Classification of Occupations (ISCO),<sup>23</sup> the activity classification of the Tourism Satellite Account (TSA)<sup>24</sup> and the International Classification of Non-Profit Organizations (ICNPO).<sup>25</sup>

186. COFOG, which was developed by the former Statistical Office of the United Nations Secretariat mainly for use in the System of National Accounts, was first published in 1980 and revised in 2000. The criteria of classification—function in the case of COFOG and activity for ISIC—are conceptually rather similar. COFOG is more appropriate than ISIC for classifying government expenditures, however, because the COFOG list of functions is more detailed than the ISIC list of activities, having been drawn up specifically to take account of the range and diversity of government activities. Although there are similarities between the criteria of the two classifications, problems may arise when comparing data collected according to ISIC and COFOG. For instance, COFOG covers not only direct outlays on government-owned schools but also the subsidizing of privately owned schools and outlays on subsidiary services to education, such as school transport, food and lodging for students etc.

187. ISCED was developed by UNESCO as an instrument for assembling, compiling and presenting statistics of education, both within individual countries and internationally, and was last updated in 1997. It is a multi-purpose classification of educational programmes to be used for statistics on student enrolment and human or financial resources invested in education, as well as on the educational attainment of the population as obtained, for example, from population censuses or labour-force surveys. The statistical unit as classified in ISCED at the lowest level is the programme or programme group.

188. Educational institutions are classified according to ISCED on the basis of the type of programmes that they provide. In principle, these institutions may be considered equivalent to the basic units to be classified by ISIC. The definitions of the ISIC categories for education services have been defined in line with the changes applied in the last ISCED revision.

189. The International Standard Classification of Occupations (ISCO) has been developed by the International Labour Organization (ILO). It provides a basis for comparing occupational statistics for different countries and communicating other occupational information, such as for the recruitment or admission of migrant workers. It also serves as a model for countries when they develop their national occupational classifications or revise their existing ones.

190. The primary units to be classified to ISCO are jobs. Jobs are classified to ISCO on the basis of the type of work performed, that is, the task and duties to be car-

<sup>22</sup> *International Standard Classification of Education (ISCED 1997)* (Paris, UNESCO, November 1997).

<sup>23</sup> *International Standard Classification of Occupations (ISCO-1988)* (Geneva, ILO, 1988).

<sup>24</sup> Commission of the European Communities, Organisation for Economic Co-operation and Development, United Nations and World Tourism Organization, *Tourism Satellite Account: Recommended Methodological Framework*, Statistical Papers, Series F, No. 80 (United Nations publication, Sales No. E.01.XVII.9).

<sup>25</sup> See Annex A1 of the *Handbook of National Accounting: Handbook on Non-Profit Institutions in the System of National Accounts*, Statistical Papers, Series F, No. 91 (United Nations publication, Sales No. E.03.XVII.9).

ried out. Since ISIC and ISCO have entirely different functions and conceptual foundations – in other words, they measure very different aspects of the economy – there is no need to harmonize their structures. However, when similarities and differences between certain groups in ISCO are based on the type of distinctions that are reflected in ISIC (i.e., between the type of products, namely, goods and services, that are being produced or sold), the ISCO groups are defined in a manner that is generally consistent with the definition of these goods and services in ISIC and CPC.

191. The World Tourism Organization has developed two international recommendations on tourism statistics that are related to one another: the new *International Recommendations for Tourism Statistics 2008* (IRTS 2008)<sup>26</sup>—a revision of the previous 1993 Recommendations on Tourism Statistics that was approved by the United Nations Statistical Commission at its thirty-ninth session, in 2008; and the updated *Tourism Satellite Account: Recommended Methodological Framework 2008* (TSA:RMF2008)<sup>27</sup>—an update of TSA:RMF2000, presented to the Statistical Commission at the same session.<sup>28</sup> The concepts, definitions and classifications to be used for basic tourism statistics, which conform with TSA:RMF2008, are described in IRTS 2008. The concept of tourism characteristic products purchased by visitors and the activities that produce them was first introduced in TSA:RMF2000. Tourism characteristic activities are defined as activities that produce one or more tourism characteristic products as a typical output of the production process characterizing the activity. Updated lists of tourism characteristic products and activities defined in terms of CPC and ISIC, which are needed to compile basic tourism statistics and TSA, are to be found in annexes 2 and 3 to IRTS 2008. The list of tourism-related activities that appeared in annex II to part two of ISIC, Rev.3 has been superseded by these lists.

192. ICNPO is the classification recommended for delineating the non-profit institutions sector in the *Handbook on Non-profit Institutions in the System of National Accounts*. ICNPO was developed initially by an international team of non-profit institutions experts because the level of detail available in ISIC, Rev.3 was not sufficient to differentiate important types of non-profit institutions and permit their reaggregation to the classification structure common in treatments of the non-profit institutions sector. ICNPO was subsequently applied in the development of systematic empirical data on the non-profit institutions sector in 40 countries throughout the world as part of the Johns Hopkins Comparative Nonprofit Sector Project; was further verified in a pilot test of the *Handbook* by 11 statistical offices; and continues to be used by national statistical offices in both data collection and *Handbook* implementation activities.

## D. Indexes to the classification

193. Alphabetical and numerical indexes are very useful tools for further detailing classification categories and greatly simplify their application. The indexes are designed to be of assistance in adapting ISIC to the classification requirements of individual countries, comparing national classifications to ISIC and classifying data according to ISIC. They should also provide a guide to the correct classification of statistical units.

194. New interpretations of the classification, usually related to new activities, can be easily reflected in the index, while no change in the classification or its related texts is usually necessary. Indexes for this new version of ISIC will be available in machine-readable form only, published in the Classifications Registry on the United Nations Statistics Division website at <http://unstats.un.org/unsd/class>.

<sup>26</sup> Statistical Papers, Series M, No.83/Rev.1 (United Nations publication, forthcoming).

<sup>27</sup> Statistical Papers, Series F, No.80/Rev.1 (United Nations publication, forthcoming).

<sup>28</sup> See *Official Records of the Economic and Social Council, 2008, Supplement No. 4* (E/2008/24).

## **E. Correspondence tables**

195. Correspondence tables are an important tool for comparing statistical data that have been collected and presented using different classifications. They become necessary when the classification changes over time or when different underlying frameworks do not allow classifications to be closely related. Correspondence tables between different versions of the same classification are used to describe the detailed changes that have taken place in the revision process. A complete detailed correspondence between ISIC, Rev.4 and ISIC, Rev.3.1 is available electronically but is not included in the present publication.

196. Since ISIC has been used for the collection and presentation of statistics in many areas, there has been a strong need for correspondence tables between ISIC and other classifications. When drafting ISIC, Rev.4, and simultaneously CPC, Ver.2, a strong link was established between the two classifications. By rearranging the CPC categories according to their industrial origin and using the link between CPC, SITC and HS, a detailed correspondence table between HS, SITC, CPC and ISIC was established.

197. These and other correspondence tables are available in electronic format only and can be accessed at the United Nations Statistics Division website at <http://unstats.un.org/unsd/class>.

## **F. Alternative aggregations for ISIC**

198. Economic analysis and the presentation of statistics on specific subjects often require aggregation of data, collected according to ISIC, in ways that are different from the aggregation provided by the ISIC structure. For these special purposes, standard aggregations have been created to meet these demands, such as those presented in part four of this publication. These alternative aggregations may use either complete ISIC classes; only parts of ISIC classes (if the underlying concept for the aggregation is not comparable with the principle used in ISIC); or a standardized subdivision of existing ISIC classes to improve the application of ISIC for their specific purposes (for more detailed information, see part four below).



PART TWO

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## **Broad and detailed structure**



## Chapter I

# Broad structure

The individual categories of ISIC have been aggregated into the following 21 sections:

Section	Divisions	Description
A	01–03	Agriculture, forestry and fishing
B	05–09	Mining and quarrying
C	10–33	Manufacturing
D	35	Electricity, gas, steam and air conditioning supply
E	36–39	Water supply; sewerage, waste management and remediation activities
F	41–43	Construction
G	45–47	Wholesale and retail trade; repair of motor vehicles and motorcycles
H	49–53	Transportation and storage
I	55–56	Accommodation and food service activities
J	58–63	Information and communication
K	64–66	Financial and insurance activities
L	68	Real estate activities
M	69–75	Professional, scientific and technical activities
N	77–82	Administrative and support service activities
O	84	Public administration and defence; compulsory social security
P	85	Education
Q	86–88	Human health and social work activities
R	90–93	Arts, entertainment and recreation
S	94–96	Other service activities
T	97–98	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
U	99	Activities of extraterritorial organizations and bodies



## Chapter II

# Detailed structure

### Section A

#### Agriculture, forestry and fishing

Division	Group	Class	Description
<b>Division 01</b>			<b>Crop and animal production, hunting and related service activities</b>
	011		Growing of non-perennial crops
		0111	Growing of cereals (except rice), leguminous crops and oil seeds
		0112	Growing of rice
		0113	Growing of vegetables and melons, roots and tubers
		0114	Growing of sugar cane
		0115	Growing of tobacco
		0116	Growing of fibre crops
		0119	Growing of other non-perennial crops
	012		Growing of perennial crops
		0121	Growing of grapes
		0122	Growing of tropical and subtropical fruits
		0123	Growing of citrus fruits
		0124	Growing of pome fruits and stone fruits
		0125	Growing of other tree and bush fruits and nuts
		0126	Growing of oleaginous fruits
		0127	Growing of beverage crops
		0128	Growing of spices, aromatic, drug and pharmaceutical crops
		0129	Growing of other perennial crops
	013	0130	Plant propagation
	014		Animal production
		0141	Raising of cattle and buffaloes
		0142	Raising of horses and other equines
		0143	Raising of camels and camelids
		0144	Raising of sheep and goats
		0145	Raising of swine/pigs
		0146	Raising of poultry
		0149	Raising of other animals
	015	0150	Mixed farming
	016		Support activities to agriculture and post-harvest crop activities
		0161	Support activities for crop production
		0162	Support activities for animal production

Division	Group	Class	Description
		0163	Post-harvest crop activities
		0164	Seed processing for propagation
	017	0170	Hunting, trapping and related service activities
<b>Division 02</b>			<b>Forestry and logging</b>
	021	0210	Silviculture and other forestry activities
	022	0220	Logging
	023	0230	Gathering of non-wood forest products
	024	0240	Support services to forestry
<b>Division 03</b>			<b>Fishing and aquaculture</b>
	031		Fishing
		0311	Marine fishing
		0312	Freshwater fishing
	032		Aquaculture
		0321	Marine aquaculture
		0322	Freshwater aquaculture

## Section B Mining and quarrying

Division	Group	Class	Description
<b>Division 05</b>			<b>Mining of coal and lignite</b>
	051	0510	Mining of hard coal
	052	0520	Mining of lignite
<b>Division 06</b>			<b>Extraction of crude petroleum and natural gas</b>
	061	0610	Extraction of crude petroleum
	062	0620	Extraction of natural gas
<b>Division 07</b>			<b>Mining of metal ores</b>
	071	0710	Mining of iron ores
	072		Mining of non-ferrous metal ores
		0721	Mining of uranium and thorium ores
		0729	Mining of other non-ferrous metal ores
<b>Division 08</b>			<b>Other mining and quarrying</b>
	081	0810	Quarrying of stone, sand and clay
	089		Mining and quarrying n.e.c.
		0891	Mining of chemical and fertilizer minerals
		0892	Extraction of peat
		0893	Extraction of salt
		0899	Other mining and quarrying n.e.c.
<b>Division 09</b>			<b>Mining support service activities</b>
	091	0910	Support activities for petroleum and natural gas extraction
	099	0990	Support activities for other mining and quarrying

## Section C Manufacturing

Division	Group	Class	Description
<b>Division 10</b>			<b>Manufacture of food products</b>
	101	1010	Processing and preserving of meat
	102	1020	Processing and preserving of fish, crustaceans and molluscs
	103	1030	Processing and preserving of fruit and vegetables
	104	1040	Manufacture of vegetable and animal oils and fats
	105	1050	Manufacture of dairy products
	106		Manufacture of grain mill products, starches and starch products
		1061	Manufacture of grain mill products
		1062	Manufacture of starches and starch products
	107		Manufacture of other food products
		1071	Manufacture of bakery products
		1072	Manufacture of sugar
		1073	Manufacture of cocoa, chocolate and sugar confectionery
		1074	Manufacture of macaroni, noodles, couscous and similar farinaceous products
		1075	Manufacture of prepared meals and dishes
		1079	Manufacture of other food products n.e.c.
	108	1080	Manufacture of prepared animal feeds
<b>Division 11</b>			<b>Manufacture of beverages</b>
		1101	Distilling, rectifying and blending of spirits
		1102	Manufacture of wines
		1103	Manufacture of malt liquors and malt
		1104	Manufacture of soft drinks; production of mineral waters and other bottled waters
<b>Division 12</b>			<b>Manufacture of tobacco products</b>
	120	1200	Manufacture of tobacco products
<b>Division 13</b>			<b>Manufacture of textiles</b>
	131		Spinning, weaving and finishing of textiles
		1311	Preparation and spinning of textile fibres
		1312	Weaving of textiles
		1313	Finishing of textiles
	139		Manufacture of other textiles
		1391	Manufacture of knitted and crocheted fabrics
		1392	Manufacture of made-up textile articles, except apparel
		1393	Manufacture of carpets and rugs
		1394	Manufacture of cordage, rope, twine and netting
		1399	Manufacture of other textiles n.e.c.
<b>Division 14</b>			<b>Manufacture of wearing apparel</b>
	141	1410	Manufacture of wearing apparel, except fur apparel
	142	1420	Manufacture of articles of fur
	143	1430	Manufacture of knitted and crocheted apparel

Division	Group	Class	Description
<b>Division 15</b>			<b>Manufacture of leather and related products</b>
	151		Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur
		1511	Tanning and dressing of leather; dressing and dyeing of fur
		1512	Manufacture of luggage, handbags and the like, saddlery and harness
	152	1520	Manufacture of footwear
<b>Division 16</b>			<b>Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials</b>
	161	1610	Sawmilling and planing of wood
	162		Manufacture of products of wood, cork, straw and plaiting materials
		1621	Manufacture of veneer sheets and wood-based panels
		1622	Manufacture of builders' carpentry and joinery
		1623	Manufacture of wooden containers
		1629	Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials
<b>Division 17</b>			<b>Manufacture of paper and paper products</b>
		1701	Manufacture of pulp, paper and paperboard
		1702	Manufacture of corrugated paper and paperboard and of containers of paper and paperboard
		1709	Manufacture of other articles of paper and paperboard
<b>Division 18</b>			<b>Printing and reproduction of recorded media</b>
	181		Printing and service activities related to printing
		1811	Printing
		1812	Service activities related to printing
	182	1820	Reproduction of recorded media
<b>Division 19</b>			<b>Manufacture of coke and refined petroleum products</b>
	191	1910	Manufacture of coke oven products
	192	1920	Manufacture of refined petroleum products
<b>Division 20</b>			<b>Manufacture of chemicals and chemical products</b>
	201		Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms
		2011	Manufacture of basic chemicals
		2012	Manufacture of fertilizers and nitrogen compounds
		2013	Manufacture of plastics and synthetic rubber in primary forms
	202		Manufacture of other chemical products
		2021	Manufacture of pesticides and other agrochemical products
		2022	Manufacture of paints, varnishes and similar coatings, printing ink and mastics
		2023	Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations
		2029	Manufacture of other chemical products n.e.c.
	203	2030	Manufacture of man-made fibres
<b>Division 21</b>			<b>Manufacture of pharmaceuticals, medicinal chemical and botanical products</b>
	210	2100	Manufacture of pharmaceuticals, medicinal chemical and botanical products



Division	Group	Class	Description
<b>Division 22</b>			<b>Manufacture of rubber and plastics products</b>
	221		Manufacture of rubber products
		2211	Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres
		2219	Manufacture of other rubber products
	222	2220	Manufacture of plastics products
<b>Division 23</b>			<b>Manufacture of other non-metallic mineral products</b>
	231	2310	Manufacture of glass and glass products
	239		Manufacture of non-metallic mineral products n.e.c.
		2391	Manufacture of refractory products
		2392	Manufacture of clay building materials
		2393	Manufacture of other porcelain and ceramic products
		2394	Manufacture of cement, lime and plaster
		2395	Manufacture of articles of concrete, cement and plaster
		2396	Cutting, shaping and finishing of stone
		2399	Manufacture of other non-metallic mineral products n.e.c.
<b>Division 24</b>			<b>Manufacture of basic metals</b>
	241	2410	Manufacture of basic iron and steel
	242	2420	Manufacture of basic precious and other non-ferrous metals
	243		Casting of metals
		2431	Casting of iron and steel
		2432	Casting of non-ferrous metals
<b>Division 25</b>			<b>Manufacture of fabricated metal products, except machinery and equipment</b>
	251		Manufacture of structural metal products, tanks, reservoirs and steam generators
		2511	Manufacture of structural metal products
		2512	Manufacture of tanks, reservoirs and containers of metal
		2513	Manufacture of steam generators, except central heating hot water boilers
	252	2520	Manufacture of weapons and ammunition
	259		Manufacture of other fabricated metal products; metalworking service activities
		2591	Forging, pressing, stamping and roll-forming of metal; powder metallurgy
		2592	Treatment and coating of metals; machining
		2593	Manufacture of cutlery, hand tools and general hardware
		2599	Manufacture of other fabricated metal products n.e.c.
<b>Division 26</b>			<b>Manufacture of computer, electronic and optical products</b>
	261	2610	Manufacture of electronic components and boards
	262	2620	Manufacture of computers and peripheral equipment
	263	2630	Manufacture of communication equipment
	264	2640	Manufacture of consumer electronics
	265		Manufacture of measuring, testing, navigating and control equipment; watches and clocks
		2651	Manufacture of measuring, testing, navigating and control equipment
		2652	Manufacture of watches and clocks
	266	2660	Manufacture of irradiation, electromedical and electrotherapeutic equipment

Division	Group	Class	Description
	267	2670	Manufacture of optical instruments and photographic equipment
	268	2680	Manufacture of magnetic and optical media
<b>Division 27</b>			<b>Manufacture of electrical equipment</b>
	271	2710	Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus
	272	2720	Manufacture of batteries and accumulators
	273		Manufacture of wiring and wiring devices
		2731	Manufacture of fibre optic cables
		2732	Manufacture of other electronic and electric wires and cables
		2733	Manufacture of wiring devices
	274	2740	Manufacture of electric lighting equipment
	275	2750	Manufacture of domestic appliances
	279	2790	Manufacture of other electrical equipment
<b>Division 28</b>			<b>Manufacture of machinery and equipment n.e.c.</b>
	281		Manufacture of general-purpose machinery
		2811	Manufacture of engines and turbines, except aircraft, vehicle and cycle engines
		2812	Manufacture of fluid power equipment
		2813	Manufacture of other pumps, compressors, taps and valves
		2814	Manufacture of bearings, gears, gearing and driving elements
		2815	Manufacture of ovens, furnaces and furnace burners
		2816	Manufacture of lifting and handling equipment
		2817	Manufacture of office machinery and equipment (except computers and peripheral equipment)
		2818	Manufacture of power-driven hand tools
		2819	Manufacture of other general-purpose machinery
	282		Manufacture of special-purpose machinery
		2821	Manufacture of agricultural and forestry machinery
		2822	Manufacture of metal-forming machinery and machine tools
		2823	Manufacture of machinery for metallurgy
		2824	Manufacture of machinery for mining, quarrying and construction
		2825	Manufacture of machinery for food, beverage and tobacco processing
		2826	Manufacture of machinery for textile, apparel and leather production
		2829	Manufacture of other special-purpose machinery
<b>Division 29</b>			<b>Manufacture of motor vehicles, trailers and semi-trailers</b>
	291	2910	Manufacture of motor vehicles
	292	2920	Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers
	293	2930	Manufacture of parts and accessories for motor vehicles
<b>Division 30</b>			<b>Manufacture of other transport equipment</b>
	301		Building of ships and boats
		3011	Building of ships and floating structures
		3012	Building of pleasure and sporting boats
	302	3020	Manufacture of railway locomotives and rolling stock

Division	Group	Class	Description
	303	3030	Manufacture of air and spacecraft and related machinery
	304	3040	Manufacture of military fighting vehicles
	309		Manufacture of transport equipment n.e.c.
		3091	Manufacture of motorcycles
		3092	Manufacture of bicycles and invalid carriages
		3099	Manufacture of other transport equipment n.e.c.
<b>Division 31</b>			<b>Manufacture of furniture</b>
	310	3100	Manufacture of furniture
<b>Division 32</b>			<b>Other manufacturing</b>
	321		Manufacture of jewellery, bijouterie and related articles
		3211	Manufacture of jewellery and related articles
		3212	Manufacture of imitation jewellery and related articles
	322	3220	Manufacture of musical instruments
	323	3230	Manufacture of sports goods
	324	3240	Manufacture of games and toys
	325	3250	Manufacture of medical and dental instruments and supplies
	329	3290	Other manufacturing n.e.c.
<b>Division 33</b>			<b>Repair and installation of machinery and equipment</b>
	331		Repair of fabricated metal products, machinery and equipment
		3311	Repair of fabricated metal products
		3312	Repair of machinery
		3313	Repair of electronic and optical equipment
		3314	Repair of electrical equipment
		3315	Repair of transport equipment, except motor vehicles
		3319	Repair of other equipment
	332	3320	Installation of industrial machinery and equipment

## Section D

### Electricity, gas, steam and air conditioning supply

Division	Group	Class	Description
<b>Division 35</b>			<b>Electricity, gas, steam and air conditioning supply</b>
	351	3510	Electric power generation, transmission and distribution
	352	3520	Manufacture of gas; distribution of gaseous fuels through mains
	353	3530	Steam and air conditioning supply

## Section E

### Water supply; sewerage, waste management and remediation activities

Division	Group	Class	Description
<b>Division 36</b>			<b>Water collection, treatment and supply</b>
	360	3600	Water collection, treatment and supply

Division	Group	Class	Description
<b>Division 37</b>			<b>Sewerage</b>
	370	3700	Sewerage
<b>Division 38</b>			<b>Waste collection, treatment and disposal activities; materials recovery</b>
	381		Waste collection
		3811	Collection of non-hazardous waste
		3812	Collection of hazardous waste
	382		Waste treatment and disposal
		3821	Treatment and disposal of non-hazardous waste
		3822	Treatment and disposal of hazardous waste
	383	3830	Materials recovery
<b>Division 39</b>			<b>Remediation activities and other waste management services</b>
	390	3900	Remediation activities and other waste management services

## Section F Construction

Division	Group	Class	Description
<b>Division 41</b>			<b>Construction of buildings</b>
	410	4100	Construction of buildings
<b>Division 42</b>			<b>Civil engineering</b>
	421	4210	Construction of roads and railways
	422	4220	Construction of utility projects
	429	4290	Construction of other civil engineering projects
<b>Division 43</b>			<b>Specialized construction activities</b>
	431		Demolition and site preparation
		4311	Demolition
		4312	Site preparation
	432		Electrical, plumbing and other construction installation activities
		4321	Electrical installation
		4322	Plumbing, heat and air-conditioning installation
		4329	Other construction installation
	433	4330	Building completion and finishing
	439	4390	Other specialized construction activities

## Section G Wholesale and retail trade; repair of motor vehicles and motorcycles

Division	Group	Class	Description
<b>Division 45</b>			<b>Wholesale and retail trade and repair of motor vehicles and motorcycles</b>
	451	4510	Sale of motor vehicles
	452	4520	Maintenance and repair of motor vehicles

Division	Group	Class	Description
	453	4530	Sale of motor vehicle parts and accessories
	454	4540	Sale, maintenance and repair of motorcycles and related parts and accessories
<b>Division 46</b>			<b>Wholesale trade, except of motor vehicles and motorcycles</b>
	461	4610	Wholesale on a fee or contract basis
	462	4620	Wholesale of agricultural raw materials and live animals
	463	4630	Wholesale of food, beverages and tobacco
	464		Wholesale of household goods
		4641	Wholesale of textiles, clothing and footwear
		4649	Wholesale of other household goods
	465		Wholesale of machinery, equipment and supplies
		4651	Wholesale of computers, computer peripheral equipment and software
		4652	Wholesale of electronic and telecommunications equipment and parts
		4653	Wholesale of agricultural machinery, equipment and supplies
		4659	Wholesale of other machinery and equipment
	466		Other specialized wholesale
		4661	Wholesale of solid, liquid and gaseous fuels and related products
		4662	Wholesale of metals and metal ores
		4663	Wholesale of construction materials, hardware, plumbing and heating equipment and supplies
		4669	Wholesale of waste and scrap and other products n.e.c.
	469	4690	Non-specialized wholesale trade
<b>Division 47</b>			<b>Retail trade, except of motor vehicles and motorcycles</b>
	471		Retail sale in non-specialized stores
		4711	Retail sale in non-specialized stores with food, beverages or tobacco predominating
		4719	Other retail sale in non-specialized stores
	472		Retail sale of food, beverages and tobacco in specialized stores
		4721	Retail sale of food in specialized stores
		4722	Retail sale of beverages in specialized stores
		4723	Retail sale of tobacco products in specialized stores
	473	4730	Retail sale of automotive fuel in specialized stores
	474		Retail sale of information and communications equipment in specialized stores
		4741	Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores
		4742	Retail sale of audio and video equipment in specialized stores
	475		Retail sale of other household equipment in specialized stores
		4751	Retail sale of textiles in specialized stores
		4752	Retail sale of hardware, paints and glass in specialized stores
		4753	Retail sale of carpets, rugs, wall and floor coverings in specialized stores
		4759	Retail sale of electrical household appliances, furniture, lighting equipment and other household articles in specialized stores
	476		Retail sale of cultural and recreation goods in specialized stores
		4761	Retail sale of books, newspapers and stationary in specialized stores
		4762	Retail sale of music and video recordings in specialized stores

Division	Group	Class	Description
		4763	Retail sale of sporting equipment in specialized stores
		4764	Retail sale of games and toys in specialized stores
	477		Retail sale of other goods in specialized stores
		4771	Retail sale of clothing, footwear and leather articles in specialized stores
		4772	Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles in specialized stores
		4773	Other retail sale of new goods in specialized stores
		4774	Retail sale of second-hand goods
	478		Retail sale via stalls and markets
		4781	Retail sale via stalls and markets of food, beverages and tobacco products
		4782	Retail sale via stalls and markets of textiles, clothing and footwear
		4789	Retail sale via stalls and markets of other goods
	479		Retail trade not in stores, stalls or markets
		4791	Retail sale via mail order houses or via Internet
		4799	Other retail sale not in stores, stalls or markets

## Section H

### Transportation and storage

Division	Group	Class	Description
<b>Division 49</b>			<b>Land transport and transport via pipelines</b>
	491		Transport via railways
		4911	Passenger rail transport, interurban
		4912	Freight rail transport
	492		Other land transport
		4921	Urban and suburban passenger land transport
		4922	Other passenger land transport
		4923	Freight transport by road
	493	4930	Transport via pipeline
<b>Division 50</b>			<b>Water transport</b>
	501		Sea and coastal water transport
		5011	Sea and coastal passenger water transport
		5012	Sea and coastal freight water transport
	502		Inland water transport
		5021	Inland passenger water transport
		5022	Inland freight water transport
<b>Division 51</b>			<b>Air transport</b>
	511	5110	Passenger air transport
	512	5120	Freight air transport
<b>Division 52</b>			<b>Warehousing and support activities for transportation</b>
	521	5210	Warehousing and storage
	522		Support activities for transportation
		5221	Service activities incidental to land transportation

Division	Group	Class	Description
		5222	Service activities incidental to water transportation
		5223	Service activities incidental to air transportation
		5224	Cargo handling
		5229	Other transportation support activities
<b>Division 53</b>			<b>Postal and courier activities</b>
	531	5310	Postal activities
	532	5320	Courier activities

## Section I Accommodation and food service activities

Division	Group	Class	Description
<b>Division 55</b>			<b>Accommodation</b>
	551	5510	Short term accommodation activities
	552	5520	Camping grounds, recreational vehicle parks and trailer parks
	559	5590	Other accommodation
<b>Division 56</b>			<b>Food and beverage service activities</b>
	561	5610	Restaurants and mobile food service activities
	562		Event catering and other food service activities
		5621	Event catering
		5629	Other food service activities
	563	5630	Beverage serving activities

## Section J Information and communication

Division	Group	Class	Description
<b>Division 58</b>			<b>Publishing activities</b>
	581		Publishing of books, periodicals and other publishing activities
		5811	Book publishing
		5812	Publishing of directories and mailing lists
		5813	Publishing of newspapers, journals and periodicals
		5819	Other publishing activities
	582	5820	Software publishing
<b>Division 59</b>			<b>Motion picture, video and television programme production, sound recording and music publishing activities</b>
	591		Motion picture, video and television programme activities
		5911	Motion picture, video and television programme production activities
		5912	Motion picture, video and television programme post-production activities
		5913	Motion picture, video and television programme distribution activities
		5914	Motion picture projection activities
	592	5920	Sound recording and music publishing activities

Division	Group	Class	Description
<b>Division 60</b>			<b>Programming and broadcasting activities</b>
	601	6010	Radio broadcasting
	602	6020	Television programming and broadcasting activities
<b>Division 61</b>			<b>Telecommunications</b>
	611	6110	Wired telecommunications activities
	612	6120	Wireless telecommunications activities
	613	6130	Satellite telecommunications activities
	619	6190	Other telecommunications activities
<b>Division 62</b>			<b>Computer programming, consultancy and related activities</b>
		6201	Computer programming activities
		6202	Computer consultancy and computer facilities management activities
		6209	Other information technology and computer service activities
<b>Division 63</b>			<b>Information service activities</b>
	631		Data processing, hosting and related activities; web portals
		6311	Data processing, hosting and related activities
		6312	Web portals
	639		Other information service activities
		6391	News agency activities
		6399	Other information service activities n.e.c.

## Section K Financial and insurance activities

Division	Group	Class	Description
<b>Division 64</b>			<b>Financial service activities, except insurance and pension funding</b>
	641		Monetary intermediation
		6411	Central banking
		6419	Other monetary intermediation
	642	6420	Activities of holding companies
	643	6430	Trusts, funds and similar financial entities
	649		Other financial service activities, except insurance and pension funding activities
		6491	Financial leasing
		6492	Other credit granting
		6499	Other financial service activities, except insurance and pension funding activities, n.e.c.
<b>Division 65</b>			<b>Insurance, reinsurance and pension funding, except compulsory social security</b>
	651		Insurance
		6511	Life insurance
		6512	Non-life insurance
	652	6520	Reinsurance
	653	6530	Pension funding



Division	Group	Class	Description
<b>Division 66</b>			<b>Activities auxiliary to financial service and insurance activities</b>
	661		Activities auxiliary to financial service activities, except insurance and pension funding
		6611	Administration of financial markets
		6612	Security and commodity contracts brokerage
		6619	Other activities auxiliary to financial service activities
	662		Activities auxiliary to insurance and pension funding
		6621	Risk and damage evaluation
		6622	Activities of insurance agents and brokers
		6629	Other activities auxiliary to insurance and pension funding
	663	6630	Fund management activities

## Section L Real estate activities

Division	Group	Class	Description
<b>Division 68</b>			<b>Real estate activities</b>
	681	6810	Real estate activities with own or leased property
	682	6820	Real estate activities on a fee or contract basis

## Section M Professional, scientific and technical activities

Division	Group	Class	Description
<b>Division 69</b>			<b>Legal and accounting activities</b>
	691	6910	Legal activities
	692	6920	Accounting, bookkeeping and auditing activities; tax consultancy
<b>Division 70</b>			<b>Activities of head offices; management consultancy activities</b>
	701	7010	Activities of head offices
	702	7020	Management consultancy activities
<b>Division 71</b>			<b>Architectural and engineering activities; technical testing and analysis</b>
	711	7110	Architectural and engineering activities and related technical consultancy
	712	7120	Technical testing and analysis
<b>Division 72</b>			<b>Scientific research and development</b>
	721	7210	Research and experimental development on natural sciences and engineering
	722	7220	Research and experimental development on social sciences and humanities
<b>Division 73</b>			<b>Advertising and market research</b>
	731	7310	Advertising
	732	7320	Market research and public opinion polling
<b>Division 74</b>			<b>Other professional, scientific and technical activities</b>
	741	7410	Specialized design activities
	742	7420	Photographic activities
	749	7490	Other professional, scientific and technical activities n.e.c.

Division	Group	Class	Description
<b>Division 75</b>			<b>Veterinary activities</b>
	750	7500	Veterinary activities

## Section N Administrative and support service activities

Division	Group	Class	Description
<b>Division 77</b>			<b>Rental and leasing activities</b>
	771	7710	Renting and leasing of motor vehicles
	772		Renting and leasing of personal and household goods
		7721	Renting and leasing of recreational and sports goods
		7722	Renting of video tapes and disks
		7729	Renting and leasing of other personal and household goods
	773	7730	Renting and leasing of other machinery, equipment and tangible goods
	774	7740	Leasing of intellectual property and similar products, except copyrighted works
<b>Division 78</b>			<b>Employment activities</b>
	781	7810	Activities of employment placement agencies
	782	7820	Temporary employment agency activities
	783	7830	Other human resources provision
<b>Division 79</b>			<b>Travel agency, tour operator, reservation service and related activities</b>
	791		Travel agency and tour operator activities
		7911	Travel agency activities
		7912	Tour operator activities
	799	7990	Other reservation service and related activities
<b>Division 80</b>			<b>Security and investigation activities</b>
	801	8010	Private security activities
	802	8020	Security systems service activities
	803	8030	Investigation activities
<b>Division 81</b>			<b>Services to buildings and landscape activities</b>
	811	8110	Combined facilities support activities
	812		Cleaning activities
		8121	General cleaning of buildings
		8129	Other building and industrial cleaning activities
	813	8130	Landscape care and maintenance service activities
<b>Division 82</b>			<b>Office administrative, office support and other business support activities</b>
	821		Office administrative and support activities
		8211	Combined office administrative service activities
		8219	Photocopying, document preparation and other specialized office support activities
	822	8220	Activities of call centres
	823	8230	Organization of conventions and trade shows
	829		Business support service activities n.e.c.
		8291	Activities of collection agencies and credit bureaus

Division	Group	Class	Description
		8292	Packaging activities
		8299	Other business support service activities n.e.c.

## Section O Public administration and defence; compulsory social security

Division	Group	Class	Description
<b>Division 84</b>			<b>Public administration and defence; compulsory social security</b>
	841		Administration of the State and the economic and social policy of the community
		8411	General public administration activities
		8412	Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security
		8413	Regulation of and contribution to more efficient operation of businesses
	842		Provision of services to the community as a whole
		8421	Foreign affairs
		8422	Defence activities
		8423	Public order and safety activities
	843	8430	Compulsory social security activities

## Section P Education

Division	Group	Class	Description
<b>Division 85</b>			<b>Education</b>
	851	8510	Pre-primary and primary education
	852		Secondary education
		8521	General secondary education
		8522	Technical and vocational secondary education
	853	8530	Higher education
	854		Other education
		8541	Sports and recreation education
		8542	Cultural education
		8549	Other education n.e.c.
	855	8550	Educational support activities

## Section Q Human health and social work activities

Division	Group	Class	Description
<b>Division 86</b>			<b>Human health activities</b>
	861	8610	Hospital activities
	862	8620	Medical and dental practice activities
	869	8690	Other human health activities

Division	Group	Class	Description
<b>Division 87</b>			<b>Residential care activities</b>
	871	8710	Residential nursing care facilities
	872	8720	Residential care activities for mental retardation, mental health and substance abuse
	873	8730	Residential care activities for the elderly and disabled
	879	8790	Other residential care activities
<b>Division 88</b>			<b>Social work activities without accommodation</b>
	881	8810	Social work activities without accommodation for the elderly and disabled
	889	8890	Other social work activities without accommodation

## Section R

### Arts, entertainment and recreation

Division	Group	Class	Description
<b>Division 90</b>			<b>Creative, arts and entertainment activities</b>
	900	9000	Creative, arts and entertainment activities
<b>Division 91</b>			<b>Libraries, archives, museums and other cultural activities</b>
		9101	Library and archives activities
		9102	Museums activities and operation of historical sites and buildings
		9103	Botanical and zoological gardens and nature reserves activities
<b>Division 92</b>			<b>Gambling and betting activities</b>
	920	9200	Gambling and betting activities
<b>Division 93</b>			<b>Sports activities and amusement and recreation activities</b>
	931		Sports activities
		9311	Operation of sports facilities
		9312	Activities of sports clubs
		9319	Other sports activities
	932		Other amusement and recreation activities
		9321	Activities of amusement parks and theme parks
		9329	Other amusement and recreation activities n.e.c.

## Section S

### Other service activities

Division	Group	Class	Description
<b>Division 94</b>			<b>Activities of membership organizations</b>
	941		Activities of business, employers and professional membership organizations
		9411	Activities of business and employers membership organizations
		9412	Activities of professional membership organizations
	942	9420	Activities of trade unions
	949		Activities of other membership organizations
		9491	Activities of religious organizations

Division	Group	Class	Description
		9492	Activities of political organizations
		9499	Activities of other membership organizations n.e.c.
<b>Division 95</b>			<b>Repair of computers and personal and household goods</b>
	951		Repair of computers and communication equipment
		9511	Repair of computers and peripheral equipment
		9512	Repair of communication equipment
	952		Repair of personal and household goods
		9521	Repair of consumer electronics
		9522	Repair of household appliances and home and garden equipment
		9523	Repair of footwear and leather goods
		9524	Repair of furniture and home furnishings
		9529	Repair of other personal and household goods
<b>Division 96</b>			<b>Other personal service activities</b>
		9601	Washing and (dry-) cleaning of textile and fur products
		9602	Hairdressing and other beauty treatment
		9603	Funeral and related activities
		9609	Other personal service activities n.e.c.

## Section T

### Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

Division	Group	Class	Description
<b>Division 97</b>			<b>Activities of households as employers of domestic personnel</b>
	970	9700	Activities of households as employers of domestic personnel
<b>Division 98</b>			<b>Undifferentiated goods- and services-producing activities of private households for own use</b>
	981	9810	Undifferentiated goods-producing activities of private households for own use
	982	9820	Undifferentiated service-producing activities of private households for own use

## Section U

### Activities of extraterritorial organizations and bodies

Division	Group	Class	Description
<b>Division 99</b>			<b>Activities of extraterritorial organizations and bodies</b>
	990	9900	Activities of extraterritorial organizations and bodies



PART THREE

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**Detailed structure and explanatory  
notes**





## Section A

### Agriculture, forestry and fishing

This section includes the exploitation of vegetal and animal natural resources, comprising the activities of growing of crops, raising and breeding of animals, harvesting of timber and other plants, animals or animal products from a farm or their natural habitats.

#### 01 Crop and animal production, hunting and related service activities

This division includes two basic activities, namely the production of crop products and production of animal products, covering also the forms of organic agriculture, the growing of genetically modified crops and the raising of genetically modified animals.

This division also includes service activities incidental to agriculture, as well as hunting, trapping and related activities.

Group 015 (Mixed farming) breaks with the usual principles for identifying main activity. It accepts that many agricultural holdings have reasonably balanced crop and animal production and that it would be arbitrary to classify them in one category or the other.

Agricultural activities exclude any subsequent processing of the agricultural products (classified under divisions 10 and 11 (Manufacture of food products and beverages) and division 12 (Manufacture of tobacco products)), beyond that needed to prepare them for the primary markets. However, the preparation of products for the primary markets is included here.

The division excludes field construction (e.g. agricultural land terracing, drainage, preparing rice paddies etc.) classified in section F (Construction) and buyers and cooperative associations engaged in the marketing of farm products classified in section G.

#### 011 Growing of non-perennial crops

This group includes the growing of non-perennial crops, i.e. plants that do not last for more than two growing seasons. Included is the growing of these plants for the purpose of seed production.

#### 0111 Growing of cereals (except rice), leguminous crops and oil seeds

This class includes all forms of growing of cereals, leguminous crops and oil seeds in open fields, including those considered organic farming and the growing of genetically modified crops. The growing of these crops is often combined within agricultural units.

This class includes:

—growing of cereals such as:

- ◆ wheat
- ◆ grain maize
- ◆ sorghum
- ◆ barley
- ◆ rye
- ◆ oats
- ◆ millets
- ◆ other cereals n.e.c.

—growing of leguminous crops such as:

- ◆ beans
- ◆ broad beans
- ◆ chick peas
- ◆ cow peas
- ◆ lentils
- ◆ lupins
- ◆ peas
- ◆ pigeon peas
- ◆ other leguminous crops

—growing of oil seeds such as:

- ◆ soya beans
- ◆ groundnuts
- ◆ castor bean
- ◆ linseed
- ◆ mustard seed
- ◆ niger seed
- ◆ rapeseed
- ◆ safflower seed
- ◆ sesame seed
- ◆ sunflower seed
- ◆ other oil seeds

*This class excludes:*

—growing of maize for fodder, see 0119

#### **0112 Growing of rice**

This class includes:

—growing of rice (including organic farming and the growing of genetically modified rice)

#### **0113 Growing of vegetables and melons, roots and tubers**

This class includes:

—growing of leafy or stem vegetables such as:

- ◆ artichokes
- ◆ asparagus
- ◆ cabbages
- ◆ cauliflower and broccoli
- ◆ lettuce and chicory
- ◆ spinach
- ◆ other leafy or stem vegetables

—growing of fruit bearing vegetables such as:

- ◆ cucumbers and gherkins
- ◆ eggplants (aubergines)
- ◆ tomatoes

- ◆ watermelons
- ◆ cantaloupes
- ◆ other melons and fruit-bearing vegetables
- growing of root, bulb or tuberous vegetables such as:
  - ◆ carrots
  - ◆ turnips
  - ◆ garlic
  - ◆ onions (incl. shallots)
  - ◆ leeks and other alliaceous vegetables
  - ◆ other root, bulb or tuberous vegetables
- growing of mushrooms and truffles
- growing of vegetable seeds, except beet seeds
- growing of sugar beet
- growing of other vegetables
- growing of roots and tubers such as:
  - ◆ potatoes
  - ◆ sweet potatoes
  - ◆ cassava
  - ◆ yams
  - ◆ other roots and tubers

*This class excludes:*

- growing of mushroom spawn, see 0130
- growing of chilies and peppers (*capsicum spp.*) and other spices and aromatic crops, see 0128

#### **0114 Growing of sugar cane**

This class includes:

- growing of sugar cane

*This class excludes:*

- growing of sugar beet, see 0113

#### **0115 Growing of tobacco**

This class includes:

- growing of unmanufactured tobacco

#### **0116 Growing of fibre crops**

This class includes:

- growing of cotton
- growing of jute, kenaf and other textile bast fibres
- growing of flax and true hemp
- growing of sisal and other textile fibre of the genus agave
- growing of abaca, ramie and other vegetable textile fibres
- growing of other fibre crops

**0119 Growing of other non-perennial crops**

This class includes the growing of non-perennial crops not elsewhere classified.

This class includes:

- growing of swedes, mangolds, fodder roots, clover, alfalfa, sainfoin, maize and other grasses, forage kale and similar forage products
- growing of beet seeds (excluding sugar beet seeds) and seeds of forage plants
- growing of flowers, including production of cut flowers and flower buds
- growing of flower seeds

*This class excludes:*

- growing of sunflower seeds, see 0111
- growing of non-perennial spice, aromatic, drug and pharmaceutical crops, see 0128

**012 Growing of perennial crops**

This group includes the growing of perennial crops, i.e. plants that lasts for more than two growing seasons, either dying back after each season or growing continuously. Included is the growing of these plants for the purpose of seed production.

**0121 Growing of grapes**

This class includes:

- growing of wine grapes and table grapes in vineyards

*This class excludes:*

- manufacture of wine, see 1102

**0122 Growing of tropical and subtropical fruits**

This class includes:

- growing of tropical and subtropical fruits:
  - ◆ avocados
  - ◆ bananas and plantains
  - ◆ dates
  - ◆ figs
  - ◆ mangoes
  - ◆ papayas
  - ◆ pineapples
  - ◆ other tropical and subtropical fruits

**0123 Growing of citrus fruits**

This class includes:

- growing of citrus fruits:
  - ◆ grapefruit and pomelo
  - ◆ lemons and limes
  - ◆ oranges
  - ◆ tangerines, mandarins and clementines
  - ◆ other citrus fruits

**0124 Growing of pome fruits and stone fruits**

This class includes:

—growing of pome fruits and stone fruits:

- ◆ apples
- ◆ apricots
- ◆ cherries and sour cherries
- ◆ peaches and nectarines
- ◆ pears and quinces
- ◆ plums and sloes
- ◆ other pome fruits and stone fruits

**0125 Growing of other tree and bush fruits and nuts**

This class includes:

—growing of berries:

- ◆ blueberries
- ◆ currants
- ◆ gooseberries
- ◆ kiwi fruit
- ◆ raspberries
- ◆ strawberries
- ◆ other berries

—growing of fruit seeds

—growing of edible nuts:

- ◆ almonds
- ◆ cashew nuts
- ◆ chestnuts
- ◆ hazelnuts
- ◆ pistachios
- ◆ walnuts
- ◆ other nuts

—growing of other tree and bush fruits:

- ◆ locust beans

*This class excludes:*

—*growing of coconuts, see 0126*

**0126 Growing of oleaginous fruits**

This class includes:

—growing of oleaginous fruits:

- ◆ coconuts
- ◆ olives
- ◆ oil palms
- ◆ other oleaginous fruits

*This class excludes:*

—*growing of soya beans, groundnuts and other oil seeds, see 0111*

**0127 Growing of beverage crops**

This class includes:

—growing of beverage crops:

- ◆ coffee
- ◆ tea
- ◆ maté
- ◆ cocoa
- ◆ other beverage crops

**0128 Growing of spices, aromatic, drug and pharmaceutical crops**

This class includes:

—growing of perennial and non-perennial spices and aromatic crops:

- ◆ pepper (piper spp.)
- ◆ chilies and peppers (capsicum spp.)
- ◆ nutmeg, mace and cardamoms
- ◆ anise, badian and fennel
- ◆ cinnamon (canella)
- ◆ cloves
- ◆ ginger
- ◆ vanilla
- ◆ hops
- ◆ other spices and aromatic crops

—growing of drug and narcotic crops

—growing of plants used primarily in perfumery, in pharmacy or for insecticidal, fungicidal or similar purposes

**0129 Growing of other perennial crops**

This class includes:

- growing of rubber trees
- growing of Christmas trees
- growing of trees for extraction of sap
- growing of vegetable materials of a kind used primarily for plaiting

*This class excludes:*

—gathering of tree sap or rubber-like gums in the wild, see 0230

**013 Plant propagation**

See class 0130.

**0130 Plant propagation**

This class includes the production of all vegetative planting materials including cuttings, suckers and seedlings for direct plant propagation or to create plant grafting stock into which selected scion is grafted for eventual planting to produce crops.

This class includes:

- growing of plants for planting

- growing of plants for ornamental purposes, including turf for transplanting
- growing of live plants for bulbs, tubers and roots; cuttings and slips; mushroom spawn
- operation of tree nurseries, except forest tree nurseries

*This class excludes:*

- growing of plants for the purpose of seed production, see groups 011 and 012
- operation of forest tree nurseries, see 0210

## **014 Animal production**

This group includes raising (farming) and breeding of all animals, except aquatic animals.

*This group excludes:*

- breeding support services, such as stud services, see 0162
- farm animal boarding and care, see 0162
- production of hides and skins from slaughterhouses, see 1010

### **0141 Raising of cattle and buffaloes**

This class includes:

- raising and breeding of cattle and buffaloes
- production of raw cow milk from cows or buffaloes
- production of bovine semen

*This class excludes:*

- processing of milk, see 1050

### **0142 Raising of horses and other equines**

This class includes:

- raising and breeding of horses (including racing horses), asses, mules or hinnies

*This class excludes:*

- operation of racing and riding stables, see 9319

### **0143 Raising of camels and camelids**

This class includes:

- raising and breeding of camels (dromedary) and camelids

### **0144 Raising of sheep and goats**

This class includes:

- raising and breeding of sheep and goats
- production of raw sheep or goat milk
- production of raw wool

*This class excludes:*

- sheep shearing on a fee or contract basis, see 0162
- production of pulled wool, see 1010
- processing of milk, see 1050

**0145 Raising of swine/pigs**

This class includes:

—raising and breeding of swine (pigs)

**0146 Raising of poultry**

This class includes:

—raising and breeding of poultry:

◆ fowls of the species *Gallus domesticus* (chickens and capons), ducks, geese, turkeys and guinea fowls

—production of eggs

—operation of poultry hatcheries

*This class excludes:*

—production of feathers or down, see 1010

**0149 Raising of other animals**

This class includes:

—raising and breeding of semi-domesticated or other live animals:

◆ ostriches and emus

◆ other birds (except poultry)

◆ insects

◆ rabbits and other fur animals

—production of fur skins, reptile or bird skins from ranching operation

—operation of worm farms, land mollusc farms, snail farms etc.

—raising of silk worms, production of silk worm cocoons

—bee-keeping and production of honey and beeswax

—raising and breeding of pet animals (except fish):

◆ cats and dogs

◆ birds, such as parakeets etc.

◆ hamsters etc.

—raising of diverse animals

*This class excludes:*

—production of hides and skins originating from hunting and trapping, see 0170

—operation of frog farms, crocodile farms, marine worm farms, see 0321, 0322

—operation of fish farms, see 0321, 0322

—training of pet animals, see 9609

**015 Mixed farming**

See class 0150.

**0150 Mixed farming**

This class includes the combined production of crops and animals without a specialized production of crops or animals. The size of the overall farming operation is not a determining factor. If either production of crops or animals in a given unit exceeds 66 per cent or more of standard gross margins, the combined activity should not be included here, but allocated to crop or animal farming.



*This class excludes:*

- *mixed crop farming, see groups 011 and 012*
- *mixed animal farming, see group 014*

## **016 Support activities to agriculture and post-harvest crop activities**

This group includes activities incidental to agricultural production and activities similar to agriculture not undertaken for production purposes (in the sense of harvesting agricultural products), done on a fee or contract basis. Also included are post-harvest crop activities, aimed at preparing agricultural products for the primary market.

### **0161 Support activities for crop production**

This class includes:

— agricultural activities on a fee or contract basis:

- ◆ preparation of fields
- ◆ establishing a crop
- ◆ treatment of crops
- ◆ crop spraying, including by air
- ◆ trimming of fruit trees and vines
- ◆ transplanting of rice, thinning of beets
- ◆ harvesting
- ◆ pest control (including rabbits) in connection with agriculture

— operation of agricultural irrigation equipment

This class also includes:

- provision of agricultural machinery with operators and crew
- maintenance of land to keep it in good condition for agricultural use

*This class excludes:*

- *post-harvest crop activities, see 0163*
- *activities of agronomists and agricultural economists, see 7490*
- *landscape architecture, see 7110*
- *landscape gardening, planting, see 8130*
- *maintenance of land to keep it in good ecological condition, see 8130*
- *organization of agricultural shows and fairs, see 8230*

### **0162 Support activities for animal production**

This class includes:

— agricultural activities on a fee or contract basis:

- ◆ activities to promote propagation, growth and output of animals
- ◆ herd testing services, droving services, agistment services, poultry caponizing, coop cleaning etc.
- ◆ activities related to artificial insemination
- ◆ stud services
- ◆ sheep shearing
- ◆ farm animal boarding and care

This class also includes:

- activities of farriers

*This class excludes:*

- provision of space for animal boarding only, see 6810
- veterinary activities, see 7500
- vaccination of animals, see 7500
- renting of animals (e.g. herds), see 7730
- service activities to promote commercial hunting and trapping, see 9499
- pet boarding, see 9609

### **0163 Post-harvest crop activities**

This class includes:

- preparation of crops for primary markets, i.e. cleaning, trimming, grading, disinfecting
- cotton ginning
- preparation of tobacco leaves
- preparation of cocoa beans
- waxing of fruit
- sun-drying of fruit and vegetables

*This class excludes:*

- preparation of agricultural products by the producer, see groups 011 and 012
- preserving of fruit and vegetables, including dehydration by artificial means, see 1030
- stemming and redrying of tobacco, see 1200
- marketing activities of commission merchants and cooperative associations, see division 46
- wholesale of agricultural raw materials, see 4620

### **0164 Seed processing for propagation**

This class includes all post-harvest activities aimed at improving the propagation quality of seed through the removal of non-seed materials, undersized, mechanically or insect-damaged and immature seeds as well as removing the seed moisture to a safe level for seed storage. This activity includes the drying, cleaning, grading and treating of seeds until they are marketed. The treatment of genetically modified seeds is included here.

*This class excludes:*

- growing of seeds, see groups 011 and 012
- processing of seeds to obtain oil, see 1040
- research to develop or modify new forms of seeds, see 7210

### **017 Hunting, trapping and related service activities**

See class 0170.

### **0170 Hunting, trapping and related service activities**

This class includes:

- hunting and trapping on a commercial basis
- taking of animals (dead or alive) for food, fur, skin, or for use in research, in zoos or as pets
- production of fur skins, reptile or bird skins from hunting or trapping activities

This class also includes:

- land-based catching of sea mammals such as walrus and seal

*This class excludes:*

- production of fur skins, reptile or bird skins from ranching operations, see group 014
- raising of game animals on ranching operations, see 0149
- catching of whales, see 0311
- production of hides and skins originating from slaughterhouses, see 1010
- hunting for sport or recreation and related service activities, see 9319
- service activities to promote hunting and trapping, see 9499

## **02 Forestry and logging**

This division includes the production of roundwood for the forest-based manufacturing industries (ISIC divisions 16 and 17) as well as the extraction and gathering of wild growing non-wood forest products. Besides the production of timber, forestry activities result in products that undergo little processing, such as fire wood, charcoal, wood chips and roundwood used in an unprocessed form (e.g. pit-props, pulpwood etc.). These activities can be carried out in natural or planted forests.

### **021 Silviculture and other forestry activities**

See class 0210.

#### **0210 Silviculture and other forestry activities**

This class includes:

- growing of standing timber: planting, replanting, transplanting, thinning and conserving of forests and timber tracts
- growing of coppice, pulpwood and fire wood
- operation of forest tree nurseries

These activities can be carried out in natural or planted forests.

*This class excludes:*

- growing of Christmas trees, see 0129
- operation of tree nurseries, see 0130
- gathering of wild growing non-wood forest products, see 0230
- production of wood chips and particles, see 1610

### **022 Logging**

See class 0220.

#### **0220 Logging**

This class includes:

- production of roundwood for forest-based manufacturing industries
- production of roundwood used in an unprocessed form such as pit-props, fence posts and utility poles
- gathering and production of fire wood
- production of charcoal in the forest (using traditional methods)

The output of this activity can take the form of logs, chips or fire wood.

*This class excludes:*

- growing of Christmas trees, see 0129

- growing of standing timber: planting, replanting, transplanting, thinning and conserving of forests and timber tracts, see 0210
- gathering of wild growing non-wood forest products, see 0230
- production of wood chips and particles, not associated with logging, see 1610
- production of charcoal through distillation of wood, see 2011

### **023 Gathering of non-wood forest products**

See class 0230.

### **0230 Gathering of non-wood forest products**

This class includes the gathering of non-wood forest products and other plants growing in the wild.

This class includes:

—gathering of wild growing materials:

- ◆ mushrooms, truffles
- ◆ berries
- ◆ nuts
- ◆ balata and other rubber-like gums
- ◆ cork
- ◆ lac and resins
- ◆ balsams
- ◆ vegetable hair
- ◆ eelgrass
- ◆ acorns, horse chestnuts
- ◆ mosses and lichens

*This class excludes:*

- managed production of any of these products (except growing of cork trees), see division 01
- growing of mushrooms or truffles, see 0113
- growing of berries or nuts, see 0125
- gathering of fire wood, see 0220

### **024 Support services to forestry**

See class 0240.

### **0240 Support services to forestry**

This class includes carrying out part of the forestry operation on a fee or contract basis.

This class includes:

—forestry service activities:

- ◆ forestry inventories
- ◆ forest management consulting services
- ◆ timber evaluation
- ◆ forest fire fighting and protection
- ◆ forest pest control

—logging service activities:

- ◆ transport of logs within the forest

*This class excludes:*

— operation of forest tree nurseries, see 0210

### 03 Fishing and aquaculture

This division includes capture fishery and aquaculture, covering the use of fishery resources from marine, brackish or freshwater environments, with the goal of capturing or gathering fish, crustaceans, molluscs and other marine organisms and products (e.g. aquatic plants, pearls, sponges etc).

Also included are activities that are normally integrated in the process of production for own account (e.g. seeding oysters for pearl production).

This division does not include building and repairing of ships and boats (3011, 3315) and sport or recreational fishing activities (9319). Processing of fish, crustaceans or molluscs is excluded, whether at land-based plants or on factory ships (1020).

#### 031 Fishing

This group includes capture fishery, i.e. the hunting, collecting and gathering activities directed at removing or collecting live wild aquatic organisms (predominantly fish, molluscs and crustaceans) including plants from the oceanic, coastal or inland waters for human consumption and other purposes by hand or more usually by various types of fishing gear such as nets, lines and stationary traps. Such activities can be conducted on the intertidal shoreline (e.g. collection of molluscs such as mussels and oysters) or shore based netting, or from home-made dugouts or more commonly using commercially made boats in inshore, coastal waters or offshore waters. Unlike in aquaculture (group 032), the aquatic resource being captured is usually common property resource irrespective of whether the harvest from this resource is undertaken with or without exploitation rights. Such activities also include fishing restocked water bodies.

#### 0311 Marine fishing

This class includes:

- fishing on a commercial basis in ocean and coastal waters
- taking of marine crustaceans and molluscs
- whale catching
- taking of marine aquatic animals: turtles, sea squirts, tunicates, sea urchins etc.

This class also includes:

- activities of vessels engaged both in fishing and in processing and preserving of fish
- gathering of other marine organisms and materials: natural pearls, sponges, coral and algae

*This class excludes:*

- capturing of marine mammals, except whales, e.g. walruses, seals, see 0170
- processing of fish, crustaceans and molluscs on factory ships or in factories ashore, see 1020
- renting of pleasure boats with crew for sea and coastal water transport (e.g. for fishing cruises), see 5011
- fishing inspection, protection and patrol services, see 8423
- fishing practiced for sport or recreation and related services, see 9319
- operation of sport fishing preserves, see 9319

**0312 Freshwater fishing**

This class includes:

- fishing on a commercial basis in inland waters
- taking of freshwater crustaceans and molluscs
- taking of freshwater aquatic animals

This class also includes:

- gathering of freshwater materials

*This class excludes:*

- processing of fish, crustaceans and molluscs, see 1020
- fishing inspection, protection and patrol services, see 8423
- fishing practiced for sport or recreation and related services, see 9319
- operation of sport fishing preserves, see 9319

**032 Aquaculture**

This group includes aquaculture (or aquafarming), i.e. the production process involving the culturing or farming (including harvesting) of aquatic organisms (fish, molluscs, crustaceans, plants, crocodiles, alligators and amphibians) using techniques designed to increase the production of the organisms in question beyond the natural capacity of the environment (for example regular stocking, feeding and protection from predators).

Culturing/farming refers to the rearing up to their juvenile and/or adult phase under captive conditions of the above organisms. In addition, aquaculture also encompasses individual, corporate or state ownership of the individual organisms throughout the rearing or culture stage, up to and including harvesting.

**0321 Marine aquaculture**

This class includes:

- fish farming in sea water including farming of marine ornamental fish
- production of bivalve spat (oyster mussel etc.), lobsterlings, shrimp post-larvae, fish fry and fingerlings
- growing of laver and other edible seaweeds
- culture of crustaceans, bivalves, other molluscs and other aquatic animals in sea water

This class also includes:

- aquaculture activities in brackish waters
- aquaculture activities in salt water filled tanks or reservoirs
- operation of fish hatcheries (marine)
- operation of marine worm farms

*This class excludes:*

- frog farming, see 0322
- operation of sport fishing preserves, see 9319

**0322 Freshwater aquaculture**

This class includes:

- fish farming in freshwater including farming of freshwater ornamental fish
- culture of freshwater crustaceans, bivalves, other molluscs and other aquatic animals
- operation of fish hatcheries (freshwater)
- farming of frogs

*This class excludes:*

- *aquaculture activities in salt water filled tanks and reservoirs, see 0321*
- *operation of sport fishing preserves, see 9319*

## **Section B**

### **Mining and quarrying**

This section includes the extraction of minerals occurring naturally as solids (coal and ores), liquids (petroleum) or gases (natural gas). Extraction can be achieved by different methods such as underground or surface mining, well operation, seabed mining etc.

This section also includes supplementary activities aimed at preparing the crude materials for marketing, for example, crushing, grinding, cleaning, drying, sorting, concentrating ores, liquefaction of natural gas and agglomeration of solid fuels. These operations are often carried out by the units that extracted the resource and/or others located nearby.

Mining activities are classified into divisions, groups and classes on the basis of the principal mineral produced. Divisions 05, 06 are concerned with mining and quarrying of fossil fuels (coal, lignite, petroleum, gas); divisions 07, 08 concern metal ores, various minerals and quarry products.

Some of the technical operations of this section, particularly related to the extraction of hydrocarbons, may also be carried out for third parties by specialized units as an industrial service, which is reflected in division 09.

This section excludes the processing of the extracted materials (see section C—Manufacturing), which also covers the bottling of natural spring and mineral waters at springs and wells (see class 1104) or the crushing, grinding or otherwise treating certain earths, rocks and minerals not carried out in conjunction with mining and quarrying (see class 2399). This section also excludes the usage of the extracted materials without a further transformation for construction purposes (see section F—Construction), the collection, purification and distribution of water (see class 3600), separate site preparation activities for mining (see class 4312) and geophysical, geologic and seismic surveying activities (see class 7110).

#### **05 Mining of coal and lignite**

This division includes the extraction of solid mineral fuels includes through underground or open-cast mining and includes operations (e.g. grading, cleaning, compressing and other steps necessary for transportation etc.) leading to a marketable product.

This division does not include coking (see 1910), services incidental to coal or lignite mining (see 0990) or the manufacture of briquettes (see 1920).

#### **051 Mining of hard coal**

See class 0510.

#### **0510 Mining of hard coal**

This class includes:

- mining of hard coal: underground or surface mining, including mining through liquefaction methods
- cleaning, sizing, grading, pulverizing, compressing etc. of coal to classify, improve quality or facilitate transport or storage

This class also includes:

- recovery of hard coal from culm banks

*This class excludes:*

- lignite mining, see 0520
- peat digging and agglomeration of peat, see 0892
- test drilling for coal mining, see 0990
- support activities for hard coal mining, see 0990
- coke ovens producing solid fuels, see 1910
- manufacture of hard coal briquettes, see 1920
- work performed to develop or prepare properties for coal mining, see 4312

## **052 Mining of lignite**

See class 0520.

## **0520 Mining of lignite**

This class includes:

- mining of lignite (brown coal): underground or surface mining, including mining through liquefaction methods
- washing, dehydrating, pulverizing, compressing of lignite to improve quality or facilitate transport or storage

*This class excludes:*

- hard coal mining, see 0510
- peat digging, see 0892
- test drilling for coal mining, see 0990
- support activities for lignite mining, see 0990
- manufacture of lignite fuel briquettes, see 1920
- work performed to develop or prepare properties for coal mining, see 4312

## **06 Extraction of crude petroleum and natural gas**

This division includes the production of crude petroleum, the mining and extraction of oil from oil shale and oil sands and the production of natural gas and recovery of hydrocarbon liquids. This includes the overall activities of operating and/or developing oil and gas field properties, including such activities as drilling, completing and equipping wells, operating separators, emulsion breakers, desilting equipment and field gathering lines for crude petroleum and all other activities in the preparation of oil and gas up to the point of shipment from the producing property.

This division excludes support activities for petroleum and gas extraction, such as oil and gas field services, performed on a fee or contract basis, oil and gas well exploration and test drilling and boring activities (see class 0910). This division also excludes the refining of petroleum products (see class 1920) and geophysical, geologic and seismic surveying activities (see class 7110).

## **061 Extraction of crude petroleum**

See class 0610.



**0610 Extraction of crude petroleum**

This class includes:

—extraction of crude petroleum oils

This class also includes:

—extraction of bituminous or oil shale and tar sand

—production of crude petroleum from bituminous shale and sand

—processes to obtain crude oils: decantation, desalting, dehydration, stabilization etc.

*This class excludes:*

—*support activities for oil and gas extraction, see 0910*

—*oil and gas exploration, see 0910*

—*manufacture of refined petroleum products, see 1920*

—*recovery of liquefied petroleum gases in the refining of petroleum, see 1920*

—*operation of pipelines, see 4930*

**062 Extraction of natural gas**

See class 0620.

**0620 Extraction of natural gas**

This class includes:

—production of crude gaseous hydrocarbon (natural gas)

—extraction of condensates

—draining and separation of liquid hydrocarbon fractions

—gas desulphurization

This class also includes:

—mining of hydrocarbon liquids, obtained through liquefaction or pyrolysis

*This class excludes:*

—*support activities for oil and gas extraction, see 0910*

—*oil and gas exploration, see 0910*

—*recovery of liquefied petroleum gases in the refining of petroleum, see 1920*

—*manufacture of industrial gases, see 2011*

—*operation of pipelines, see 4930*

**07 Mining of metal ores**

This division includes mining for metallic minerals (ores), performed through underground or open-cast extraction, seabed mining etc. Also included are ore dressing and beneficiating operations, such as crushing, grinding, washing, drying, sintering, calcining or leaching ore, gravity separation or flotation operations.

This division excludes manufacturing activities such as the roasting of iron pyrites (see class 2011), the production of aluminium oxide (see class 2420) and the operation of blast furnaces (see classes 2410 and 2420).

**071 Mining of iron ores**

See class 0710.

**0710 Mining of iron ores**

This class includes:

- mining of ores valued chiefly for iron content
- beneficiation and agglomeration of iron ores

*This class excludes:*

- extraction and preparation of pyrites and pyrrhotite (except roasting), see 0891

**072 Mining of non-ferrous metal ores**

This group includes the mining of non-ferrous metal ores.

**0721 Mining of uranium and thorium ores**

This class includes:

- mining of ores chiefly valued for uranium and thorium content: pitchblende etc.
- concentration of such ores
- production of yellowcake

*This class excludes:*

- enrichment of uranium and thorium ores, see 2011
- production of uranium metal from pitchblende or other ores, see 2420
- smelting and refining of uranium, see 2420

**0729 Mining of other non-ferrous metal ores**

This class includes:

- mining and preparation of ores valued chiefly for non-ferrous metal content:
  - ♦ aluminium (bauxite), copper, lead, zinc, tin, manganese, chrome, nickel, cobalt, molybdenum, tantalum, vanadium etc.
  - ♦ precious metals: gold, silver, platinum

*This class excludes:*

- mining and preparation of uranium and thorium ores, see 0721
- production of aluminium oxide and mattes of nickel or of copper, see 2420

**08 Other mining and quarrying**

This division includes extraction from a mine or quarry, but also dredging of alluvial deposits, rock crushing and the use of salt marshes. The products are used most notably in construction (e.g. sands, stones etc.), manufacture of materials (e.g. clay, gypsum, calcium etc.), manufacture of chemicals etc.

This division does not include processing (except crushing, grinding, cutting, cleaning, drying, sorting and mixing) of the minerals extracted.

**081 Quarrying of stone, sand and clay**

See class 0810.

**0810 Quarrying of stone, sand and clay**

This class includes:

- quarrying, rough trimming and sawing of monumental and building stone such as marble, granite, sandstone etc.

- quarrying, crushing and breaking of limestone
- mining of gypsum and anhydrite
- mining of chalk and uncalcined dolomite
- extraction and dredging of industrial sand, sand for construction and gravel
- breaking and crushing of stone and gravel
- quarrying of sand
- mining of clays, refractory clays and kaolin

*This class excludes:*

- mining of bituminous sand, see 0610
- mining of chemical and fertilizer minerals, see 0891
- production of calcined dolomite, see 2394
- cutting, shaping and finishing of stone outside quarries, see 2396

## **089 Mining and quarrying n.e.c.**

### **0891 Mining of chemical and fertilizer minerals**

This class includes:

- mining of natural phosphates and natural potassium salts
- mining of native sulphur
- extraction and preparation of pyrites and pyrrhotite, except roasting
- mining of natural barium sulphate and carbonate (barytes and witherite), natural borates, natural magnesium sulphates (kieserite)
- mining of earth colours, fluorspar and other minerals valued chiefly as a source of chemicals

This class also includes:

- guano mining

*This class excludes:*

- extraction of salt, see 0893
- roasting of iron pyrites, see 2011
- manufacture of synthetic fertilizers and nitrogen compounds, see 2012

### **0892 Extraction of peat**

This class includes:

- peat digging
- peat agglomeration
- preparation of peat to improve quality or facilitate transport or storage

*This class excludes:*

- service activities incidental to peat mining, see 0990
- manufacture of articles of peat, see 2399

### **0893 Extraction of salt**

This class includes:

- extraction of salt from underground including by dissolving and pumping

- salt production by evaporation of sea water or other saline waters
- crushing, purification and refining of salt by the producer

*This class excludes:*

- processing of salt into food-grade salt, e.g. iodized salt, see 1079
- potable water production by evaporation of saline water, see 3600

#### **0899 Other mining and quarrying n.e.c.**

This class includes:

- mining and quarrying of various minerals and materials:
  - ◆ abrasive materials, asbestos, siliceous fossil meals, natural graphite, steatite (talc), feldspar etc.
  - ◆ natural asphalt, asphaltites and asphaltic rock; natural solid bitumen
  - ◆ gemstones, quartz, mica etc.

#### **09 Mining support service activities**

This division includes specialized support services incidental to mining provided on a fee or contract basis. It includes exploration services through traditional prospecting methods such as taking core samples and making geological observations as well as drilling, test-drilling or re-drilling for oil wells, metallic and non-metallic minerals. Other typical services cover building oil and gas well foundations, cementing oil and gas well casings, cleaning, bailing and swabbing oil and gas wells, draining and pumping mines, overburden removal services at mines, etc.

#### **091 Support activities for petroleum and natural gas extraction**

See class 0910.

#### **0910 Support activities for petroleum and natural gas extraction**

This class includes:

- oil and gas extraction service activities provided on a fee or contract basis:
  - ◆ exploration services in connection with petroleum or gas extraction, e.g. traditional prospecting methods, such as making geological observations at prospective sites
  - ◆ directional drilling and re-drilling; “spudding in”; derrick erection in situ, repairing and dismantling; cementing oil and gas well casings; pumping of wells; plugging and abandoning wells etc.
  - ◆ liquefaction and regasification of natural gas for purpose of transport, done at the mine site
  - ◆ draining and pumping services, on a fee or contract basis
  - ◆ test drilling in connection with petroleum or gas extraction

This class also includes:

- oil and gas field fire fighting services

*This class excludes:*

- service activities performed by operators of oil or gas fields, see 0610, 0620
- specialized repair of mining machinery, see 3312
- liquefaction and regasification of natural gas for purpose of transport, done off the mine site, see 5221
- geophysical, geologic and seismic surveying, see 7110

**099 Support activities for other mining and quarrying**

See class 0990.

**0990 Support activities for other mining and quarrying**

This class includes:

- support services on a fee or contract basis, required for mining activities of divisions 05, 07 and 08
  - ◆ exploration services, e.g. traditional prospecting methods, such as taking core samples and making geological observations at prospective sites
  - ◆ draining and pumping services, on a fee or contract basis
  - ◆ test drilling and test hole boring

*This class excludes:*

- *operating mines or quarries on a contract or fee basis, see division 05, 07 or 08*
- *specialized repair of mining machinery, see 3312*
- *geophysical surveying services, on a contract or fee basis, see 7110*

## Section C

### Manufacturing

This section includes the physical or chemical transformation of materials, substances, or components into new products, although this cannot be used as the single universal criterion for defining manufacturing (see remark on processing of waste below). The materials, substances, or components transformed are raw materials that are products of agriculture, forestry, fishing, mining or quarrying as well as products of other manufacturing activities. Substantial alteration, renovation or reconstruction of goods is generally considered to be manufacturing.

Units engaged in manufacturing are often described as plants, factories or mills and characteristically use power-driven machines and materials-handling equipment. However, units that transform materials or substances into new products by hand or in the worker's home and those engaged in selling to the general public of products made on the same premises from which they are sold, such as bakeries and custom tailors, are also included in this section. Manufacturing units may process materials or may contract with other units to process their materials for them. Both types of units are included in manufacturing.

The output of a manufacturing process may be finished in the sense that it is ready for utilization or consumption, or it may be semi-finished in the sense that it is to become an input for further manufacturing. For example, the output of alumina refining is the input used in the primary production of aluminium; primary aluminium is the input to aluminium wire drawing; and aluminium wire is the input for the manufacture of fabricated wire products.

Manufacture of specialized components and parts of, and accessories and attachments to, machinery and equipment is, as a general rule, classified in the same class as the manufacture of the machinery and equipment for which the parts and accessories are intended. Manufacture of unspecialized components and parts of machinery and equipment, e.g. engines, pistons, electric motors, electrical assemblies, valves, gears, roller bearings, is classified in the appropriate class of manufacturing, without regard to the machinery and equipment in which these items may be included. However, making specialized components and accessories by moulding or extruding plastics materials is included in class 2220.

Assembly of the component parts of manufactured products is considered manufacturing. This includes the assembly of manufactured products from either self-produced or purchased components.

The recovery of waste, i.e. the processing of waste into secondary raw materials is classified in class 3830 (Materials recovery). While this may involve physical or chemical transformations, this is not

considered to be a part of manufacturing. The primary purpose of these activities is considered to be the treatment or processing of waste and they are therefore classified in Section E (Water supply; sewerage, waste management and remediation activities). However, the manufacture of new final products (as opposed to secondary raw materials) is classified in manufacturing, even if these processes use waste as an input. For example, the production of silver from film waste is considered to be a manufacturing process.

Specialized maintenance and repair of industrial, commercial and similar machinery and equipment is, in general, classified in division 33 (Repair, maintenance and installation of machinery and equipment). However, the repair of computers and personal and household goods is classified in division 95 (Repair of computers and personal and household goods), while the repair of motor vehicles is classified in division 45 (Wholesale and retail trade and repair of motor vehicles and motorcycles).

The installation of machinery and equipment, when carried out as a specialized activity, is classified in 3320.

*Remark:* The boundaries of manufacturing and the other sectors of the classification system can be somewhat blurry. As a general rule, the activities in the manufacturing section involve the transformation of materials into new products. Their output is a new product. However, the definition of what constitutes a new product can be somewhat subjective. As clarification, the following activities are considered manufacturing in ISIC:

- milk pasteurizing and bottling (see 1050)
- fresh fish processing (oyster shucking, fish filleting), not done on a fishing boat (see 1020)
- printing and related activities (see 1811, 1812)
- ready-mixed concrete production (see 2395)
- leather converting (see 1511)
- wood preserving (see 1610)
- electroplating, plating, metal heat treating, and polishing (see 2592)
- rebuilding or remanufacturing of machinery (e.g. automobile engines, see 2910)
- tyre retreading (see 2211)

Conversely, there are activities that, although sometimes involving transformation processes, are classified in other sections of ISIC; in other words, they are not classified as manufacturing. They include:

- logging, classified in section A (Agriculture, forestry and fishing);
- beneficiating of agricultural products, classified in section A (Agriculture, forestry and fishing);
- beneficiating of ores and other minerals, classified in section B (Mining and quarrying);
- construction of structures and fabricating operations performed at the site of construction, classified in section F (Construction);
- activities of breaking bulk and redistribution in smaller lots, including packaging, repackaging or bottling of products, such as liquors or chemicals; sorting of scrap; mixing of paints to customers' order; and cutting of metals to customers' order, producing a modified version of the same product, are classified to section G (Wholesale and retail trade; repair of motor vehicles and motorcycles).

## 10 Manufacture of food products

This division includes the processing of the products of agriculture, forestry and fishing into food for humans or animals, and includes the production of various intermediate products that are not directly food products. The activity often generates associated products of greater or lesser value (for example, hides from slaughtering, or oilcake from oil production).

This division is organized by activities dealing with different kinds of products: meat, fish, fruit and vegetables, fats and oils, milk products, grain mill products, animal feeds and other food products. Production can be carried out for own account, as well as for third parties, as in custom slaughtering.

Some activities are considered manufacturing (for example, those performed in bakeries, pastry shops, and prepared meat shops etc. which sell their own production) even though there is retail sale of the products in the producers' own shop. However, where the processing is minimal and does not lead to a real transformation, the unit is classified to Wholesale and retail trade (section G).

Production of animal feeds from slaughter waste or by-products is classified in 1080, while processing food and beverage waste into secondary raw material is classified to 3830, and disposal of food and beverage waste in 3821.

## 101 Processing and preserving of meat

See class 1010.

### 1010 Processing and preserving of meat

This class includes:

- operation of slaughterhouses engaged in killing, dressing or packing meat: beef, pork, poultry, lamb, rabbit, mutton, camel, etc.
- production of fresh, chilled or frozen meat, in carcasses
- production of fresh, chilled or frozen meat, in cuts
- production of fresh, chilled or frozen meat, in individual portions
- production of dried, salted or smoked meat
- production of meat products:
  - ♦ sausages, salami, puddings, "andouillettes", saveloys, bolognas, pâtés, rillettes, boiled ham

This class also includes:

- slaughtering and processing of whales on land or on specialized vessels
- production of hides and skins originating from slaughterhouses, including fellmongery
- rendering of lard and other edible fats of animal origin
- processing of animal offal
- production of pulled wool
- production of feathers and down

*This class excludes:*

- *manufacture of prepared frozen meat and poultry dishes, see 1075*
- *manufacture of soup containing meat, see 1079*
- *wholesale trade of meat, see 4630*
- *packaging of meat, see 8292*

## 102 Processing and preserving of fish, crustaceans and molluscs

See class 1020.

**1020 Processing and preserving of fish, crustaceans and molluscs**

This class includes:

- preparation and preservation of fish, crustaceans and molluscs: freezing, deep-freezing, drying, smoking, salting, immersing in brine, canning etc.
- production of fish, crustacean and mollusc products: cooked fish, fish fillets, roes, caviar, caviar substitutes etc.
- production of fishmeal for human consumption or animal feed
- production of meals and solubles from fish and other aquatic animals unfit for human consumption

This class also includes:

- activities of vessels engaged only in the processing and preserving of fish
- processing of seaweed

*This class excludes:*

- processing of whales on land or specialized vessels, see 1010*
- production of oils and fats from marine material, see 1040*
- manufacture of prepared frozen fish dishes, see 1075*
- manufacture of fish soups, see 1079*

**103 Processing and preserving of fruit and vegetables**

See class 1030.

**1030 Processing and preserving of fruit and vegetables**

This class includes:

- manufacture of food consisting chiefly of fruit or vegetables, except ready-made dishes in frozen or canned form
- preserving of fruit, nuts or vegetables: freezing, drying, immersing in oil or in vinegar, canning etc.
- manufacture of fruit or vegetable food products
- manufacture of fruit or vegetable juices
- manufacture of jams, marmalades and table jellies
- processing and preserving of potatoes:
  - ◆ manufacture of prepared frozen potatoes
  - ◆ manufacture of dehydrated mashed potatoes
  - ◆ manufacture of potato snacks
  - ◆ manufacture of potato crisps
  - ◆ manufacture of potato flour and meal
- roasting of nuts
- manufacture of nut foods and pastes

This class also includes:

- industrial peeling of potatoes
- production of concentrates from fresh fruits and vegetables
- manufacture of perishable prepared foods of fruit and vegetables, such as:
  - ◆ salads
  - ◆ peeled or cut vegetables
  - ◆ tofu (bean curd)



*This class excludes:*

- *manufacture of flour or meal of dried leguminous vegetables, see 1061*
- *preservation of fruit and nuts in sugar, see 1073*
- *manufacture of prepared vegetable dishes, see 1075*
- *manufacture of artificial concentrates, see 1079*

#### **104 Manufacture of vegetable and animal oils and fats**

See class 1040.

#### **1040 Manufacture of vegetable and animal oils and fats**

This class includes the manufacture of crude and refined oils and fats from vegetable or animal materials, except rendering or refining of lard and other edible animal fats.

This class includes:

- manufacture of crude vegetable oils: olive oil, soya-bean oil, palm oil, sunflower-seed oil, cotton-seed oil, rape, colza or mustard oil, linseed oil etc.
- manufacture of non-defatted flour or meal of oilseeds, oil nuts or oil kernels
- manufacture of refined vegetable oils: olive oil, soya-bean oil etc.
- processing of vegetable oils: blowing, boiling, dehydration, hydrogenation etc.
- manufacture of margarine
- manufacture of melanges and similar spreads
- manufacture of compound cooking fats

This class also includes:

- manufacture of non-edible animal oils and fats
- extraction of fish and marine mammal oils
- production of cotton linters, oilcakes and other residual products of oil production

*This class excludes:*

- *rendering and refining of lard and other edible animal fats, see 1010*
- *wet corn milling, see 1062*
- *production of essential oils, see 2029*
- *treatment of oil and fats by chemical processes, see 2029*

#### **105 Manufacture of dairy products**

See class 1050.

#### **1050 Manufacture of dairy products**

This class includes:

- manufacture of fresh liquid milk, pasteurized, sterilized, homogenized and/or ultra heat treated
- manufacture of milk-based drinks
- manufacture of cream from fresh liquid milk, pasteurized, sterilized, homogenized
- manufacture of dried or concentrated milk whether or not sweetened
- manufacture of milk or cream in solid form
- manufacture of butter
- manufacture of yoghurt

- manufacture of cheese and curd
- manufacture of whey
- manufacture of casein or lactose
- manufacture of ice cream and other edible ice such as sorbet

*This class excludes:*

- production of raw milk (cattle), see 0141
- production of raw milk (camels, etc.), see 0143
- production of raw milk (sheep, goats, horses, asses, etc.), see 0144
- manufacture of non-dairy milk and cheese substitutes, see 1079
- activities of ice cream parlours, see 5610

## **106 Manufacture of grain mill products, starches and starch products**

This group includes the milling of flour or meal from grains or vegetables, the milling, cleaning and polishing of rice, as well as the manufacture of flour mixes or doughs from these products. Also included in this group are the wet milling of corn and vegetables and the manufacture of starch and starch products.

### **1061 Manufacture of grain mill products**

This class includes:

- grain milling: production of flour, groats, meal or pellets of wheat, rye, oats, maize (corn) or other cereal grains
- rice milling: production of husked, milled, polished, glazed, parboiled or converted rice; production of rice flour
- vegetable milling: production of flour or meal of dried leguminous vegetables, of roots or tubers, or of edible nuts
- manufacture of cereal breakfast foods
- manufacture of flour mixes and prepared blended flour and dough for bread, cakes, biscuits or pancakes

*This class excludes:*

- manufacture of potato flour and meal, see 1030
- wet corn milling, see 1062

### **1062 Manufacture of starches and starch products**

This class includes:

- manufacture of starches from rice, potatoes, maize etc.
- wet corn milling
- manufacture of glucose, glucose syrup, maltose, inulin etc.
- manufacture of gluten
- manufacture of tapioca and tapioca substitutes prepared from starch
- manufacture of corn oil

*This class excludes:*

- manufacture of lactose (milk sugar), see 1050
- production of cane or beet sugar, see 1072

**107 Manufacture of other food products**

This group includes the production of a variety of food products not included in previous groups of this division. This includes the production of bakery products, sugar and confectionery, macaroni, noodles and similar products, prepared meals and dishes, coffee, tea and spices, as well as perishable and specialty food products.

**1071 Manufacture of bakery products**

This class includes the manufacture of fresh, frozen or dry bakery products.

This class includes:

- manufacture of bread and rolls
- manufacture of fresh pastry, cakes, pies, tarts etc.
- manufacture of rusks, biscuits and other “dry” bakery products
- manufacture of preserved pastry goods and cakes
- manufacture of snack products (cookies, crackers, pretzels etc.), whether sweet or salted
- manufacture of tortillas
- manufacture of frozen bakery products: pancakes, waffles, rolls etc.

*This class excludes:*

- *manufacture of farinaceous products (pastas), see 1074*
- *manufacture of potato snacks, see 1030*
- *heating up of bakery items for immediate consumption, see division 56*

**1072 Manufacture of sugar**

This class includes:

- manufacture or refining of sugar (sucrose) and sugar substitutes from the juice of cane, beet, maple and palm
- manufacture of sugar syrups
- manufacture of molasses
- production of maple syrup and sugar

*This class excludes:*

- *manufacture of glucose, glucose syrup, maltose, see 1062*

**1073 Manufacture of cocoa, chocolate and sugar confectionery**

This class includes:

- manufacture of cocoa, cocoa butter, cocoa fat, cocoa oil
- manufacture of chocolate and chocolate confectionery
- manufacture of sugar confectionery: caramels, cachous, nougats, fondant, white chocolate
- manufacture of chewing gum
- preserving in sugar of fruit, nuts, fruit peels and other parts of plants
- manufacture of confectionery lozenges and pastilles

*This class excludes:*

- *manufacture of sucrose sugar, see 1072*

**1074 Manufacture of macaroni, noodles, couscous and similar farinaceous products**

This class includes:

- manufacture of pastas such as macaroni and noodles, whether or not cooked or stuffed
- manufacture of couscous
- manufacture of canned or frozen pasta products

*This class excludes:*

- *manufacture of prepared couscous dishes, see 1075*
- *manufacture of soup containing pasta, see 1079*

**1075 Manufacture of prepared meals and dishes**

This class includes the manufacture of ready-made (i.e. prepared, seasoned and cooked) meals and dishes. These dishes are processed to preserve them, such as in frozen or canned form, and are usually packaged and labeled for re-sale, i.e. this class does not include the preparation of meals for immediate consumption, such as in restaurants. To be considered a dish, these foods have to contain at least two distinct main ingredients (except seasonings etc.).

This class includes:

- manufacture of meat or poultry dishes
- manufacture of fish dishes, including fish and chips
- manufacture of prepared dishes of vegetables
- manufacture of canned stews and vacuum-prepared meals
- manufacture of other prepared meals (such as “TV dinners”, etc.)
- manufacture of frozen or otherwise preserved pizza

*This class excludes:*

- *manufacture of fresh foods or foods with only one main ingredient, see division 10*
- *preparation of meals and dishes for immediate consumption, see division 56*
- *activities of food service contractors, see 5629*

**1079 Manufacture of other food products n.e.c.**

This class includes:

- decaffeinating and roasting of coffee
- production of coffee products:
  - ◆ ground coffee
  - ◆ soluble coffee
  - ◆ extracts and concentrates of coffee
- manufacture of coffee substitutes
- blending of tea and maté
- manufacture of extracts and preparations based on tea or maté
- manufacture of soups and broths
- manufacture of special foods, such as:
  - ◆ infant formula
  - ◆ follow up milks and other follow up foods
  - ◆ baby foods

- ◆ foods containing homogenized ingredients
- manufacture of spices, sauces and condiments:
  - ◆ mayonnaise
  - ◆ mustard flour and meal
  - ◆ prepared mustard etc.
- manufacture of vinegar
- manufacture of artificial honey and caramel
- manufacture of perishable prepared foods, such as:
  - ◆ sandwiches
  - ◆ fresh (uncooked) pizza

This class also includes:

- manufacture of herb infusions (mint, vervain, chamomile etc.)
- manufacture of yeast
- manufacture of extracts and juices of meat, fish, crustaceans or molluscs
- manufacture of non-dairy milk and cheese substitutes
- manufacture of egg products, egg albumin
- processing of salt into food-grade salt, e.g. iodized salt
- manufacture of artificial concentrates

*This class excludes:*

- *growing of spice crops, see 0128*
- *manufacture of inulin, see 1062*
- *manufacture of perishable prepared foods of fruit and vegetables (e.g. salads, peeled vegetables, bean curd), see 1030*
- *manufacture of frozen pizza, see 1075*
- *manufacture of spirits, beer, wine and soft drinks, see division 11*
- *preparation of botanical products for pharmaceutical use, see 2100*

## **108 Manufacture of prepared animal feeds**

See class 1080.

## **1080 Manufacture of prepared animal feeds**

This class includes:

- manufacture of prepared feeds for pets, including dogs, cats, birds, fish etc.
- manufacture of prepared feeds for farm animals, including animal feed concentrates and feed supplements
- preparation of unmixed (single) feeds for farm animals

This class also includes:

- treatment of slaughter waste to produce animal feeds

*This class excludes:*

- *production of fishmeal for animal feed, see 1020*
- *production of oilseed cake, see 1040*
- *activities resulting in by-products usable as animal feed without special treatment, e.g. oilseeds (see 1040), grain milling residues (see 1061) etc.*

**11 Manufacture of beverages**

This division includes the manufacture of beverages, such as nonalcoholic beverages and mineral water, manufacture of alcoholic beverages mainly through fermentation, beer and wine, and the manufacture of distilled alcoholic beverages.

This division excludes the production of fruit and vegetable juices (see class 1030), the manufacture of milk-based drinks (see class 1050) and the manufacture of coffee, tea and maté products (see class 1079).

**110 Manufacture of beverages**

See division 11.

**1101 Distilling, rectifying and blending of spirits**

This class includes:

- manufacture of distilled, potable, alcoholic beverages: whisky, brandy, gin, liqueurs, “mixed drinks” etc.
- blending of distilled spirits
- production of neutral spirits

*This class excludes:*

- manufacture of ethyl alcohol, see 2011
- manufacture of non-distilled alcoholic beverages, see 1102, 1103
- merely bottling and labeling, see 4630 (if performed as part of wholesale) and 8292 (if performed on a fee or contract basis)

**1102 Manufacture of wines**

This class includes:

- manufacture of wine
- manufacture of sparkling wine
- manufacture of wine from concentrated grape must
- manufacture of fermented but not distilled alcoholic beverages: sake, cider, perry, mead, other fruit wines and mixed beverages containing alcohol
- manufacture of vermouth and the like

This class also includes:

- blending of wine
- manufacture of low or non-alcoholic wine

*This class excludes:*

- manufacture of vinegar, see 1079
- merely bottling and labeling, see 4630 (if performed as part of wholesale) and 8292 (if performed on a fee or contract basis)

**1103 Manufacture of malt liquors and malt**

This class includes:

- manufacture of malt liquors, such as beer, ale, porter and stout
- manufacture of malt

This class also includes:

— manufacture of low alcohol or non-alcoholic beer

#### **1104 Manufacture of soft drinks; production of mineral waters and other bottled waters**

This class includes:

— manufacture of non-alcoholic beverages, except non-alcoholic beer and wine

— production of natural mineral waters and other bottled waters

— manufacture of soft drinks:

- ◆ non-alcoholic flavoured and/or sweetened waters: lemonade, orangeade, cola, fruit drinks, tonic waters etc.

*This class excludes:*

— production of fruit and vegetable juice, see 1030

— manufacture of milk-based drinks, see 1050

— manufacture of coffee, tea and maté products, see 1079

— manufacture of alcohol-based drinks, see 1101, 1102, 1103

— manufacture of non-alcoholic wine, see 1102

— manufacture of non-alcoholic beer, see 1103

— merely bottling and labeling, see 4630 (if performed as part of wholesale) and 8292 (if performed on a fee or contract basis)

#### **12 Manufacture of tobacco products**

This division includes the processing of an agricultural product, tobacco, into a form suitable for final consumption.

#### **120 Manufacture of tobacco products**

See class 1200.

#### **1200 Manufacture of tobacco products**

This class includes:

— manufacture of tobacco products and products of tobacco substitutes: cigarettes, cigarette tobacco, cigars, pipe tobacco, chewing tobacco, snuff

— manufacture of “homogenized” or “reconstituted” tobacco

This class also includes:

— stemming and redrying of tobacco

*This class excludes:*

— growing or preliminary processing of tobacco, see 0115, 0163

#### **13 Manufacture of textiles**

This division includes preparation and spinning of textile fibres as well as textile weaving, finishing of textiles and wearing apparel, manufacture of made-up textile articles, except apparel (e.g. household linen, blankets, rugs, cordage etc.). Growing of natural fibres is covered under division 01, while manufacture of synthetic fibres is a chemical process classified in class 2030. Manufacture of wearing apparel is covered in division 14.

**131 Spinning, weaving and finishing of textiles**

This group includes the manufacture of textiles, including preparatory operations, the spinning of textile fibres and the weaving of textiles. This can be done from varying raw materials, such as silk, wool, other animal, vegetable or man-made fibres, paper or glass etc.

Also included in this group is the finishing of textiles and wearing apparel, i.e. bleaching, dyeing, dressing and similar activities.

**1311 Preparation and spinning of textile fibres**

This class includes:

— preparatory operations on textile fibres:

- ◆ reeling and washing of silk
- ◆ degreasing and carbonizing of wool and dyeing of wool fleece
- ◆ carding and combing of all kinds of animal, vegetable and man-made fibres

— spinning and manufacture of yarn or thread for weaving or sewing, for the trade or for further processing:

- ◆ texturizing, twisting, folding, cabling and dipping of synthetic or artificial filament yarns

This class also includes:

— manufacture of paper yarn

*This class excludes:*

- preparatory operations carried out in combination with agriculture or farming, see division 01
- retting of plants bearing vegetable textile fibres (jute, flax, coir etc.), see 0116
- cotton ginning, see 0163
- manufacture of synthetic or artificial fibres and tows, manufacture of single yarns (including high-tenacity yarn and yarn for carpets) of synthetic or artificial fibres, see 2030
- manufacture of glass fibres, see 2310

**1312 Weaving of textiles**

This class includes:

— manufacture of broad woven cotton-type, woollen-type, worsted-type or silk-type fabrics, including from mixtures or artificial or synthetic yarns

— manufacture of other broad woven fabrics, using flax, ramie, hemp, jute, bast fibres and special yarns

This class also includes:

- manufacture of woven pile or chenille fabrics, terry towelling, gauze etc.
- manufacture of woven fabrics of glass fibres
- manufacture of woven fabrics of carbon and aramid threads
- manufacture of imitation fur by weaving

*This class excludes:*

- manufacture of knitted and crocheted fabrics, see 1391
- manufacture of textile floor coverings, see 1393
- manufacture of non-woven fabrics and felts, see 1399
- manufacture of narrow fabrics, see 1399



**1313 Finishing of textiles**

This class includes:

- bleaching and dyeing of textile fibres, yarns, fabrics and textile articles, including wearing apparel
- dressing, drying, steaming, shrinking, mending, Sanforizing, mercerizing of textiles and textile articles, including wearing apparel

This class also includes:

- bleaching of jeans
- pleating and similar work on textiles
- waterproofing, coating, rubberizing or impregnating of garments
- silk-screen printing on textiles and wearing apparel

*This class excludes:*

- manufacture of textile fabric impregnated, coated, covered or laminated with rubber, where rubber is the chief constituent, see 2219*

**139 Manufacture of other textiles**

This group includes the manufacture of products produced from textiles, except wearing apparel, such as made-up textile articles, carpets and rugs, rope, narrow woven fabrics, trimmings etc.

**1391 Manufacture of knitted and crocheted fabrics**

This class includes:

- manufacture and processing of knitted or crocheted fabrics:
  - ◆ pile and terry fabrics
  - ◆ net and window furnishing type fabrics knitted on Raschel or similar machines
  - ◆ other knitted or crocheted fabrics

This class also includes:

- manufacture of imitation fur by knitting

*This class excludes:*

- manufacture of net and window furnishing type fabrics of lace knitted on Raschel or similar machines, see 1399*
- manufacture of knitted and crocheted apparel, see 1430*

**1392 Manufacture of made-up textile articles, except apparel**

This class includes:

- manufacture, of made-up articles of any textile material, including of knitted or crocheted fabrics:
  - ◆ blankets, including travelling rugs
  - ◆ bed, table, toilet or kitchen linen
  - ◆ quilts, eiderdowns, cushions, pouffes, pillows, sleeping bags etc.
- manufacture of made-up furnishing articles:
  - ◆ curtains, valances, blinds, bedspreads, furniture or machine covers etc.
  - ◆ tarpaulins, tents, camping goods, sails, sunblinds, loose covers for cars, machines or furniture etc.

- ◆ flags, banners, pennants etc.
- ◆ dust cloths, dishcloths and similar articles, life jackets, parachutes etc.

This class also includes:

- manufacture of the textile part of electric blankets
- manufacture of hand-woven tapestries
- manufacture of tire covers

*This class excludes:*

- *manufacture of textile articles for technical use, see 1399*

### **1393 Manufacture of carpets and rugs**

This class includes:

- manufacture of textile floor coverings:
  - ◆ carpets, rugs and mats, tiles

This class also includes:

- manufacture of needle-loom felt floor coverings

*This class excludes:*

- *manufacture of mats and matting of plaiting materials, see 1629*
- *manufacture of floor coverings of cork, see 1629*
- *manufacture of resilient floor coverings, such as vinyl, linoleum, see 2220*

### **1394 Manufacture of cordage, rope, twine and netting**

This class includes:

- manufacture of twine, cordage, rope and cables of textile fibres or strip or the like, whether or not impregnated, coated, covered or sheathed with rubber or plastics
- manufacture of knotted netting of twine, cordage or rope
- manufacture of products of rope or netting: fishing nets, ships' fenders, unloading cushions, loading slings, rope or cable fitted with metal rings etc.

*This class excludes:*

- *manufacture of hairnets, see 1410*
- *manufacture of wire rope, see 2599*

### **1399 Manufacture of other textiles n.e.c.**

This class includes all activities related to the manufacture of textiles or textile products, not specified elsewhere in division 13 or 14, involving a large number of processes and a great variety of goods produced.

This class includes:

- manufacture of narrow woven fabrics, including fabrics consisting of warp without weft assembled by means of an adhesive
- manufacture of labels, badges etc.
- manufacture of ornamental trimmings: braids, tassels, pompons etc.
- manufacture of felt
- manufacture of tulle and other net fabrics, and of lace and embroidery, in the piece, in strips or in motifs

- manufacture of fabrics impregnated, coated, covered or laminated with plastics
- manufacture of metallized yarn or gimped yarn, rubber thread and cord covered with textile material, textile yarn or strip covered, impregnated, coated or sheathed with rubber or plastics
- manufacture of tyre cord fabric of high-tenacity man-made yarn
- manufacture of other treated or coated fabrics: tracing cloth, canvas prepared for use by painters, buckram and similar stiffened textile fabrics, fabrics coated with gum or amylaceous substances
- manufacture of diverse textile articles: textile wicks, incandescent gas mantles and tubular gas mantle fabric, hosepiping, transmission or conveyor belts or belting (whether or not reinforced with metal or other material), bolting cloth, straining cloth
- manufacture of automotive trimmings
- manufacture of pressure sensitive cloth-tape
- manufacture of artists' canvas boards and tracing cloth
- manufacture of shoe-lace, of textiles
- manufacture of powder puffs and mitts

*This class excludes:*

- *manufacture of needle-loom felt floor coverings, see 1393*
- *manufacture of textile wadding and articles of wadding: sanitary towels, tampons etc., see 1709*
- *manufacture of transmission or conveyor belts of textile fabric, yarn or cord impregnated, coated, covered or laminated with rubber, where rubber is the chief constituent, see 2219*
- *manufacture of plates or sheets of cellular rubber or plastic combined with textiles for reinforcing purposes only, see 2219, 2220*
- *manufacture of cloth of woven metal wire, see 2599*

## **14 Manufacture of wearing apparel**

This division includes all tailoring (ready-to-wear or made-to-measure), in all materials (e.g. leather, fabric, knitted and crocheted fabrics etc.), of all items of clothing (e.g. outerwear, underwear for men, women or children; work, city or casual clothing etc.) and accessories. There is no distinction made between clothing for adults and clothing for children, or between modern and traditional clothing. Division 14 also includes the fur industry (fur skins and wearing apparel).

### **141 Manufacture of wearing apparel, except fur apparel**

See class 1410.

### **1410 Manufacture of wearing apparel, except fur apparel**

This class includes the manufacture of wearing apparel. The material used may be of any kind (see below for exceptions) and may be coated, impregnated or rubberized.

This class includes:

- manufacture of wearing apparel made of leather or composition leather, including leather industrial work accessories such as welder's leather aprons
- manufacture of work wear
- manufacture of other outerwear made of woven, knitted or crocheted fabric, non-wovens etc. for men, women and children:
  - ♦ coats, suits, ensembles, jackets, trousers, skirts etc.

- manufacture of underwear and nightwear made of woven, knitted or crocheted fabric, lace etc. for men, women and children:
  - ◆ shirts, T-shirts, underpants, briefs, pyjamas, nightdresses, dressing gowns, blouses, slips, brassieres, corsets etc.
- manufacture of babies' garments, tracksuits, ski suits, swimwear etc.
- manufacture of hats and caps
- manufacture of other clothing accessories: gloves, belts, shawls, ties, cravats, hairnets etc.

This class also includes:

- custom tailoring
- manufacture of headgear of fur skins
- manufacture of footwear of textile material without applied soles
- manufacture of parts of the products listed

*This class excludes:*

- *manufacture of wearing apparel of fur skins (except headgear), see 1420*
- *manufacture of footwear, see 1520*
- *manufacture of wearing apparel of rubber or plastics not assembled by stitching but merely sealed together, see 2219, 2220*
- *manufacture of leather sports gloves and sports headgear, see 3230*
- *manufacture of safety headgear (except sports headgear), see 3290*
- *manufacture of fire-resistant and protective safety clothing, see 3290*
- *repair of wearing apparel, see 9529*

#### **142 Manufacture of articles of fur**

See class 1420.

#### **1420 Manufacture of articles of fur**

This class includes:

- manufacture of articles made of fur skins:
  - ◆ fur wearing apparel and clothing accessories
  - ◆ assemblies of fur skins such as "dropped" fur skins, plates, mats, strips etc.
  - ◆ diverse articles of fur skins: rugs, unstuffed pouffes, industrial polishing cloths

*This class excludes:*

- *production of raw fur skins, see groups 014 and 017*
- *production of raw hides and skins, see 1010*
- *manufacture of imitation furs (long-hair cloth obtained by weaving or knitting), see 1312, 1391*
- *manufacture of fur hats, see 1410*
- *manufacture of apparel trimmed with fur, see 1410*
- *dressing and dyeing of fur, see 1511*
- *manufacture of boots or shoes containing fur parts, see 1520*

#### **143 Manufacture of knitted and crocheted apparel**

See class 1430.

**1430 Manufacture of knitted and crocheted apparel**

This class includes:

- manufacture of knitted or crocheted wearing apparel and other made-up articles directly into shape: pullovers, cardigans, jerseys, waistcoats and similar articles
- manufacture of hosiery, including socks, tights and pantyhose

*This class excludes:*

- *manufacture of knitted and crocheted fabrics, see 1391*

**15 Manufacture of leather and related products**

This division includes dressing and dyeing of fur and the transformation of hides into leather by tanning or curing and fabricating the leather into products for final consumption. It also includes the manufacture of similar products from other materials (imitation leathers or leather substitutes), such as rubber footwear, textile luggage etc. The products made from leather substitutes are included here, since they are made in ways similar to those in which leather products are made (e.g. luggage) and are often produced in the same unit.

**151 Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness; dressing and dyeing of fur**

This group includes the manufacture of leather and fur and products thereof.

**1511 Tanning and dressing of leather; dressing and dyeing of fur**

This class includes:

- tanning, dyeing and dressing of hides and skins
- manufacture of chamois dressed, parchment dressed, patent or metallized leathers
- manufacture of composition leather
- scraping, shearing, plucking, currying, tanning, bleaching and dyeing of fur skins and hides with the hair on

*This class excludes:*

- *production of hides and skins as part of ranching, see group 014*
- *production of hides and skins as part of slaughtering, see 1010*
- *manufacture of leather apparel, see 1410*
- *manufacture of imitation leather not based on natural leather, see 2219, 2220*

**1512 Manufacture of luggage, handbags and the like, saddlery and harness**

This class includes:

- manufacture of luggage, handbags and the like, of leather, composition leather or any other material, such as plastic sheeting, textile materials, vulcanized fibre or paper-board, where the same technology is used as for leather
- manufacture of saddlery and harness
- manufacture of non-metallic watch bands (e.g. fabric, leather, plastic)
- manufacture of diverse articles of leather or composition leather: driving belts, packings etc.
- manufacture of shoe-lace, of leather
- manufacture of horse whips and riding crops

*This class excludes:*

- *manufacture of leather wearing apparel, see 1410*
- *manufacture of leather gloves and hats, see 1410*
- *manufacture of footwear, see 1520*
- *manufacture of saddles for bicycles, see 3092*
- *manufacture of precious metal watch bands, see 3211*
- *manufacture of non-precious metal watch bands, see 3212*
- *manufacture of linemen's safety belts and other belts for occupational use, see 3290*

## **152 Manufacture of footwear**

See class 1520.

## **1520 Manufacture of footwear**

This class includes:

- *manufacture of footwear for all purposes, of any material, by any process, including moulding (see below for exceptions)*
- *manufacture of leather parts of footwear: manufacture of uppers and parts of uppers, outer and inner soles, heels etc.*
- *manufacture of gaiters, leggings and similar articles*

*This class excludes:*

- *manufacture of footwear of textile material without applied soles, see 1410*
- *manufacture of wooden shoe parts (e.g. heels and lasts), see 1629*
- *manufacture of rubber boot and shoe heels and soles and other rubber footwear parts, see 2219*
- *manufacture of plastic footwear parts, see 2220*
- *manufacture of ski-boots, see 3230*
- *manufacture of orthopedic shoes, see 3250*

## **16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials**

This division includes the manufacture of wood products, such as lumber, plywood, veneers, wood containers, wood flooring, wood trusses, and prefabricated wood buildings. The production processes include sawing, planing, shaping, laminating, and assembling of wood products starting from logs that are cut into bolts, or lumber that may then be cut further, or shaped by lathes or other shaping tools. The lumber or other transformed wood shapes may also be subsequently planed or smoothed, and assembled into finished products, such as wood containers.

With the exception of sawmilling, this division is subdivided mainly based on the specific products manufactured.

This division does not include the manufacture of furniture (3100), or the installation of wooden fittings and the like (4330).

## **161 Sawmilling and planing of wood**

See class 1610.

**1610 Sawmilling and planing of wood**

This class includes:

- sawing, planing and machining of wood
- slicing, peeling or chipping logs
- manufacture of wooden railway sleepers
- manufacture of unassembled wooden flooring
- manufacture of wood wool, wood flour, chips, particles

This class also includes:

- drying of wood
- impregnation or chemical treatment of wood with preservatives or other materials

*This class excludes:*

- logging and production of wood in the rough, see 0220*
- manufacture of veneer sheets thin enough for use in plywood, boards and panels, see 1621*
- manufacture of shingles and shakes, beadings and mouldings, see 1622*

**162 Manufacture of products of wood, cork, straw and plaiting materials**

This group includes the manufacture of products of wood, cork, straw or plaiting materials, including basic shapes as well as assembled products.

**1621 Manufacture of veneer sheets and wood-based panels**

This class includes:

- manufacture of veneer sheets thin enough to be used for veneering, making plywood or other purposes:
  - ◆ smoothed, dyed, coated, impregnated, reinforced (with paper or fabric backing)
  - ◆ made in the form of motifs
- manufacture of plywood, veneer panels and similar laminated wood boards and sheets
- manufacture of particle board and fibreboard
- manufacture of densified wood
- manufacture of glue laminated wood, laminated veneer wood

**1622 Manufacture of builders' carpentry and joinery**

This class includes:

- manufacture of wooden goods intended to be used primarily in the construction industry:
  - ◆ beams, rafters, roof struts
  - ◆ glue-laminated or metal connected prefabricated wooden roof trusses
  - ◆ doors, windows, shutters and their frames, whether or not containing metal fittings, such as hinges, locks etc.
  - ◆ stairs, railings
  - ◆ wooden beadings and mouldings, shingles and shakes
  - ◆ parquet floor blocks, strips etc., assembled into panels
- manufacture of prefabricated buildings, or elements thereof, predominantly of wood
- manufacture of mobile homes
- manufacture of wood partitions (except free standing)

*This class excludes:*

- *manufacture of unassembled wooden flooring, see 1610*
- *manufacture of kitchen cabinets, bookcases, wardrobes etc., see 3100*
- *manufacture of wood partitions, free standing, see 3100*

### **1623 Manufacture of wooden containers**

This class includes:

- manufacture of packing cases, boxes, crates, drums and similar packings of wood
- manufacture of pallets, box pallets and other load boards of wood
- manufacture of barrels, vats, tubs and other coopers' products of wood
- manufacture of wooden cable-drums

*This class excludes:*

- *manufacture of luggage, see 1512*
- *manufacture of cases of plaiting material, see 1629*

### **1629 Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials**

This class includes:

- manufacture of various wood products:
  - ◆ wooden handles and bodies for tools, brooms, brushes
  - ◆ wooden boot or shoe parts (e.g. heels)
  - ◆ wooden boot or shoe lasts and trees
  - ◆ wooden clothes hangers
  - ◆ wooden mirror and picture frames
  - ◆ wooden frames for artists' canvases
  - ◆ household utensils and kitchenware of wood
  - ◆ wooden statuettes and ornaments, wood marquetry, inlaid wood
  - ◆ wooden cases for jewellery, cutlery and similar articles
  - ◆ wooden spools, cops, bobbins, sewing thread reels and similar articles of turned wood
  - ◆ wooden handles for umbrellas, canes and similar
  - ◆ wooden blocks for the manufacture of smoking pipes
  - ◆ other articles of wood
- natural cork processing, manufacture of agglomerated cork
- manufacture of articles of natural or agglomerated cork, including floor coverings
- manufacture of plaits and products of plaiting materials: mats, matting, screens, cases etc.
- manufacture of basket-ware and wickerwork
- manufacture of fire logs, made of pressed wood or substitute materials like coffee or soybean grounds

*This class excludes:*

- *manufacture of mats or matting of textile materials, see 1392*
- *manufacture of luggage, see 1512*
- *manufacture of wooden footwear, see 1520*
- *manufacture of matches, see 2029*
- *manufacture of clock cases, see 2652*



- *manufacture of wooden spools and bobbins that are part of textile machinery, see 2826*
- *manufacture of furniture, see 3100*
- *manufacture of wooden toys, see 3240*
- *manufacture of cork life preservers, see 3290*
- *manufacture of brushes and brooms, see 3290*
- *manufacture of caskets, see 3290*

## 17 Manufacture of paper and paper products

This division includes the manufacture of pulp, paper and converted paper products. The manufacture of these products is grouped together because they constitute a series of vertically connected processes. More than one activity is often carried out in a single unit. There are essentially three activities: The manufacture of pulp involves separating the cellulose fibers from other impurities in wood or used paper. The manufacture of paper involves matting these fibers into a sheet. Converted paper products are made from paper and other materials by various cutting and shaping techniques, including coating and laminating activities. The paper articles may be printed (e.g. wallpaper, gift wrap etc.), as long as the printing of information is not the main purpose.

The production of pulp, paper and paperboard in bulk is included in class 1701, while the remaining classes include the production of further-processed paper and paper products.

## 170 Manufacture of paper and paper products

See division 17.

## 1701 Manufacture of pulp, paper and paperboard

This class includes:

- *manufacture of bleached, semi-bleached or unbleached paper pulp by mechanical, chemical (dissolving or non-dissolving) or semi-chemical processes*
- *manufacture of cotton-linters pulp*
- *removal of ink and manufacture of pulp from waste paper*
- *manufacture of paper and paperboard intended for further industrial processing*

This class also includes:

- *further processing of paper and paperboard:*
  - ◆ *coating, covering and impregnating of paper and paperboard*
  - ◆ *manufacture of crêped or crinkled paper*
  - ◆ *manufacture of laminates and foils, if laminated with paper or paperboard*
- *manufacture of handmade paper*
- *manufacture of newsprint and other printing or writing paper*
- *manufacture of cellulose wadding and webs of cellulose fibres*
- *manufacture of carbon paper or stencil paper in rolls or large sheets*

*This class excludes:*

- *manufacture of corrugated paper and paperboard, see 1702*
- *manufacture of further-processed articles of paper, paperboard or pulp, see 1709*
- *manufacture of coated or impregnated paper, where the coating or impregnant is the main ingredient, see class in which the manufacture of the coating or impregnant is classified*
- *manufacture of abrasive paper, see 2399*

**1702 Manufacture of corrugated paper and paperboard and of containers of paper and paperboard**

This class includes:

- manufacture of corrugated paper and paperboard
- manufacture of containers of corrugated paper or paperboard
- manufacture of folding paperboard containers
- manufacture of containers of solid board
- manufacture of other containers of paper and paperboard
- manufacture of sacks and bags of paper
- manufacture of office box files and similar articles

*This class excludes:*

- *manufacture of envelopes, see 1709*
- *manufacture of moulded or pressed articles of paper pulp (e.g. boxes for packing eggs, moulded pulp paper plates), see 1709*

**1709 Manufacture of other articles of paper and paperboard**

This class includes:

- manufacture of household and personal hygiene paper and cellulose wadding products:
  - ◆ cleansing tissues
  - ◆ handkerchiefs, towels, serviettes
  - ◆ toilet paper
  - ◆ sanitary towels and tampons, napkins and napkin liners for babies
  - ◆ cups, dishes and trays
- manufacture of textile wadding and articles of wadding: sanitary towels, tampons etc.
- manufacture of printing and writing paper ready for use
- manufacture of computer printout paper ready for use
- manufacture of self-copy paper ready for use
- manufacture of duplicator stencils and carbon paper ready for use
- manufacture of gummed or adhesive paper ready for use
- manufacture of envelopes and letter-cards
- manufacture of registers, accounting books, binders, albums and similar educational and commercial stationery
- manufacture of boxes, pouches, wallets and writing compendiums containing an assortment of paper stationery
- manufacture of wallpaper and similar wall coverings, including vinyl-coated and textile wallpaper
- manufacture of labels
- manufacture of filter paper and paperboard
- manufacture of paper and paperboard bobbins, spools, cops etc.
- manufacture of egg trays and other moulded pulp packaging products etc.
- manufacture of paper novelties

*This class excludes:*

- *manufacture of paper or paperboard in bulk, see 1701*
- *printing on paper products, see 1811*
- *manufacture of playing cards, see 3240*
- *manufacture of games and toys of paper or paperboard, see 3240*

**18 Printing and reproduction of recorded media**

This division includes printing of products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and associated support activities, such as bookbinding, plate-making services, and data imaging. The support activities included here are an integral part of the printing industry, and a product (a printing plate, a bound book, or a computer disk or file) that is an integral part of the printing industry is almost always provided by these operations.

Processes used in printing include a variety of methods for transferring an image from a plate, screen, or computer file to a medium, such as paper, plastics, metal, textile articles, or wood. The most prominent of these methods entails the transfer of the image from a plate or screen to the medium through lithographic, gravure, screen or flexographic printing. Often a computer file is used to directly “drive” the printing mechanism to create the image or electrostatic and other types of equipment (digital or non-impact printing).

Though printing and publishing can be carried out by the same unit (a newspaper, for example), it is less and less the case that these distinct activities are carried out in the same physical location.

This division also includes the reproduction of recorded media, such as compact discs, video recordings, software on discs or tapes, records etc.

This division excludes publishing activities (see section J).

**181 Printing and service activities related to printing**

This group includes printing of products, such as newspapers, books, periodicals, business forms, greeting cards, and other materials, and associated support activities, such as bookbinding, plate-making services, and data imaging. Printing can be done using various techniques and on different materials.

**1811 Printing**

This class includes:

- printing of newspapers, magazines and other periodicals, books and brochures, music and music manuscripts, maps, atlases, posters, advertising catalogues, prospectuses and other printed advertising, postage stamps, taxation stamps, documents of title, cheques and other security papers, diaries, calendars, business forms and other commercial printed matter, personal stationery and other printed matter by letterpress, offset, photogravure, flexographic and other printing presses, duplication machines, computer printers, embossers etc., including quick printing
- printing directly onto textiles, plastic, glass, metal, wood and ceramics (except silk-screen printing on textiles and wearing apparel)

The material printed is typically copyrighted.

This class also includes:

- printing on labels or tags (lithographic, gravure printing, flexographic printing, other)

*This class excludes:*

- silk-screen printing on textiles and wearing apparel, see 1313*
- manufacture of paper articles, such as binders, see 1709*
- publishing of printed matter, see group 581*
- photocopying of documents, see 8219*

**1812 Service activities related to printing**

This class includes:

- binding of printed sheets, e.g. into books, brochures, magazines, catalogues etc., by folding, assembling, stitching, glueing, collating, basting, adhesive binding, trimming, gold stamping
- composition, typesetting, phototypesetting, pre-press data input including scanning and optical character recognition, electronic make-up
- plate-making services including imagesetting and plate-setting (for the printing processes letterpress and offset)
- engraving or etching of cylinders for gravure
- plate processes direct to plate (also photopolymer plates)
- preparation of plates and dies for relief stamping or printing
- production of proofs
- artistic work including preparation of litho stones and prepared woodblocks
- production of reprographic products
- design of printing products e.g. sketches, layouts, dummies etc.
- other graphic activities such as die-sinking or die-stamping, Braille copying, punching and drilling, embossing, varnishing and laminating, collating and inseting, creasing

**182 Reproduction of recorded media**

See class 1820.

**1820 Reproduction of recorded media**

This class includes:

- reproduction from master copies of gramophone records, compact discs and tapes with music or other sound recordings
- reproduction from master copies of records, compact discs and tapes with motion pictures and other video recordings
- reproduction from master copies of software and data on discs and tapes

*This class excludes:*

- reproduction of printed matter, see 1811*
- publishing of software, see 5820*
- production and distribution of motion pictures, video tapes and movies on DVD or similar media, see 5911, 5912, 5913*
- reproduction of motion picture film for theatrical distribution, see 5912*
- production of master copies for records or audio material, see 5920*

**19 Manufacture of coke and refined petroleum products**

This division includes the transformation of crude petroleum and coal into usable products. The dominant process is petroleum refining, which involves the separation of crude petroleum into component products through such techniques as cracking and distillation. This division also includes the manufacture for own account of characteristic products (e.g. coke, butane, propane, petrol, kerosene, fuel oil etc.) as well as processing services (e.g. custom refining).

This division includes the manufacture of gases such as ethane, propane and butane as products of petroleum refineries.

Not included is the manufacture of such gases in other units (2011), manufacture of industrial gases (2011), extraction of natural gas (methane, ethane, butane or propane) (0600), and manufacture of fuel gas, other than petroleum gases (e.g. coal gas, water gas, producer gas, gasworks gas) (35420).

The manufacture of petrochemicals from refined petroleum is classified in division 20.

### **191 Manufacture of coke oven products**

See class 1910.

### **1910 Manufacture of coke oven products**

This class includes:

- operation of coke ovens
- production of coke and semi-coke
- production of pitch and pitch coke
- production of coke oven gas
- production of crude coal and lignite tars
- agglomeration of coke

### **192 Manufacture of refined petroleum products**

See class 1920.

### **1920 Manufacture of refined petroleum products**

This class includes the manufacture of liquid or gaseous fuels or other products from crude petroleum, bituminous minerals or their fractionation products. Petroleum refining involves one or more of the following activities: fractionation, straight distillation of crude oil, and cracking.

This class includes:

- production of motor fuel: gasoline, kerosene etc.
- production of fuel: light, medium and heavy fuel oil, refinery gases such as ethane, propane, butane etc.
- manufacture of oil-based lubricating oils or greases, including from waste oil
- manufacture of products for the petrochemical industry and for the manufacture of road coverings
- manufacture of various products: white spirit, Vaseline, paraffin wax, petroleum jelly etc.
- manufacture of hard-coal and lignite fuel briquettes
- manufacture of petroleum briquettes
- blending of biofuels, i.e. blending of alcohols with petroleum (e.g. gasohol)

## **20 Manufacture of chemicals and chemical products**

This division includes the transformation of organic and inorganic raw materials by a chemical process and the formation of products. It distinguishes the production of basic chemicals that constitute the first industry group from the production of intermediate and end products produced by further processing of basic chemicals that make up the remaining industry classes.

## 201 Manufacture of basic chemicals, fertilizers and nitrogen compounds, plastics and synthetic rubber in primary forms

This group includes the manufacture of basic chemical products, fertilizers and associated nitrogen compounds, as well as plastics and synthetic rubber in primary forms.

### 2011 Manufacture of basic chemicals

This class includes the manufacture of chemicals using basic processes, such as thermal cracking and distillation. The output of these processes are usually separate chemical elements or separate chemically defined compounds.

This class includes:

- manufacture of liquefied or compressed inorganic industrial or medical gases:
  - ◆ elemental gases
  - ◆ liquid or compressed air
  - ◆ refrigerant gases
  - ◆ mixed industrial gases
  - ◆ inert gases such as carbon dioxide
  - ◆ isolating gases
- manufacture of dyes and pigments from any source in basic form or as concentrate
- manufacture of chemical elements
- manufacture of inorganic acids except nitric acid
- manufacture of alkalis, lyes and other inorganic bases except ammonia
- manufacture of other inorganic compounds
- manufacture of basic organic chemicals:
  - ◆ acyclic hydrocarbons, saturated and unsaturated
  - ◆ cyclic hydrocarbons, saturated and unsaturated
  - ◆ acyclic and cyclic alcohols
  - ◆ mono- and polycarboxylic acids, including acetic acid
  - ◆ other oxygen-function compounds, including aldehydes, ketones, quinones and dual or poly oxygen-function compounds
  - ◆ synthetic glycerol
  - ◆ nitrogen-function organic compounds, including amines
  - ◆ fermentation of sugarcane, corn or similar to produce alcohol and esters
  - ◆ other organic compounds, including wood distillation products (e.g. charcoal) etc.
- manufacture of distilled water
- manufacture of synthetic aromatic products
- roasting of iron pyrites

This class also includes:

- manufacture of products of a kind used as fluorescent brightening agents or as luminophores
- enrichment of uranium and thorium ores and production of fuel elements for nuclear reactors

*This class excludes:*

- extraction of methane, ethane, butane or propane, see 0620
- manufacture of fuel gases such as ethane, butane or propane in a petroleum refinery, see 1920

- *manufacture of nitrogenous fertilizers and nitrogen compounds, see 2012*
- *manufacture of ammonia, see 2012*
- *manufacture of ammonium chloride, see 2012*
- *manufacture of nitrites and nitrates of potassium, see 2012*
- *manufacture of ammonium carbonates, see 2012*
- *manufacture of plastics in primary forms, see 2013*
- *manufacture of synthetic rubber in primary forms, see 2013*
- *manufacture of prepared dyes and pigments, see 2022*
- *manufacture of crude glycerol, see 2023*
- *manufacture of natural essential oils, see 2029*
- *manufacture of aromatic distilled waters, see 2029*
- *manufacture of salicylic and O-acetylsalicylic acids, see 2100*

## 2012 Manufacture of fertilizers and nitrogen compounds

This class includes:

- manufacture of fertilizers:
  - ♦ straight or complex nitrogenous, phosphatic or potassic fertilizers
  - ♦ urea, crude natural phosphates and crude natural potassium salts
- manufacture of associated nitrogen products:
  - ♦ nitric and sulphonitric acids, ammonia, ammonium chloride, ammonium carbonate, nitrites and nitrates of potassium

This class also includes:

- manufacture of potting soil with peat as main constituent
- manufacture of potting soil mixtures of natural soil, sand, clays and minerals

*This class excludes:*

- *mining of guano, see 0891*
- *manufacture of agrochemical products, such as pesticides, see 2021*
- *operation of compost dumps, see 3821*

## 2013 Manufacture of plastics and synthetic rubber in primary forms

This class includes the manufacture of resins, plastics materials and non-vulcanizable thermoplastic elastomers, the mixing and blending of resins on a custom basis, as well as the manufacture of non-customized synthetic resins.

This class includes:

- manufacture of plastics in primary forms:
  - ♦ polymers, including those of ethylene, propylene, styrene, vinyl chloride, vinyl acetate and acrylics
  - ♦ polyamides
  - ♦ phenolic and epoxide resins and polyurethanes
  - ♦ alkyd and polyester resins and polyethers
  - ♦ silicones
  - ♦ ion-exchangers based on polymers
- manufacture of synthetic rubber in primary forms:
  - ♦ synthetic rubber
  - ♦ factice

— manufacture of mixtures of synthetic rubber and natural rubber or rubber-like gums (e.g. balata)

This class also includes:

— manufacture of cellulose and its chemical derivatives

*This class excludes:*

— *manufacture of artificial and synthetic fibres, filaments and yarn, see 2030*

— *shredding of plastic products, see 3830*

## **202 Manufacture of other chemical products**

This group includes the manufacture of chemical products other than basic chemicals and man-made fibres. This includes the manufacture of a variety of goods such as pesticides, paints and inks, soap, cleaning preparations, perfumes and toilet preparations, explosives and pyrotechnic products, chemical preparations for photographic uses (including film and sensitized paper), gelatins, composite diagnostic preparations etc.

### **2021 Manufacture of pesticides and other agrochemical products**

This class includes:

— manufacture of insecticides, rodenticides, fungicides, herbicides

— manufacture of anti-sprouting products, plant growth regulators

— manufacture of disinfectants (for agricultural and other use)

— manufacture of other agrochemical products n.e.c.

*This class excludes:*

— *manufacture of fertilizers and nitrogen compounds, see 2012*

### **2022 Manufacture of paints, varnishes and similar coatings, printing ink and mastics**

This class includes:

— manufacture of paints and varnishes, enamels or lacquers

— manufacture of prepared pigments and dyes, opacifiers and colours

— manufacture of vitrifiable enamels and glazes and engobes and similar preparations

— manufacture of mastics

— manufacture of caulking compounds and similar non-refractory filling or surfacing preparations

— manufacture of organic composite solvents and thinners

— manufacture of prepared paint or varnish removers

— manufacture of printing ink

*This class excludes:*

— *manufacture of dyestuffs and pigments, see 2011*

— *manufacture of writing and drawing ink, see 2029*

### **2023 Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations**

This class includes:

— manufacture of organic surface-active agents

— manufacture of soap



- manufacture of paper, wadding, felt etc. coated or covered with soap or detergent
- manufacture of crude glycerol
- manufacture of surface-active preparations:
  - ◆ washing powders in solid or liquid form and detergents
  - ◆ dish-washing preparations
  - ◆ textile softeners
- manufacture of cleaning and polishing products:
  - ◆ preparations for perfuming or deodorizing rooms
  - ◆ artificial waxes and prepared waxes
  - ◆ polishes and creams for leather
  - ◆ polishes and creams for wood
  - ◆ polishes for coachwork, glass and metal
  - ◆ scouring pastes and powders, including paper, wadding etc. coated or covered with these
- manufacture of perfumes and toilet preparations:
  - ◆ perfumes and toilet water
  - ◆ beauty and make-up preparations
  - ◆ sunburn prevention and suntan preparations
  - ◆ manicure and pedicure preparations
  - ◆ shampoos, hair lacquers, waving and straightening preparations
  - ◆ dentifrices and preparations for oral hygiene, including denture fixative preparations
  - ◆ shaving preparations, including pre-shave and aftershave preparations
  - ◆ deodorants and bath salts
  - ◆ depilatories

*This class excludes:*

- *manufacture of separate, chemically defined compounds, see 2011*
- *manufacture of glycerol, synthesized from petroleum products, see 2011*
- *extraction and refining of natural essential oils, see 2029*

## **2029 Manufacture of other chemical products n.e.c.**

This class includes:

- manufacture of propellant powders
- manufacture of explosives and pyrotechnic products, including percussion caps, detonators, signalling flares etc.
- manufacture of gelatine and its derivatives, glues and prepared adhesives, including rubber-based glues and adhesives
- manufacture of extracts of natural aromatic products
- manufacture of resinoids
- manufacture of aromatic distilled waters
- manufacture of mixtures of odoriferous products for the manufacture of perfumes or food
- manufacture of photographic plates, films, sensitized paper and other sensitized unexposed materials
- manufacture of chemical preparations for photographic uses
- manufacture of various chemical products:
  - ◆ peptones, peptone derivatives, other protein substances and their derivatives n.e.c.

- ◆ essential oils
- ◆ chemically modified oils and fats
- ◆ materials used in the finishing of textiles and leather
- ◆ powders and pastes used in soldering, brazing or welding
- ◆ substances used to pickle metal
- ◆ prepared additives for cements
- ◆ activated carbon, lubricating oil additives, prepared rubber accelerators, catalysts and other chemical products for industrial use
- ◆ anti-knock preparations, antifreeze preparations
- ◆ composite diagnostic or laboratory reagents

This class also includes:

- manufacture of writing and drawing ink
- manufacture of matches

*This class excludes:*

- *manufacture of chemically defined products in bulk, see 2011*
- *manufacture of distilled water, see 2011*
- *manufacture of synthetic aromatic products, see 2011*
- *manufacture of printing ink, see 2022*
- *manufacture of perfumes and toilet preparations, see 2023*
- *manufacture of asphalt-based adhesives, see 2399*

### **203 Manufacture of man-made fibres**

See class 2030.

### **2030 Manufacture of man-made fibres**

This class includes:

- manufacture of synthetic or artificial filament tow
- manufacture of synthetic or artificial staple fibres, not carded, combed or otherwise processed for spinning
- manufacture of synthetic or artificial filament yarn, including high-tenacity yarn
- manufacture of synthetic or artificial monofilament or strip

*This class excludes:*

- *spinning of synthetic or artificial fibres, see 1311*
- *manufacture of yarns made of man-made staple, see 1311*

### **21 Manufacture of basic pharmaceutical products and pharmaceutical preparations**

This division includes the manufacture of basic pharmaceutical products and pharmaceutical preparations. This includes also the manufacture of medicinal chemical and botanical products.

### **210 Manufacture of pharmaceuticals, medicinal chemical and botanical products**

See class 2100.

**2100 Manufacture of pharmaceuticals, medicinal chemical and botanical products**

This class includes:

- manufacture of medicinal active substances to be used for their pharmacological properties in the manufacture of medicaments: antibiotics, basic vitamins, salicylic and O-acetylsalicylic acids etc.
- processing of blood
- manufacture of medicaments:
  - ◆ antisera and other blood fractions
  - ◆ vaccines
  - ◆ diverse medicaments, including homeopathic preparations
- manufacture of chemical contraceptive products for external use and hormonal contraceptive medicaments
- manufacture of medical diagnostic preparations, including pregnancy tests
- manufacture of radioactive in-vivo diagnostic substances
- manufacture of biotech pharmaceuticals

This class also includes:

- manufacture of chemically pure sugars
- processing of glands and manufacture of extracts of glands etc.
- manufacture of medical impregnated wadding, gauze, bandages, dressings etc.
- preparation of botanical products (grinding, grading, milling) for pharmaceutical use

*This class excludes:*

- *manufacture of herb infusions (mint, vervain, chamomile etc.), see 1079*
- *manufacture of dental fillings and dental cement, see 3250*
- *manufacture of bone reconstruction cements, see 3250*
- *wholesale of pharmaceuticals, see 4649*
- *retail sale of pharmaceuticals, see 4772*
- *research and development for pharmaceuticals and biotech pharmaceuticals, see 7210*
- *packaging of pharmaceuticals, see 8292*

**22 Manufacture of rubber and plastics products**

This division includes the manufacture of rubber and plastics products.

This division is characterized by the raw materials used in the manufacturing process. However, this does not imply that the manufacture of all products made of these materials is classified here.

**221 Manufacture of rubber products**

This group includes the manufacture of rubber products.

**2211 Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres**

This class includes:

- manufacture of rubber tyres for vehicles, equipment, mobile machinery, aircraft, toy, furniture and other uses:
  - ◆ pneumatic tyres
  - ◆ solid or cushion tyres

- manufacture of inner tubes for tyres
- manufacture of interchangeable tyre treads, tyre flaps, “camelback” strips for retreading tyres etc.
- tyre rebuilding and retreading

*This class excludes:*

- *manufacture of tube repair materials, see 2219*
- *tyre and tube repair, fitting or replacement, see 4520*

## **2219 Manufacture of other rubber products**

This class includes:

- manufacture of other products of natural or synthetic rubber, unvulcanized, vulcanized or hardened:
  - ◆ rubber plates, sheets, strip, rods, profile shapes
  - ◆ tubes, pipes and hoses
  - ◆ rubber conveyor or transmission belts or belting
  - ◆ rubber hygienic articles: sheath contraceptives, teats, hot water bottles etc.
  - ◆ rubber articles of apparel (if only sealed together, not sewn)
  - ◆ rubber thread and rope
  - ◆ rubberized yarn and fabrics
  - ◆ rubber rings, fittings and seals
  - ◆ rubber roller coverings
  - ◆ inflatable rubber mattresses
  - ◆ inflatable balloons
- manufacture of rubber brushes
- manufacture of hard rubber pipe stems
- manufacture of hard rubber combs, hair pins, hair rollers, and similar

This class also includes:

- manufacture of rubber repair materials
- manufacture of textile fabric impregnated, coated, covered or laminated with rubber, where rubber is the chief constituent
- manufacture of rubber waterbed mattresses
- manufacture of rubber bathing caps and aprons
- manufacture of rubber wet suits and diving suits
- manufacture of rubber sex articles

*This class excludes:*

- *manufacture of tyre cord fabrics, see 1399*
- *manufacture of apparel of elastic fabrics, see 1410*
- *manufacture of rubber footwear, see 1520*
- *manufacture of glues and adhesives based on rubber, see 2029*
- *manufacture of “camelback” strips, see 2211*
- *manufacture of inflatable rafts and boats, see 3011, 3012*
- *manufacture of mattresses of uncovered cellular rubber, see 3100*
- *manufacture of rubber sports requisites, except apparel, see 3230*
- *manufacture of rubber games and toys (including children’s wading pools, inflatable children rubber boats, inflatable rubber animals, balls and the like), see 3240*
- *reclaiming of rubber, see 3830*

**222 Manufacture of plastics products**

See class 2220.

**2220 Manufacture of plastics products**

This class includes the processing of new or spent (i.e. recycled) plastics resins into intermediate or final products, using such processes as compression molding, extrusion molding, injection molding, blow molding and casting. For most of these, the production process is such that a wide variety of products can be made.

This class includes:

- manufacture of semi-manufactures of plastic products:
  - ♦ plastic plates, sheets, blocks, film, foil, strip etc. (whether self-adhesive or not)
- manufacture of finished plastic products:
  - ♦ plastic tubes, pipes and hoses; hose and pipe fittings
- manufacture of plastic articles for the packing of goods:
  - ♦ plastic bags, sacks, containers, boxes, cases, carboys, bottles etc.
- manufacture of builders' plastics ware:
  - ♦ plastic doors, windows, frames, shutters, blinds, skirting boards
  - ♦ tanks, reservoirs
  - ♦ plastic floor, wall or ceiling coverings in rolls or in the form of tiles etc.
  - ♦ plastic sanitary ware, such as:
    - plastic baths, shower baths, washbasins, lavatory pans, flushing cisterns etc.
- manufacture of plastic tableware, kitchenware and toilet articles
- cellophane film or sheet
- manufacture of resilient floor coverings, such as vinyl, linoleum etc.
- manufacture of artificial stone (e.g. cultured marble)
- manufacture of plastic signs (non-electrical)
- manufacture of diverse plastic products:
  - ♦ plastic headgear, insulating fittings, parts of lighting fittings, office or school supplies, articles of apparel (if only sealed together, not sewn), fittings for furniture, statuettes, transmission and conveyer belts, self-adhesive tapes of plastic, plastic wall paper, plastic shoe lasts, plastic cigar and cigarette holders, combs, plastics hair curlers, plastics novelties, etc.

*This class excludes:*

- *manufacture of plastic luggage, see 1512*
- *manufacture of plastic footwear, see 1520*
- *manufacture of plastics in primary forms, see 2013*
- *manufacture of articles of synthetic or natural rubber, see group 221*
- *manufacture of plastic non current-carrying wiring devices (e.g. junction boxes, face plates), see 2733*
- *manufacture of plastic furniture, see 3100*
- *manufacture of mattresses of uncovered cellular plastic, see 3100*
- *manufacture of plastic sports requisites, see 3230*
- *manufacture of plastic games and toys, see 3240*
- *manufacture of plastic medical and dental appliances, see 3250*
- *manufacture of plastic ophthalmic goods, see 3250*
- *manufacture of plastics hard hats and other personal safety equipment of plastics, see 3290*

**23 Manufacture of other non-metallic mineral products**

This division includes manufacturing activities related to a single substance of mineral origin. This division includes the manufacture of glass and glass products (e.g. flat glass, hollow glass, fibres, technical glassware etc.), ceramic products, tiles and baked clay products, and cement and plaster, from raw materials to finished articles. The manufacture of shaped and finished stone and other mineral products is also included in this division.

**231 Manufacture of glass and glass products**

See class 2310.

**2310 Manufacture of glass and glass products**

This class includes the manufacture of glass in all forms, made by any process and the manufacture of articles of glass.

This class includes:

- manufacture of flat glass, including wired, coloured or tinted flat glass
- manufacture of toughened or laminated flat glass
- manufacture of glass in rods or tubes
- manufacture of glass paving blocks
- manufacture of glass mirrors
- manufacture of multiple-walled insulating units of glass
- manufacture of bottles and other containers of glass or crystal
- manufacture of drinking glasses and other domestic glass or crystal articles
- manufacture of glass fibres, including glass wool and non-woven products thereof
- manufacture of laboratory, hygienic or pharmaceutical glassware
- manufacture of clock or watch glasses, optical glass and optical elements not optically worked
- manufacture of glassware used in imitation jewellery
- manufacture of glass insulators and glass insulating fittings
- manufacture of glass envelopes for lamps
- manufacture of glass figurines

*This class excludes:*

- *manufacture of woven fabrics of glass yarn, see 1312*
- *manufacture of optical elements optically worked, see 2670*
- *manufacture of fiber optic cable for data transmission or live transmission of images, see 2731*
- *manufacture of glass toys, see 3240*
- *manufacture of syringes and other medical laboratory equipment, see 3250*

**239 Manufacture of non-metallic mineral products n.e.c.**

This group includes the manufacture of intermediate and final products from mined or quarried non-metallic minerals, such as sand, gravel, stone or clay.

**2391 Manufacture of refractory products**

This class includes:

- manufacture of refractory mortars, concretes etc.

- manufacture of refractory ceramic goods:
  - ◆ heat-insulating ceramic goods of siliceous fossil meals
  - ◆ refractory bricks, blocks and tiles etc.
  - ◆ retorts, crucibles, muffles, nozzles, tubes, pipes etc.

This class also includes:

- manufacture of refractory articles containing magnesite, dolomite or chromite

### **2392 Manufacture of clay building materials**

This class includes:

- manufacture of non-refractory ceramic hearth or wall tiles, mosaic cubes etc.
- manufacture of non-refractory ceramic flags and paving
- manufacture of structural non-refractory clay building materials:
  - ◆ manufacture of ceramic bricks, roofing tiles, chimney pots, pipes, conduits etc.
- manufacture of flooring blocks in baked clay
- manufacture of ceramic sanitary fixtures

*This class excludes:*

- *manufacture of artificial stone (e.g. cultured marble), see 2220*
- *manufacture of refractory ceramic products, see 2391*

### **2393 Manufacture of other porcelain and ceramic products**

This class includes:

- manufacture of ceramic tableware and other domestic or toilet articles
- manufacture of statuettes and other ornamental ceramic articles
- manufacture of electrical insulators and insulating fittings of ceramics
- manufacture of ceramic and ferrite magnets
- manufacture of ceramic laboratory, chemical and industrial products
- manufacture of ceramic pots, jars and similar articles of a kind used for conveyance or packing of goods
- manufacture of ceramic furniture
- manufacture of ceramic products n.e.c.

*This class excludes:*

- *manufacture of artificial stone (e.g. cultured marble), see 2220*
- *manufacture of refractory ceramic goods, see 2391*
- *manufacture of ceramic building materials, see 2392*
- *manufacture of ceramic sanitary fixtures, see 2392*
- *manufacture of permanent metallic magnets, see 2599*
- *manufacture of imitation jewellery, see 3212*
- *manufacture of ceramic toys, see 3240*
- *manufacture of artificial teeth, see 3250*

### **2394 Manufacture of cement, lime and plaster**

This class includes:

- manufacture of clinkers and hydraulic cements, including Portland, aluminous cement, slag cement and superphosphate cements

- manufacture of quicklime, slaked lime and hydraulic lime
- manufacture of plasters of calcined gypsum or calcined sulphate
- manufacture of calcined dolomite

*This class excludes:*

- *manufacture of refractory mortars, concrete etc., see 2391*
- *manufacture of articles of cement, see 2395*
- *manufacture of articles of plaster, see 2395*
- *manufacture of ready-mixed and dry-mix concrete and mortars, see 2395*
- *manufacture of cements used in dentistry, see 3250*

### **2395 Manufacture of articles of concrete, cement and plaster**

This class includes:

- manufacture of precast concrete, cement or artificial stone articles for use in construction:
  - ◆ tiles, flagstones, bricks, boards, sheets, panels, pipes, posts etc.
- manufacture of prefabricated structural components for buildings or civil engineering of cement, concrete or artificial stone
- manufacture of plaster articles for use in construction:
  - ◆ boards, sheets, panels etc.
- manufacture of building materials of vegetable substances (wood wool, straw, reeds, rushes) agglomerated with cement, plaster or other mineral binder
- manufacture of articles of asbestos-cement or cellulose fibre-cement or the like:
  - ◆ corrugated sheets, other sheets, panels, tiles, tubes, pipes, reservoirs, troughs, basins, sinks, jars, furniture, window frames etc.
- manufacture of other articles of concrete, plaster, cement or artificial stone:
  - ◆ statuary, furniture, bas- and haut-reliefs, vases, flowerpots etc.
- manufacture of powdered mortars
- manufacture of ready-mix and dry-mix concrete and mortars

*This class excludes:*

- *manufacture of refractory cements and mortars, see 2391*

### **2396 Cutting, shaping and finishing of stone**

This class includes:

- cutting, shaping and finishing of stone for use in construction, in cemeteries, on roads, as roofing etc.
- manufacture of stone furniture

*This class excludes:*

- *production of rough cut stone, i.e. quarrying activities, see 0810*
- *production of millstones, abrasive stones and similar products, see 2399*
- *activities of sculptors, see 9000*

### **2399 Manufacture of other non-metallic mineral products n.e.c.**

This class includes:

- manufacture of millstones, sharpening or polishing stones and natural or artificial abrasive products, including abrasive products on a soft base (e.g. sandpaper)



- manufacture of friction material and unmounted articles thereof with a base of mineral substances or of cellulose
- manufacture of mineral insulating materials:
  - ◆ slag wool, rock wool and similar mineral wools; exfoliated vermiculite, expanded clays and similar heat-insulating, sound-insulating or sound-absorbing materials
- manufacture of articles of diverse mineral substances:
  - ◆ worked mica and articles of mica, of peat, of graphite (other than electrical articles) etc.
- manufacture of articles of asphalt or similar material, e.g. asphalt-based adhesives, coal tar pitch etc.
- carbon and graphite fibers and products (except electrodes and electrical applications)

*This class excludes:*

- *manufacture of glass wool and non-woven glass wool products, see 2310*
- *manufacture of carbon or graphite gaskets, see 2819*

## **24 Manufacture of basic metals**

This division includes the activities of smelting and/or refining ferrous and non-ferrous metals from ore, pig or scrap, using electrometallurgic and other process metallurgic techniques. This division also includes the manufacture of metal alloys and super-alloys by introducing other chemical elements to pure metals. The output of smelting and refining, usually in ingot form, is used in rolling, drawing and extruding operations to make products such as plate, sheet, strip, bars, rods, wire, tubes, pipes and hollow profiles, and in molten form to make castings and other basic metal products.

### **241 Manufacture of basic iron and steel**

See class 2410.

#### **2410 Manufacture of basic iron and steel**

This class includes operations of conversion by reduction of iron ore in blast furnaces and oxygen converters or of ferrous waste and scrap in electric arc furnaces or by direct reduction of iron ore without fusion to obtain crude steel which is smelted and refined in a ladle furnace and then poured and solidified in a continuous caster in order to produce semi-finished flat or long products, which are used, after reheating, in rolling, drawing and extruding operations to manufacture finished products such as plate, sheet, strip, bars, rods, wire, tubes, pipes and hollow profiles.

This class includes:

- operation of blast furnaces, steel converters, rolling and finishing mills
- production of pig iron and spiegeleisen in pigs, blocks or other primary forms
- production of ferro-alloys
- production of ferrous products by direct reduction of iron and other spongy ferrous products
- production of iron of exceptional purity by electrolysis or other chemical processes
- production of granular iron and iron powder
- production of steel in ingots or other primary forms
- remelting of scrap ingots of iron or steel
- production of semi-finished products of steel
- manufacture of hot-rolled and cold-rolled flat-rolled products of steel

- manufacture of hot-rolled bars and rods of steel
- manufacture of hot-rolled open sections of steel
- manufacture of steel bars and solid sections of steel by cold drawing, grinding or turning
- manufacture of open sections by progressive cold forming on a roll mill or folding on a press of flat-rolled products of steel
- manufacture of wire of steel by cold drawing or stretching
- manufacture of sheet piling of steel and welded open sections of steel
- manufacture of railway track materials (unassembled rails) of steel
- manufacture of seamless tubes, pipes and hollow profiles of steel, by hot rolling, hot extrusion or hot drawing, or by cold drawing or cold rolling
- manufacture of welded tubes and pipes of steel, by cold or hot forming and welding, delivered as welded or further processed by cold drawing or cold rolling or manufactured by hot forming, welding and reducing
- manufacture of tube fittings of steel, such as:
  - ◆ flat flanges and flanges with forged collars
  - ◆ butt-welded fittings
  - ◆ threaded fittings
  - ◆ socket-welded fittings

*This class excludes:*

- *manufacture of tubes, pipes and hollow profiles and of tube or pipe fittings of cast-iron, see 2431*
- *manufacture of seamless tubes and pipes of steel by centrifugal casting, see 2431*
- *manufacture of tube or pipe fittings of cast-steel, see 2431*

## **242 Manufacture of basic precious and other non-ferrous metals**

See class 2420.

### **2420 Manufacture of basic precious and other non-ferrous metals**

This class includes:

- production of basic precious metals:
  - ◆ production and refining of unwrought or wrought precious metals: gold, silver, platinum etc. from ore and scrap
- production of precious metal alloys
- production of precious metal semi-products
- production of silver rolled onto base metals
- production of gold rolled onto base metals or silver
- production of platinum and platinum group metals rolled onto gold, silver or base metals
- production of aluminium from alumina
- production of aluminium from electrolytic refining of aluminium waste and scrap
- production of aluminium alloys
- semi-manufacturing of aluminium
- production of lead, zinc and tin from ores
- production of lead, zinc and tin from electrolytic refining of lead, zinc and tin waste and scrap
- production of lead, zinc and tin alloys
- semi-manufacturing of lead, zinc and tin

- production of copper from ores
- production of copper from electrolytic refining of copper waste and scrap
- production of copper alloys
- manufacture of fuse wire or strip
- semi-manufacturing of copper
- production of chrome, manganese, nickel etc. from ores or oxides
- production of chrome, manganese, nickel etc. from electrolytic and aluminothermic refining of chrome, manganese, nickel etc., waste and scrap
- production of alloys of chrome, manganese, nickel etc.
- semi-manufacturing of chrome, manganese, nickel etc.
- production of mattes of nickel
- production of uranium metal from pitchblende or other ores
- smelting and refining of uranium

This class also includes:

- manufacture of wire of these metals by drawing
- production of aluminium oxide (alumina)
- production of aluminium wrapping foil
- manufacture of aluminium (tin) foil laminates made from aluminium (tin) foil as primary component
- manufacture of precious metal foil laminates

*This class excludes:*

- casting of non-ferrous metals, see 2432
- manufacture of precious metal jewellery, see 3211

## 243 Casting of metals

This group includes the manufacture of semi-finished products and various castings by a casting process.

*This group excludes:*

- manufacture of finished cast products such as:
  - ♦ boilers and radiators, see 2512
  - ♦ cast household items, see 2599

## 2431 Casting of iron and steel

This class includes the casting of iron and steel, i.e. the activities of iron and steel foundries.

This class includes:

- casting of semi-finished iron products
- casting of grey iron castings
- casting of spheroidal graphite iron castings
- casting of malleable cast-iron products
- casting of semi-finished steel products
- casting of steel castings
- manufacture of tubes, pipes and hollow profiles and of tube or pipe fittings of cast-iron
- manufacture of seamless tubes and pipes of steel by centrifugal casting
- manufacture of tube or pipe fittings of cast-steel

**2432 Casting of non-ferrous metals**

This class includes:

- casting of semi-finished products of aluminium, magnesium, titanium, zinc etc.
- casting of light metal castings
- casting of heavy metal castings
- casting of precious metal castings
- die-casting of non-ferrous metal castings

**25 Manufacture of fabricated metal products, except machinery and equipment**

This division includes the manufacture of “pure” metal products (such as parts, containers and structures), usually with a static, immovable function, as opposed to the following divisions 26-30, which cover the manufacture of combinations or assemblies of such metal products (sometimes with other materials) into more complex units that, unless they are purely electrical, electronic or optical, work with moving parts.

The manufacture of weapons and ammunition is also included in this division.

This division excludes specialized repair and maintenance activities (see group 331) and the specialized installation of manufactured goods produced in this division in buildings, such as central heating boilers (see 4322).

**251 Manufacture of structural metal products, tanks, reservoirs and steam generators**

This group includes the manufacture of structural metal products (such as metal frameworks or parts for construction), as well as metal container-type objects (such as reservoirs, tanks, central heating boilers) and steam generators.

**2511 Manufacture of structural metal products**

This class includes:

- manufacture of metal frameworks or skeletons for construction and parts thereof (towers, masts, trusses, bridges etc.)
- manufacture of industrial frameworks in metal (frameworks for blast furnaces, lifting and handling equipment etc.)
- manufacture of prefabricated buildings mainly of metal:
  - ◆ site huts, modular exhibition elements etc.
- manufacture of metal doors, windows and their frames, shutters and gates
- metal room partitions for floor attachment

*This class excludes:*

- *manufacture of parts for marine or power boilers, see 2513*
- *manufacture of assembled railway track fixtures, see 2599*
- *manufacture of sections of ships, see 3011*

**2512 Manufacture of tanks, reservoirs and containers of metal**

This class includes:

- manufacture of reservoirs, tanks and similar containers of metal, of types normally installed as fixtures for storage or manufacturing use
- manufacture of metal containers for compressed or liquefied gas
- manufacture of central heating boilers and radiators

*This class excludes:*

- *manufacture of metal casks, drums, cans, pails, boxes etc. of a kind normally used for carrying and packing of goods, see 2599*
- *manufacture of transport containers, see 2920*
- *manufacture of tanks (armored military vehicles), see 3040*

### **2513 Manufacture of steam generators, except central heating hot water boilers**

This class includes:

- manufacture of steam or other vapour generators
- manufacture of auxiliary plant for use with steam generators:
  - ◆ condensers, economizers, superheaters, steam collectors and accumulators
- manufacture of nuclear reactors, except isotope separators
- manufacture of parts for marine or power boilers

*This class excludes:*

- *manufacture of central heating hot-water boilers and radiators, see 2512*
- *manufacture of boiler-turbine sets, see 2811*
- *manufacture of isotope separators, see 2829*

### **252 Manufacture of weapons and ammunition**

See class 2520.

### **2520 Manufacture of weapons and ammunition**

This class includes:

- manufacture of heavy weapons (artillery, mobile guns, rocket launchers, torpedo tubes, heavy machine guns)
- manufacture of small arms (revolvers, shotguns, light machine guns)
- manufacture of air or gas guns and pistols
- manufacture of war ammunition

This class also includes:

- manufacture of hunting, sporting or protective firearms and ammunition
- manufacture of explosive devices such as bombs, mines and torpedoes

*This class excludes:*

- *manufacture of percussion caps, detonators or signalling flares, see 2029*
- *manufacture of cutlasses, swords, bayonets etc., see 2593*
- *manufacture of armoured vehicles for the transport of banknotes or valuables, see 2910*
- *manufacture of space vehicles, see 3030*
- *manufacture of tanks and other fighting vehicles, see 3040*

### **259 Manufacture of other fabricated metal products; metalworking service activities**

This group includes general activities for the treatment of metal, such as forging or pressing, plating, coating, engraving, boring, polishing, welding etc., which are typically carried out on a fee or contract basis. This group also includes the manufacture of a variety of metal products, such as cutlery; metal hand tools and general hardware; cans and buckets; nails, bolts and nuts; metal household articles; metal fixtures; ships propellers and anchors; assembled railway track fixtures etc. for a variety of household and industrial uses.

**2591 Forging, pressing, stamping and roll-forming of metal; powder metallurgy**

This class includes:

- forging, pressing, stamping and roll-forming of metal
- powder metallurgy: production of metal objects directly from metal powders by heat treatment (sintering) or under pressure

*This class excludes:*

- production of metal powder, see 2410, 2420

**2592 Treatment and coating of metals; machining**

This class includes:

- plating, anodizing etc. of metals
- heat treatment of metals
- deburring, sandblasting, tumbling, cleaning of metals
- colouring and engraving of metals
- non-metallic coating of metals:
  - ◆ plasticizing, enamelling, lacquering etc.
- hardening, buffing of metals
- boring, turning, milling, eroding, planing, lapping, broaching, levelling, sawing, grinding, sharpening, polishing, welding, splicing etc. of metalwork pieces
- cutting of and writing on metals by means of laser beams

*This class excludes:*

- activities of farriers, see 0162
- rolling precious metals onto base metals or other metals, see 2420

**2593 Manufacture of cutlery, hand tools and general hardware**

This class includes:

- manufacture of domestic cutlery such as knives, forks, spoons etc.
- manufacture of other articles of cutlery:
  - ◆ cleavers and choppers
  - ◆ razors and razor blades
  - ◆ scissors and hair clippers
- manufacture of knives and cutting blades for machines or for mechanical appliances
- manufacture of hand tools such as pliers, screwdrivers etc.
- manufacture of non-power-driven agricultural hand tools
- manufacture of saws and saw blades, including circular saw blades and chainsaw blades
- manufacture of interchangeable tools for hand tools, whether or not power-operated, or for machine tools: drills, punches, milling cutters etc.
- manufacture of press tools
- manufacture of blacksmiths' tools: forges, anvils etc.
- manufacture of moulding boxes and moulds (except ingot moulds)
- manufacture of vices, clamps
- manufacture of padlocks, locks, keys, hinges and the like, hardware for buildings, furniture, vehicles etc.
- manufacture of cutlasses, swords, bayonets etc.

*This class excludes:*

- *manufacture of hollowware (pots, kettles etc.), dinnerware (bowls, platters etc.) or flatware (plates, saucers etc.), see 2599*
- *manufacture of power-driven hand tools, see 2818*
- *manufacture of ingot moulds, see 2823*
- *manufacture of cutlery of precious metal, see 3211*

## **2599 Manufacture of other fabricated metal products n.e.c.**

This class includes:

- manufacture of pails, cans, drums, buckets, boxes
- manufacture of tins and cans for food products, collapsible tubes and boxes
- manufacture of metallic closures
- manufacture of metal cable, plaited bands and similar articles
- manufacture of uninsulated metal cable or insulated cable not capable of being used as a conductor of electricity
- manufacture of articles made of wire: barbed wire, wire fencing, grill, netting, cloth etc.
- manufacture of nails and pins
- manufacture of rivets, washers and similar non-threaded products
- manufacture of screw machine products
- manufacture of bolts, screws, nuts and similar threaded products
- manufacture of springs (except watch springs):
  - ◆ leaf springs, helical springs, torsion bar springs
  - ◆ leaves for springs
- manufacture of chain, except power transmission chain
- manufacture of metal household articles:
  - ◆ flatware: plates, saucers etc.
  - ◆ hollowware: pots, kettles etc.
  - ◆ dinnerware: bowls, platters etc.
  - ◆ saucepans, frying pans and other non-electrical utensils for use at the table or in the kitchen
  - ◆ small hand-operated kitchen appliances and accessories
  - ◆ metal scouring pads
- manufacture of baths, sinks, washbasins and similar articles
- manufacture of metal goods for office use, except furniture
- manufacture of safes, strongboxes, armoured doors etc.
- manufacture of various metal articles:
  - ◆ ship propellers and blades thereof
  - ◆ anchors
  - ◆ bells
  - ◆ assembled railway track fixtures
  - ◆ clasps, buckles, hooks
- manufacture of foil bags
- manufacture of permanent metallic magnets
- manufacture of metal vacuum jugs and bottles
- manufacture of metal signs (non-electrical)
- manufacture of metal badges and metal military insignia
- manufacture of metal hair curlers, metal umbrella handles and frames, combs

*This class excludes:*

- *manufacture of ceramic and ferrite magnets, see 2393*
- *manufacture of tanks and reservoirs, see 2512*
- *manufacture of swords, bayonets, see 2593*
- *manufacture of clock or watch springs, see 2652*
- *manufacture of wire and cable for electricity transmission, see 2732*
- *manufacture of power transmission chain, see 2814*
- *manufacture of shopping carts, see 3099*
- *manufacture of metal furniture, see 3100*
- *manufacture of sports goods, see 3230*
- *manufacture of games and toys, see 3240*

## **26 Manufacture of computer, electronic and optical products**

This division includes the manufacture of computers, computer peripherals, communications equipment, and similar electronic products, as well as the manufacture of components for such products. Production processes of this division are characterized by the design and use of integrated circuits and the application of highly specialized miniaturization technologies.

The division also contains the manufacture of consumer electronics, measuring, testing, navigating, and control equipment, irradiation, electromedical and electrotherapeutic equipment, optical instruments and equipment, and the manufacture of magnetic and optical media.

### **261 Manufacture of electronic components and boards**

See class 2610.

### **2610 Manufacture of electronic components and boards**

This class includes the manufacture of semiconductors and other components for electronic applications.

This class includes:

- manufacture of capacitors, electronic
- manufacture of resistors, electronic
- manufacture of microprocessors
- manufacture of bare printed circuit boards
- manufacture of electron tubes
- manufacture of electronic connectors
- manufacture of integrated circuits (analog, digital or hybrid)
- manufacture of diodes, transistors and related discrete devices
- manufacture of inductors (e.g. chokes, coils, transformers), electronic component type
- manufacture of electronic crystals and crystal assemblies
- manufacture of solenoids, switches and transducers for electronic applications
- manufacture of dice or wafers, semiconductor, finished or semi-finished
- manufacture of interface cards (e.g. sound, video, controllers, network, modems)
- manufacture of display components (plasma, polymer, LCD)
- manufacture of light emitting diodes (LED)
- loading of components onto printed circuit boards



This class also includes:

— manufacture of printer cables, monitor cables, USB cables, connectors etc.

*This class excludes:*

— *printing of smart cards, see 1811*

— *manufacture of modems (carrier equipment), see 2630*

— *manufacture of computer and television displays, see 2620, 2640*

— *manufacture of X-ray tubes and similar irradiation devices, see 2660*

— *manufacture of optical equipment and instruments, see 2670*

— *manufacture of similar devices for electrical applications, see division 27*

— *manufacture of lighting ballasts, see 2710*

— *manufacture of electrical relays, see 2710*

— *manufacture of electrical wiring devices, see 2733*

— *manufacture of complete equipment is classified elsewhere based on complete equipment classification*

## **262 Manufacture of computers and peripheral equipment**

See class 2620.

## **2620 Manufacture of computers and peripheral equipment**

This class includes the manufacture and/or assembly of electronic computers, such as mainframes, desktop computers, laptops and computer servers; and computer peripheral equipment, such as storage devices and input/output devices (printers, monitors, keyboards). Computers can be analog, digital, or hybrid. Digital computers, the most common type, are devices that do all of the following: (1) store the processing program or programs and the data immediately necessary for the execution of the program, (2) can be freely programmed in accordance with the requirements of the user, (3) perform arithmetical computations specified by the user and (4) execute, without human intervention, a processing program that requires the computer to modify its execution by logical decision during the processing run. Analog computers are capable of simulating mathematical models and comprise at least analog control and programming elements.

This class includes:

— manufacture of desktop computers

— manufacture of laptop computers

— manufacture of main frame computers

— manufacture of hand-held computers (e.g. PDA)

— manufacture of magnetic disk drives, flash drives and other storage devices

— manufacture of optical (e.g. CD-RW, CD-ROM, DVD-ROM, DVD-RW) disk drives

— manufacture of printers

— manufacture of monitors

— manufacture of keyboards

— manufacture of all types of mice, joysticks, and trackball accessories

— manufacture of dedicated computer terminals

— manufacture of computer servers

— manufacture of scanners, including bar code scanners

— manufacture of smart card readers

— manufacture of virtual reality helmets

— manufacture of computer projectors (video beamers)

This class also includes:

- manufacture of computer terminals, like automatic teller machines (ATM's), point-of-sale (POS) terminals, not mechanically operated
- manufacture of multi-function office equipment, such as fax-scanner-copier combinations

*This class excludes:*

- *reproduction of recorded media (computer media, sound, video, etc.), see 1820*
- *manufacture of electronic components and electronic assemblies used in computers and peripherals, see 2610*
- *manufacture of internal/external computer modems, see 2610*
- *manufacture of interface cards, modules and assemblies, see 2610*
- *manufacture of modems, carrier equipment, see 2630*
- *manufacture of digital communication switches, data communications equipment (e.g. bridges, routers, gateways), see 2630*
- *manufacture of consumer electronic devices, such as CD players and DVD players, see 2640*
- *manufacture of television monitors and displays, see 2640*
- *manufacture of video game consoles, see 2640*
- *manufacture of blank optical and magnetic media for use with computers or other devices, see 2680*

### **263 Manufacture of communication equipment**

See class 2630.

### **2630 Manufacture of communication equipment**

This class includes the manufacture of telephone and data communications equipment used to move signals electronically over wires or through the air such as radio and television broadcast and wireless communications equipment.

This class includes:

- manufacture of central office switching equipment
- manufacture of cordless telephones
- manufacture of private branch exchange (PBX) equipment
- manufacture of telephone and facsimile equipment, including telephone answering machines
- manufacture of data communications equipment, such as bridges, routers, and gateways
- manufacture of transmitting and receiving antenna
- manufacture of cable television equipment
- manufacture of pagers
- manufacture of cellular phones
- manufacture of mobile communication equipment
- manufacture of radio and television studio and broadcasting equipment, including television cameras
- manufacture of modems, carrier equipment
- manufacture of burglar and fire alarm systems, sending signals to a control station
- manufacture of radio and television transmitters
- manufacture of infrared devices (e.g. remote controls)

*This class excludes:*

- *manufacture of computers and computer peripheral equipment, see 2620*
- *manufacture of consumer audio and video equipment, see 2640*
- *manufacture of electronic components and subassemblies used in communications equipment, see 2610*
- *manufacture of internal/external computer modems (PC-type), see 2610*
- *manufacture of electronic scoreboards, see 2790*
- *manufacture of traffic lights, see 2790*

## **264 Manufacture of consumer electronics**

See class 2640.

## **2640 Manufacture of consumer electronics**

This class includes the manufacture of electronic audio and video equipment for home entertainment, motor vehicle, public address systems and musical instrument amplification.

This class includes:

- manufacture of video cassette recorders and duplicating equipment
- manufacture of televisions
- manufacture of television monitors and displays
- manufacture of audio recording and duplicating systems
- manufacture of stereo equipment
- manufacture of radio receivers
- manufacture of speaker systems
- manufacture of household-type video cameras
- manufacture of jukeboxes
- manufacture of amplifiers for musical instruments and public address systems
- manufacture of microphones
- manufacture of CD and DVD players
- manufacture of karaoke machines
- manufacture of headphones (e.g. radio, stereo, computer)
- manufacture of video game consoles

*This class excludes:*

- *reproduction of recorded media (computer media, sound, video, etc.), see 1820*
- *manufacture of computer peripheral devices and computer monitors, see 2620*
- *manufacture of telephone answering machines, see 2630*
- *manufacture of paging equipment, see 2630*
- *manufacture of remote control devices (radio and infrared), see 2630*
- *manufacture of broadcast studio equipment such as reproduction equipment, transmitting and receiving antennas, commercial video cameras, see 2630*
- *manufacture of electronic games with fixed (non-replaceable) software, see 3240*

## **265 Manufacture of measuring, testing, navigating and control equipment; watches and clocks**

This group includes the manufacture of measuring, testing, navigating and control equipment for various industrial and non-industrial purposes, including time-based measuring devices such as watches and clocks and related devices.

**2651 Manufacture of measuring, testing, navigating and control equipment**

This class includes the manufacture of search, detection, navigation, guidance, aeronautical and nautical systems and instruments; automatic controls and regulators for applications, such as heating, air-conditioning, refrigeration and appliances; instruments and devices for measuring, displaying, indicating, recording, transmitting and controlling industrial process variables, such as temperature, humidity, pressure, vacuum, combustion, flow, level, viscosity, density, acidity, concentration and rotation; totalizing (i.e. registering) fluid meters and counting devices; instruments for measuring and testing the characteristics of electricity and electrical signals; instruments and instrumentation systems for laboratory analysis of the chemical or physical composition or concentration of samples of solid, fluid, gaseous or composite material and other measuring and testing instruments and parts thereof.

The manufacture of non-electric measuring, testing, navigating and control equipment (except simple mechanical tools) is included here.

This class includes:

- manufacture of aircraft engine instruments
- manufacture of automotive emissions testing equipment
- manufacture of meteorological instruments
- manufacture of physical properties testing and inspection equipment
- manufacture of polygraph machines
- manufacture of instruments for measuring and testing electricity and electrical signals (including for telecommunications)
- manufacture of radiation detection and monitoring instruments
- manufacture of electron and proton microscopes
- manufacture of surveying instruments
- manufacture of thermometers liquid-in-glass and bimetal types (except medical)
- manufacture of humidistats
- manufacture of hydronic limit controls
- manufacture of flame and burner control
- manufacture of spectrometers
- manufacture of pneumatic gauges
- manufacture of consumption meters (e.g. water, gas)
- manufacture of flow meters and counting devices
- manufacture of tally counters
- manufacture of mine detectors, pulse (signal) generators; metal detectors
- manufacture of search, detection, navigation, aeronautical and nautical equipment, including sonobuoys
- manufacture of radar equipment
- manufacture of GPS devices
- manufacture of environmental controls and automatic controls for appliances
- manufacture of measuring and recording equipment (e.g. flight recorders)
- manufacture of motion detectors
- manufacture of laboratory analytical instruments (e.g. blood analysis equipment)
- manufacture of laboratory scales, balances, incubators, and miscellaneous laboratory apparatus for measuring, testing, etc.

*This class excludes:*

- *manufacture of telephone answering machines, see 2630*
- *manufacture of irradiation equipment, see 2660*

- *manufacture of optical measuring and checking devices and instruments (e.g. fire control equipment, photographic light meters, range finders), see 2670*
- *manufacture of optical positioning equipment, see 2670*
- *manufacture of dictating machines, see 2817*
- *manufacture of levels, tape measures and similar hand tools, machinists' precision tools, see 2819*
- *manufacture of medical thermometers, see 3250*
- *installation of industrial process control equipment, see 3320*

## 2652 Manufacture of watches and clocks

This class includes the manufacture of watches, clocks and timing mechanisms and parts thereof.

This class includes:

- manufacture of watches and clocks of all kinds, including instrument panel clocks
- manufacture of watch and clock cases, including cases of precious metals
- manufacture of time-recording equipment and equipment for measuring, recording and otherwise displaying intervals of time with a watch or clock movement or with synchronous motor, such as:
  - ◆ parking meters
  - ◆ time clocks
  - ◆ time/date stamps
  - ◆ process timers
- manufacture of time switches and other releases with a watch or clock movement or with synchronous motor:
  - ◆ time locks
- manufacture of components for clocks and watches:
  - ◆ movements of all kinds for watches and clocks
  - ◆ springs, jewels, dials, hands, plates, bridges and other parts

*This class excludes:*

- *manufacture of non-metal watch bands (textile, leather, plastic), see 1512*
- *manufacture of watch bands of precious metal, see 3211*
- *manufacture of watch bands of non-precious metal, see 3212*

## 266 Manufacture of irradiation, electromedical and electrotherapeutic equipment

See class 2660.

## 2660 Manufacture of irradiation, electromedical and electrotherapeutic equipment

This class includes:

- manufacture of irradiation apparatus and tubes (e.g. industrial, medical diagnostic, medical therapeutic, research, scientific):
  - ◆ beta-, gamma, X-ray or other radiation equipment
- manufacture of CT scanners
- manufacture of PET scanners
- manufacture of magnetic resonance imaging (MRI) equipment
- manufacture of medical ultrasound equipment
- manufacture of electrocardiographs

- manufacture of electromedical endoscopic equipment
- manufacture of medical laser equipment
- manufacture of pacemakers
- manufacture of hearing aids

This class also includes:

- manufacture of food and milk irradiation equipment

*This class excludes:*

- *manufacture of laboratory analytical instruments (e.g. blood analysis equipment), see 2651*
- *manufacture of tanning beds, see 2790*

## **267 Manufacture of optical instruments and photographic equipment**

See class 2670.

### **2670 Manufacture of optical instruments and photographic equipment**

This class includes the manufacture of optical instruments and lenses, such as binoculars, microscopes (except electron, proton), telescopes, prisms and lenses (except ophthalmic); the coating or polishing of lenses (except ophthalmic); the mounting of lenses (except ophthalmic) and the manufacture of photographic equipment such as cameras and light meters.

This class includes:

- manufacture of lenses and prisms
- manufacture of optical microscopes, binoculars and telescopes
- manufacture of optical mirrors
- manufacture of optical magnifying instruments
- manufacture of optical machinist's precision tools
- manufacture of optical comparators
- manufacture of optical gun sighting equipment
- manufacture of optical positioning equipment
- manufacture of optical measuring and checking devices and instruments (e.g. fire control equipment, photographic light meters, range finders)
- manufacture of film cameras and digital cameras
- manufacture of motion picture and slide projectors
- manufacture of overhead transparency projectors
- manufacture of laser assemblies

This class also includes:

- coating, polishing and mounting of lenses

*This class excludes:*

- *manufacture of computer projectors, see 2620*
- *manufacture of commercial TV and video cameras, see 2630*
- *manufacture of household-type video cameras, see 2640*
- *manufacture of electron and proton microscopes, see 2651*
- *manufacture of complete equipment using laser components, see manufacturing class by type of machinery (e.g. medical laser equipment, see 2660)*
- *manufacture of photocopy machinery, see 2817*
- *manufacture of ophthalmic goods, see 3250*

**268 Manufacture of magnetic and optical media**

See class 2680.

**2680 Manufacture of magnetic and optical media**

This class includes the manufacture of magnetic and optical recording media.

This class includes:

- manufacture of blank magnetic audio and video tapes
- manufacture of blank magnetic audio and video cassettes
- manufacture of blank diskettes
- manufacture of blank optical discs
- manufacture of hard drive media

*This class excludes:*

- reproduction of recorded media (computer media, sound, video, etc.), see 1820

**27 Manufacture of electrical equipment**

This division includes the manufacture of products that generate, distribute and use electrical power. Also included is the manufacture of electrical lighting, signalling equipment and electric household appliances.

This division excludes the manufacture of electronic products (see division 26).

**271 Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus**

See class 2710.

**2710 Manufacture of electric motors, generators, transformers and electricity distribution and control apparatus**

This class includes the manufacture of power, distribution and specialty transformers; electric motors, generators and motor generator sets; switchgear and switchboard apparatus; relays and industrial controls. The electrical equipment manufactured in this class is for distribution level voltages.

This class includes:

- manufacture of distribution transformers, electric
- manufacture of arc-welding transformers
- manufacture of fluorescent ballasts (i.e. transformers)
- manufacture of substation transformers for electric power distribution
- manufacture of transmission and distribution voltage regulators
- manufacture of electric motors (except internal combustion engine starting motors)
- manufacture of power generators (except battery charging alternators for internal combustion engines)
- manufacture of motor generator sets (except turbine generator set units)
- manufacture of prime mover generator sets
- rewinding of armatures on a factory basis
- manufacture of power circuit breakers
- manufacture of surge suppressors (for distribution level voltage)
- manufacture of control panels for electric power distribution

- manufacture of electrical relays
- manufacture of duct for electrical switchboard apparatus
- manufacture of electric fuses
- manufacture of power switching equipment
- manufacture of electric power switches (except pushbutton, snap, solenoid, tumbler)

*This class excludes:*

- *manufacture of electronic component-type transformers and switches, see 2610*
- *manufacture of environmental controls and industrial process control instruments, see 2651*
- *manufacture of switches for electrical circuits, such as pushbutton and snap switches, see 2733*
- *manufacture of electric welding and soldering equipment, see 2790*
- *manufacture of solid state inverters, rectifiers and converters, see 2790*
- *manufacture of turbine-generator sets, see 2811*
- *manufacture of starting motors and generators for internal combustion engines, see 2930*

## **272 Manufacture of batteries and accumulators**

See class 2720.

## **2720 Manufacture of batteries and accumulators**

This class includes the manufacture of non-rechargeable and rechargeable batteries.

This class includes:

- manufacture of primary cells and primary batteries
  - ◆ cells containing manganese dioxide, mercuric dioxide, silver oxide etc.
- manufacture of electric accumulators, including parts thereof:
  - ◆ separators, containers, covers
- manufacture of lead acid batteries
- manufacture of NiCad batteries
- manufacture of NiMH batteries
- manufacture of lithium batteries
- manufacture of dry cell batteries
- manufacture of wet cell batteries

## **273 Manufacture of wiring and wiring devices**

This group includes the manufacture of current-carrying wiring devices and non current-carrying wiring devices for wiring electrical circuits regardless of material. This group also includes the insulating of wire and the manufacture of fiber optic cables.

## **2731 Manufacture of fibre optic cables**

This class includes:

- manufacture of fiber optic cable for data transmission or live transmission of images

*This class excludes:*

- *manufacture of glass fibres or strand, see 2310*
- *manufacture of optical cable sets or assemblies with connectors or other attachments, see depending on application, e.g. 2610*



**2732 Manufacture of other electronic and electric wires and cables**

This class includes:

— manufacture of insulated wire and cable, made of steel, copper, aluminium

*This class excludes:*

— *manufacture (drawing) of wire, see 2410, 2420*

— *manufacture of computer cables, printer cables, USB cables and similar cable sets or assemblies, see 2610*

— *manufacture of extension cords, see 2790*

— *manufacture of cable sets, wiring harnesses and similar cable sets or assemblies for automotive applications, see 2930*

**2733 Manufacture of wiring devices**

This class includes the manufacture of current-carrying and non current-carrying wiring devices for electrical circuits regardless of material.

This class includes:

— manufacture of bus bars, electrical conductors (except switchgear-type)

— manufacture of GFCI (ground fault circuit interrupters)

— manufacture of lamp holders

— manufacture of lightning arrestors and coils

— manufacture of switches for electrical wiring (e.g. pressure, pushbutton, snap, tumbler switches)

— manufacture of electrical outlets and sockets

— manufacture of boxes for electrical wiring (e.g. junction, outlet, switch boxes)

— manufacture of electrical conduit and fitting

— manufacture of transmission pole and line hardware

— manufacture of plastic non current-carrying wiring devices including plastic junction boxes, face plates, and similar, plastic pole line fittings

*This class excludes:*

— *manufacture of ceramic insulators, see 2393*

— *manufacture of electronic component-type connectors, sockets and switches, see 2610*

**274 Manufacture of electric lighting equipment**

See class 2740.

**2740 Manufacture of electric lighting equipment**

This class includes the manufacture of electric light bulbs and tubes and parts and components thereof (except glass blanks for electric light bulbs), electric lighting fixtures and lighting fixture components (except current-carrying wiring devices).

This class includes:

— manufacture of discharge, incandescent, fluorescent, ultra-violet, infra-red etc. lamps, fixtures and bulbs

— manufacture of ceiling lighting fixtures

— manufacture of chandeliers

— manufacture of table lamps (i.e. lighting fixture)

- manufacture of Christmas tree lighting sets
- manufacture of electric fireplace logs
- manufacture of flashlights
- manufacture of electric insect lamps
- manufacture of lanterns (e.g. carbide, electric, gas, gasoline, kerosene)
- manufacture of spotlights
- manufacture of street lighting fixtures (except traffic signals)
- manufacture of lighting equipment for transportation equipment (e.g. for motor vehicles, aircraft, boats)

This class also includes:

- manufacture of non-electrical lighting equipment

*This class excludes:*

- *manufacture of glassware and glass parts for lighting fixtures, see 2310*
- *manufacture of current-carrying wiring devices for lighting fixtures, see 2733*
- *manufacture of ceiling fans or bath fans with integrated lighting fixtures, see 2750*
- *manufacture of electrical signalling equipment such as traffic lights and pedestrian signalling equipment, see 2790*

## **275 Manufacture of domestic appliances**

See class 2750.

## **2750 Manufacture of domestic appliances**

This class includes the manufacture of small electric appliances and electric housewares, household-type fans, household-type vacuum cleaners, electric household-type floor care machines, household-type cooking appliances, household-type laundry equipment, household-type refrigerators, upright and chest freezers and other electrical and non-electrical household appliances, such as dishwashers, water heaters and garbage disposal units. This class includes the manufacture of appliances with electric, gas or other fuel sources.

This class includes:

- manufacture of domestic electric appliances:
  - ◆ refrigerators
  - ◆ freezers
  - ◆ dishwashers
  - ◆ washing and drying machines
  - ◆ vacuum cleaners
  - ◆ floor polishers
  - ◆ waste disposers
  - ◆ grinders, blenders, juice squeezers
  - ◆ tin openers
  - ◆ electric shavers, electric toothbrushes and other electric personal care device
  - ◆ knife sharpeners
  - ◆ ventilating or recycling hoods
- manufacture of domestic electrothermic appliances:
  - ◆ electric water heaters
  - ◆ electric blankets

- ◆ electric dryers, combs, brushes, curlers
  - ◆ electric smoothing irons
  - ◆ space heaters and household-type fans, portable
  - ◆ electric ovens
  - ◆ microwave ovens
  - ◆ cookers, hotplates
  - ◆ toasters
  - ◆ coffee or tea makers
  - ◆ fry pans, roasters, grills, hoods
  - ◆ electric heating resistors etc.
- manufacture of domestic non-electric cooking and heating equipment:
- ◆ non-electric space heaters, cooking ranges, grates, stoves, water heaters, cooking appliances, plate warmers

*This class excludes:*

- *manufacture of commercial and industrial refrigerators and freezers, room air-conditioners, attic fans, permanent mount space heaters and commercial ventilation and exhaust fans, commercial-type cooking equipment; commercial-type laundry, dry-cleaning and pressing equipment; commercial, industrial and institutional vacuum cleaners, see division 28*
- *manufacture of household-type sewing machines, see 2826*
- *installation of central vacuum cleaning systems, 4329*

## **279 Manufacture of other electrical equipment**

See class 2790.

## **2790 Manufacture of other electrical equipment**

This class includes the manufacture of miscellaneous electrical equipment other than motors, generators and transformers, batteries and accumulators, wires and wiring devices, lighting equipment or domestic appliances.

This class includes:

- manufacture of battery chargers, solid-state
- manufacture of door opening and closing devices, electrical
- manufacture of electric bells
- manufacture of ultrasonic cleaning machines (except laboratory and dental)
- manufacture of tanning beds
- manufacture of solid state inverters, rectifying apparatus, fuel cells, regulated and unregulated power supplies
- manufacture of uninterruptible power supplies (UPS)
- manufacture of surge suppressors (except for distribution level voltage)
- manufacture of appliance cords, extension cords, and other electrical cord sets with insulated wire and connectors
- manufacture of carbon and graphite electrodes, contacts, and other electrical carbon and graphite products
- manufacture of particle accelerators
- manufacture of electrical capacitors, resistors, condensers and similar components
- manufacture of electromagnets
- manufacture of sirens

- manufacture of electronic scoreboards
- manufacture of electrical signs
- manufacture of electrical signalling equipment such as traffic lights and pedestrian signalling equipment
- manufacture of electrical insulators (except glass or porcelain)
- manufacture of electrical welding and soldering equipment, including hand-held soldering irons

*This class excludes:*

- *manufacture of non-electrical signs, see class according to material (plastic signs 2220, metal signs 2599)*
- *manufacture of porcelain electrical insulators, see 2393*
- *manufacture of carbon and graphite fibers and products (except electrodes and electrical applications), see 2399*
- *manufacture of electronic component-type rectifiers, voltage regulating integrated circuits, power converting integrated circuits, electronic capacitors, electronic resistors and similar devices, see 2610*
- *manufacture of transformers, motors, generators, switchgear, relays and industrial controls, see 2710*
- *manufacture of batteries, see 2720*
- *manufacture of communication and energy wire, current-carrying and non current-carrying wiring devices, see 2733*
- *manufacture of lighting equipment, see 2740*
- *manufacture of household-type appliances, see 2750*
- *manufacture of non-electrical welding and soldering equipment, see 2819*
- *manufacture of motor vehicle electrical equipment, such as generators, alternators, spark plugs, ignition wiring harnesses, power window and door systems, voltage regulators, see 2930*
- *manufacture of mechanical and electromechanical signalling, safety and traffic control equipment for railways, tramways, inland waterways, roads, parking facilities, airfields, see 3020*

## **28 Manufacture of machinery and equipment n.e.c.**

This division includes the manufacture of machinery and equipment that act independently on materials either mechanically or thermally or perform operations on materials (such as handling, spraying, weighing or packing), including their mechanical components that produce and apply force, and any specially manufactured primary parts. This includes the manufacture of fixed and mobile or hand-held devices, regardless of whether they are designed for industrial, building and civil engineering, agricultural or home use. The manufacture of special equipment for passenger or freight transport within demarcated premises also belongs within this division.

This division distinguishes between the manufacture of special-purpose machinery, i.e. machinery for exclusive use in an ISIC industry or a small cluster of ISIC industries, and general-purpose machinery, i.e. machinery that is being used in a wide range of ISIC industries.

This division also includes the manufacture of other special-purpose machinery, not covered elsewhere in the classification, whether or not used in a manufacturing process, such as fairground amusement equipment, automatic bowling alley equipment, etc.

This division excludes the manufacture of metal products for general use (division 25), associated control devices, computer equipment, measurement and testing equipment, electricity distribution and control apparatus (divisions 26 and 27) and general-purpose motor vehicles (divisions 29 and 30).

**281 Manufacture of general-purpose machinery**

This group includes the manufacture of general-purpose machinery, i.e. machinery that is being used in a wide range of ISIC industries. This can include the manufacture of components used in the manufacture of a variety of other machinery or the manufacture of machinery that support the operation of other businesses.

**2811 Manufacture of engines and turbines, except aircraft, vehicle and cycle engines**

This class includes:

- manufacture of internal combustion piston engines, except motor vehicle, aircraft and cycle propulsion engines:
  - ◆ marine engines
  - ◆ railway engines
- manufacture of pistons, piston rings, carburetors and such for all internal combustion engines, diesel engines etc.
- manufacture of inlet and exhaust valves of internal combustion engines
- manufacture of turbines and parts thereof:
  - ◆ steam turbines and other vapour turbines
  - ◆ hydraulic turbines, waterwheels and regulators thereof
  - ◆ wind turbines
  - ◆ gas turbines, except turbojets or turbo propellers for aircraft propulsion
- manufacture of boiler-turbine sets
- manufacture of turbine-generator sets

*This class excludes:*

- *manufacture of electric generators (except turbine generator sets), see 2710*
- *manufacture of prime mover generator sets (except turbine generator sets), see 2710*
- *manufacture of electrical equipment and components of internal combustion engines, see 2790*
- *manufacture of motor vehicle, aircraft or cycle propulsion engines, see 2910, 3030, 3091*
- *manufacture of turbojets and turbo propellers, see 3030*

**2812 Manufacture of fluid power equipment**

This class includes:

- manufacture of hydraulic and pneumatic components (including hydraulic pumps, hydraulic motors, hydraulic and pneumatic cylinders, hydraulic and pneumatic valves, hydraulic and pneumatic hose and fittings)
- manufacture of air preparation equipment for use in pneumatic systems
- manufacture of fluid power systems
- manufacture of hydraulic transmission equipment

*This class excludes:*

- *manufacture of compressors, see 2813*
- *manufacture of pumps and valves for non-fluid power applications, see 2813*
- *manufacture of mechanical transmission equipment, see 2814*

**2813 Manufacture of other pumps, compressors, taps and valves**

This class includes:

- manufacture of air or vacuum pumps, air or other gas compressors

- manufacture of pumps for liquids whether or not fitted with a measuring device
- manufacture of pumps designed for fitting to internal combustion engines: oil, water and fuel pumps for motor vehicles etc.

This class also includes:

- manufacture of industrial taps and valves, including regulating valves and intake taps
- manufacture of sanitary taps and valves
- manufacture of heating taps and valves
- manufacture of hand pumps

*This class excludes:*

- *manufacture of valves of unhardened vulcanized rubber, glass or of ceramic materials, see 2219, 2310 or 2393*
- *manufacture of hydraulic transmission equipment, see 2812*
- *manufacture of inlet and exhaust valves of internal combustion engines, see 2811*

#### **2814 Manufacture of bearings, gears, gearing and driving elements**

This class includes:

- manufacture of ball and roller bearings and parts thereof
- manufacture of mechanical power transmission equipment:
  - ◆ transmission shafts and cranks: camshafts, crankshafts, cranks etc.
  - ◆ bearing housings and plain shaft bearings
- manufacture of gears, gearing and gear boxes and other speed changers
- manufacture of clutches and shaft couplings
- manufacture of flywheels and pulleys
- manufacture of articulated link chain
- manufacture of power transmission chain

*This class excludes:*

- *manufacture of other chain, see 2599*
- *manufacture of (electromagnetic) clutches, see 2930*
- *manufacture of sub-assemblies of power transmission equipment identifiable as parts of vehicles or aircraft, see divisions 29 and 30*

#### **2815 Manufacture of ovens, furnaces and furnace burners**

This class includes:

- manufacture of electrical and other industrial and laboratory furnaces and ovens, including incinerators
- manufacture of burners
- manufacture of permanent mount electric space heaters, electric swimming pool heaters
- manufacture of permanent mount non-electric household heating equipment, such as solar heating, steam heating, oil heat and similar furnaces and heating equipment
- manufacture of electric household-type furnaces (electric forced air furnaces, heat pumps, etc.), non-electric household forced air furnaces

This class also includes:

- manufacture of mechanical stokers, grates, ash dischargers etc.

*This class excludes:*

- *manufacture of household ovens, see 2750*
- *manufacture of agricultural dryers, see 2825*
- *manufacture of bakery ovens, see 2825*
- *manufacture of dryers for wood, paper pulp, paper or paperboard, see 2829*
- *manufacture of medical, surgical or laboratory sterilizers, see 3250*
- *manufacture of (dental) laboratory furnaces, see 3250*

## **2816 Manufacture of lifting and handling equipment**

This class includes:

- manufacture of hand-operated or power-driven lifting, handling, loading or unloading machinery:
  - ♦ pulley tackle and hoists, winches, capstans and jacks
  - ♦ derricks, cranes, mobile lifting frames, straddle carriers etc.
  - ♦ works trucks, whether or not fitted with lifting or handling equipment, whether or not self-propelled, of the type used in factories (including hand trucks and wheelbarrows)
  - ♦ mechanical manipulators and industrial robots specifically designed for lifting, handling, loading or unloading
- manufacture of conveyors, telfers (téléphériques) etc.
- manufacture of lifts, escalators and moving walkways
- manufacture of parts specialized for lifting and handling equipment

*This class excludes:*

- *manufacture of continuous-action elevators and conveyors for underground use, see 2824*
- *manufacture of mechanical shovels, excavators and shovel loaders, see 2824*
- *manufacture of industrial robots for multiple uses, see 2829*
- *manufacture of crane-lorries, floating cranes, railway cranes, see 2910, 3011, 3020*
- *installation of lifts and elevators, see 4329*

## **2817 Manufacture of office machinery and equipment (except computers and peripheral equipment)**

This class includes:

- manufacture of calculating machines
- manufacture of adding machines, cash registers
- manufacture of calculators, electronic or not
- manufacture of postage meters, mail handling machines (envelope stuffing, sealing and addressing machinery; opening, sorting, scanning), collating machinery
- manufacture of typewriters
- manufacture of stenography machines
- manufacture of office-type binding equipment (i.e. plastic or tape binding)
- manufacture of cheque writing machines
- manufacture of coin counting and coin wrapping machinery
- manufacture of pencil sharpeners
- manufacture of staplers and staple removers
- manufacture of voting machines
- manufacture of tape dispensers
- manufacture of hole punches

- manufacture of cash registers, mechanically operated
- manufacture of photocopy machines
- manufacture of toner cartridges
- manufacture of blackboards; white boards and marker boards
- manufacture of dictating machines

*This class excludes:*

- *manufacture of computers and peripheral equipment, see 2620*

### **2818 Manufacture of power-driven hand tools**

This class includes:

- manufacture of hand tools, with self-contained electric or non-electric motor or pneumatic drive, such as:
  - ◆ circular or reciprocating saws
  - ◆ drills and hammer drills
  - ◆ hand held power sanders
  - ◆ pneumatic nailers
  - ◆ buffers
  - ◆ routers
  - ◆ grinders
  - ◆ staplers
  - ◆ pneumatic rivet guns
  - ◆ planers
  - ◆ shears and nibblers
  - ◆ impact wrenches
  - ◆ powder actuated nailers

*This class excludes:*

- *manufacture of electrical hand-held soldering and welding equipment, see 2790*

### **2819 Manufacture of other general-purpose machinery**

This class includes:

- manufacture of industrial refrigerating or freezing equipment, including assemblies of major components
- manufacture of air-conditioning machines, including for motor vehicles
- manufacture of non-domestic fans
- manufacture of weighing machinery (other than sensitive laboratory balances):
  - ◆ household and shop scales, platform scales, scales for continuous weighing, weigh-bridges, weights etc.
- manufacture of filtering or purifying machinery and apparatus for liquids
- manufacture of equipment for projecting, dispersing or spraying liquids or powders:
  - ◆ spray guns, fire extinguishers, sandblasting machines, steam cleaning machines etc.
- manufacture of packing and wrapping machinery:
  - ◆ filling, closing, sealing, capsuling or labeling machines etc.
- manufacture of machinery for cleaning or drying bottles and for aerating beverages
- manufacture of distilling or rectifying plant for petroleum refineries, chemical industries, beverage industries etc.
- manufacture of heat exchangers
- manufacture of machinery for liquefying air or gas



- manufacture of gas generators
- manufacture of calendering or other rolling machines and cylinders thereof (except for metal and glass)
- manufacture of centrifuges (except cream separators and clothes dryers)
- manufacture of gaskets and similar joints made of a combination of materials or layers of the same material
- manufacture of automatic goods vending machines
- manufacture of parts for general-purpose machinery
- manufacture of attic ventilation fans (gable fans, roof ventilators, etc.)
- manufacture of levels, tape measures and similar hand tools, machinists' precision tools (except optical)
- manufacture of non-electrical welding and soldering equipment

*This class excludes:*

- *manufacture of sensitive (laboratory-type) balances, see 2651*
- *manufacture of domestic refrigerating or freezing equipment, see 2750*
- *manufacture of domestic fans, see 2750*
- *manufacture of electrical welding and soldering equipment, see 2790*
- *manufacture of agricultural spraying machinery, see 2821*
- *manufacture of metal or glass rolling machinery and cylinders thereof, see 2823, 2829*
- *manufacture of agricultural dryers, see 2825*
- *manufacture of machinery for filtering or purifying food, see 2825*
- *manufacture of cream separators, see 2825*
- *manufacture of commercial clothes dryers, see 2826*
- *manufacture of textile printing machinery, see 2826*

## **282 Manufacture of special-purpose machinery**

This group includes the manufacture of special-purpose machinery, i.e. machinery for exclusive use in an ISIC industry or a small cluster of ISIC industries. While most of these are used in other manufacturing processes, such as food manufacturing or textile manufacturing, this group also includes the manufacture of machinery specific for other (non-manufacturing industries), such as aircraft launching gear or amusement park equipment.

### **2821 Manufacture of agricultural and forestry machinery**

This class includes:

- manufacture of tractors used in agriculture and forestry
- manufacture of walking (pedestrian-controlled) tractors
- manufacture of mowers, including lawnmowers
- manufacture of agricultural self-loading or self-unloading trailers or semi-trailers
- manufacture of agricultural machinery for soil preparation, planting or fertilizing:
  - ◆ ploughs, manure spreaders, seeders, harrows etc.
- manufacture of harvesting or threshing machinery:
  - ◆ harvesters, threshers, sorters etc.
- manufacture of milking machines
- manufacture of spraying machinery for agricultural use
- manufacture of diverse agricultural machinery:
  - ◆ poultry-keeping machinery, bee-keeping machinery, equipment for preparing fodder etc.
  - ◆ machines for cleaning, sorting or grading eggs, fruit etc.

*This class excludes:*

- *manufacture of non-power-driven agricultural hand tools, see 2593*
- *manufacture of conveyors for farm use, see 2816*
- *manufacture of power-driven hand tools, see 2818*
- *manufacture of cream separators, see 2825*
- *manufacture of machinery to clean, sort or grade seed, grain or dried leguminous vegetables, see 2825*
- *manufacture of road tractors for semi-trailers, see 2910*
- *manufacture of road trailers or semi-trailers, see 2920*

## **2822 Manufacture of metal-forming machinery and machine tools**

This class includes:

- *manufacture of machine tools for working metals and other materials (wood, bone, stone, hard rubber, hard plastics, cold glass etc.), including those using a laser beam, ultrasonic waves, plasma arc, magnetic pulse etc.*
- *manufacture of machine tools for turning, drilling, milling, shaping, planing, boring, grinding etc.*
- *manufacture of stamping or pressing machine tools*
- *manufacture of punch presses, hydraulic presses, hydraulic brakes, drop hammers, forging machines etc.*
- *manufacture of draw-benches, thread rollers or machines for working wires*
- *manufacture of stationary machines for nailing, stapling, glueing or otherwise assembling wood, cork, bone, hard rubber or plastics etc.*
- *manufacture of stationary rotary or rotary percussion drills, filing machines, riveters, sheet metal cutters etc.*
- *manufacture of presses for the manufacture of particle board and the like*
- *manufacture of electroplating machinery*

This class also includes:

- *manufacture of parts and accessories for the machine tools listed above: work holders, dividing heads and other special attachments for machine tools*

*This class excludes:*

- *manufacture of interchangeable tools for hand tools or machine tools (drills, punches, dies, taps, milling cutters, turning tools, saw blades, cutting knives etc.), see 2593*
- *manufacture of electric hand held soldering irons and soldering guns, see 2790*
- *manufacture of power-driven hand tools, see 2818*
- *manufacture of machinery used in metal mills or foundries, see 2823*
- *manufacture of machinery for mining and quarrying, see 2824*

## **2823 Manufacture of machinery for metallurgy**

This class includes:

- *manufacture of machines and equipment for handling hot metals:*
  - ◆ *converters, ingot moulds, ladles, casting machines*
- *manufacture of metal-rolling mills and rolls for such mills*

*This class excludes:*

- *manufacture of draw-benches, see 2822*
- *manufacture of moulding boxes and moulds (except ingot moulds), see 2593*
- *manufacture of machines for forming foundry moulds, see 2829*

**2824 Manufacture of machinery for mining, quarrying and construction**

This class includes:

- manufacture of continuous-action elevators and conveyors for underground use
- manufacture of boring, cutting, sinking and tunnelling machinery (whether or not for underground use)
- manufacture of machinery for treating minerals by screening, sorting, separating, washing, crushing etc.
- manufacture of concrete and mortar mixers
- manufacture of earth-moving machinery:
  - ◆ bulldozers, angle-dozers, graders, scrapers, levellers, mechanical shovels, shovel loaders etc.
- manufacture of pile drivers and pile extractors, mortar spreaders, bitumen spreaders, concrete surfacing machinery etc.
- manufacture of tracklaying tractors and tractors used in construction or mining
- manufacture of bulldozer and angle-dozer blades
- manufacture of off-road dumping trucks

*This class excludes:*

- *manufacture of lifting and handling equipment, see 2816*
- *manufacture of other tractors, see 2821, 2910*
- *manufacture of machine tools for working stone, including machines for splitting or clearing stone, see 2822*
- *manufacture of concrete-mixer lorries, see 2910*
- *manufacture of mining locomotives and mining rail cars, see 3020*

**2825 Manufacture of machinery for food, beverage and tobacco processing**

This class includes:

- manufacture of agricultural dryers
- manufacture of machinery for the dairy industry:
  - ◆ cream separators
  - ◆ milk processing machinery (e.g. homogenizers)
  - ◆ milk converting machinery (e.g. butter chums, butter workers and moulding machines)
  - ◆ cheese-making machines (e.g. homogenizers, moulders, presses) etc.
- manufacture of machinery for the grain milling industry:
  - ◆ machinery to clean, sort or grade seeds, grain or dried leguminous vegetables (winnowers, sieving belts, separators, grain brushing machines etc.)
  - ◆ machinery to produce flour and meal etc. (grinding mills, feeders, sifters, bran cleaners, blenders, rice hullers, pea splitters)
- manufacture of presses, crushers etc. used to make wine, cider, fruit juices etc.
- manufacture of machinery for the bakery industry or for making macaroni, spaghetti or similar products:
  - ◆ bakery ovens, dough mixers, dough-dividers, moulders, slicers, cake depositing machines etc.
- manufacture of machines and equipment to process diverse foods:
  - ◆ machinery to make confectionery, cocoa or chocolate; to manufacture sugar; for breweries; to process meat or poultry; to prepare fruit, nuts or vegetables; to prepare fish, shellfish or other seafood
  - ◆ machinery for filtering and purifying
  - ◆ other machinery for the industrial preparation or manufacture of food or drink

- manufacture of machinery for the extraction or preparation of animal or vegetable fats or oils
- manufacture of machinery for the preparation of tobacco and for the making of cigarettes or cigars, or for pipe or chewing tobacco or snuff
- manufacture of machinery for the preparation of food in hotels and restaurants

*This class excludes:*

- *manufacture of food and milk irradiation equipment, see 2660*
- *manufacture of packing, wrapping and weighing machinery, see 2819*
- *manufacture of cleaning, sorting or grading machinery for eggs, fruit or other crops (except seeds, grains and dried leguminous vegetables), see 2821*

## **2826 Manufacture of machinery for textile, apparel and leather production**

This class includes:

- manufacture of textile machinery:
  - ◆ machines for preparing, producing, extruding, drawing, texturing or cutting man-made textile fibres, materials or yarns
  - ◆ machines for preparing textile fibres: cotton gins, bale breakers, garnettors, cotton spreaders, wool scourers, wool carbonizers, combs, carders, roving frames etc.
  - ◆ spinning machines
  - ◆ machines for preparing textile yarns: reelers, warpers and related machines
  - ◆ weaving machines (looms), including hand looms
  - ◆ knitting machines
  - ◆ machines for making knotted net, tulle, lace, braid etc.
- manufacture of auxiliary machines or equipment for textile machinery:
  - ◆ dobbies, jacquards, automatic stop motions, shuttle changing mechanisms, spindles and spindle flyers etc.
- manufacture of textile printing machinery
- manufacture of machinery for fabric processing:
  - ◆ machinery for washing, bleaching, dyeing, dressing, finishing, coating or impregnating textile fabrics
  - ◆ manufacture of machines for reeling, unreeling, folding, cutting or pinking textile fabrics
- manufacture of laundry machinery:
  - ◆ ironing machines, including fusing presses
  - ◆ commercial washing and drying machines
  - ◆ dry-cleaning machines
- manufacture of sewing machines, sewing machine heads and sewing machine needles (whether or not for household use)
- manufacture of machines for producing or finishing felt or non-wovens
- manufacture of leather machines:
  - ◆ machinery for preparing, tanning or working hides, skins or leather
  - ◆ machinery for making or repairing footwear or other articles of hides, skins, leather or fur skins

*This class excludes:*

- *manufacture of paper or paperboard cards for use on jacquard machines, see 1709*
- *manufacture of domestic washing and drying machines, see 2750*
- *manufacture of calendaring machines, see 2819*
- *manufacture of machines used in bookbinding, see 2829*

**2829 Manufacture of other special-purpose machinery**

This class includes the manufacture of special-purpose machinery not elsewhere classified.

This class includes:

- manufacture of machinery for making paper pulp
- manufacture of paper and paperboard making machinery
- manufacture of dryers for wood, paper pulp, paper or paperboard
- manufacture of machinery producing articles of paper or paperboard
- manufacture of machinery for working soft rubber or plastics or for the manufacture of products of these materials:
  - ♦ extruders, moulders, pneumatic tyre making or retreading machines and other machines for making a specific rubber or plastic product
- manufacture of printing and bookbinding machines and machines for activities supporting printing on a variety of materials
- manufacture of machinery for producing tiles, bricks, shaped ceramic pastes, pipes, graphite electrodes, blackboard chalk, foundry moulds etc.
- manufacture of semi-conductor manufacturing machinery
- manufacture of industrial robots performing multiple tasks for special purposes
- manufacture of diverse special-purpose machinery and equipment:
  - ♦ machines to assemble electric or electronic lamps, tubes (valves) or bulbs
  - ♦ machines for production or hot-working of glass or glassware, glass fibre or yarn
  - ♦ machinery or apparatus for isotopic separation
- manufacture of tire alignment and balancing equipment; balancing equipment (except wheel balancing)
- manufacture of central greasing systems
- manufacture of aircraft launching gear, aircraft carrier catapults and related equipment
- manufacture of automatic bowling alley equipment (e.g. pin-setters)
- manufacture of roundabouts, swings, shooting galleries and other fairground amusements

*This class excludes:*

- *manufacture of household appliances, see 2750*
- *manufacture of photocopy machines etc., see 2817*
- *manufacture of machinery or equipment to work hard rubber, hard plastics or cold glass, see 2822*
- *manufacture of ingot moulds, see 2823*
- *manufacture of textile printing machinery, see 2826*

**29 Manufacture of motor vehicles, trailers and semi-trailers**

This division includes the manufacture of motor vehicles for transporting passengers or freight. The manufacture of various parts and accessories, as well as the manufacture of trailers and semi-trailers, is included here.

The maintenance and repair of vehicles produced in this division are classified in 4520.

**291 Manufacture of motor vehicles**

See class 2910.

**2910 Manufacture of motor vehicles**

This class includes:

- manufacture of passenger cars
- manufacture of commercial vehicles:
  - ◆ vans, lorries, over-the-road tractors for semi-trailers etc.
- manufacture of buses, trolley-buses and coaches
- manufacture of motor vehicle engines
- manufacture of chassis fitted with engines
- manufacture of other motor vehicles:
  - ◆ snowmobiles, golf carts, amphibious vehicles
  - ◆ fire engines, street sweepers, travelling libraries, armoured cars etc.
  - ◆ concrete-mixer lorries
- ATVs, go-carts and similar including race cars

This class also includes:

- factory rebuilding of motor vehicle engines

*This class excludes:*

- *manufacture of lighting equipment for motor vehicles, see 2740*
- *manufacture of pistons, piston rings and carburetors, see 2811*
- *manufacture of agricultural tractors, see 2821*
- *manufacture of tractors used in construction or mining, see 2824*
- *manufacture of off-road dumping trucks, see 2824*
- *manufacture of bodies for motor vehicles, see 2920*
- *manufacture of electrical parts for motor vehicles, see 2930*
- *manufacture of parts and accessories for motor vehicles, see 2930*
- *manufacture of tanks and other military fighting vehicles, see 3040*
- *maintenance, repair and alteration of motor vehicles, see 4520*

**292 Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers**

See class 2920.

**2920 Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers**

This class includes:

- manufacture of bodies, including cabs for motor vehicles
- outfitting of all types of motor vehicles, trailers and semi-trailers
- manufacture of trailers and semi-trailers:
  - ◆ for transport of goods: tankers, removal trailers etc.
  - ◆ for transport of passengers: caravan trailers etc.
- manufacture of containers for carriage by one or more modes of transport

*This class excludes:*

- *manufacture of trailers and semi-trailers specially designed for use in agriculture, see 2821*
- *manufacture of parts and accessories of bodies for motor vehicles, see 2930*
- *manufacture of vehicles drawn by animals, see 3099*

**293 Manufacture of parts and accessories for motor vehicles**

See class 2930.

**2930 Manufacture of parts and accessories for motor vehicles**

This class includes:

- manufacture of diverse parts and accessories for motor vehicles:
  - ♦ brakes, gearboxes, axles, road wheels, suspension shock absorbers, radiators, silencers, exhaust pipes, catalytic converters, clutches, steering wheels, steering columns and steering boxes
- manufacture of parts and accessories of bodies for motor vehicles:
  - ♦ safety belts, airbags, doors, bumpers
- manufacture of car seats
- manufacture of motor vehicle electrical equipment, such as generators, alternators, spark plugs, ignition wiring harnesses, power window and door systems, assembly of purchased gauges into instrument panels, voltage regulators, etc.

*This class excludes:*

- *manufacture of tyres, see 2211*
- *manufacture of rubber hoses and belts and other rubber products, see 2219*
- *manufacture of plastic hoses and belts and other plastic products, see 2220*
- *manufacture of batteries for vehicles, see 2720*
- *manufacture of lighting equipment for motor vehicles, see 2740*
- *manufacture of pistons, piston rings and carburetors, see 2811*
- *manufacture of pumps for motor vehicles and engines, see 2813*
- *maintenance, repair and alteration of motor vehicles, see 4520*

**30 Manufacture of other transport equipment**

This division includes the manufacture of transportation equipment such as ship building and boat manufacturing, the manufacture of railroad rolling stock and locomotives, air and spacecraft and the manufacture of parts thereof.

**301 Building of ships and boats**

This group includes the building of ships, boats and other floating structures for transportation and other commercial purposes, as well as for sports and recreational purposes.

**3011 Building of ships and floating structures**

This class includes the building of ships, except vessels for sports or recreation, and the construction of floating structures.

This class includes:

- building of commercial vessels:
  - ♦ passenger vessels, ferry boats, cargo ships, tankers, tugs etc.
- building of warships
- building of fishing boats and fish-processing factory vessels

This class also includes:

- building of hovercraft (except recreation-type hovercraft)
- construction of drilling platforms, floating or submersible

- construction of floating structures:
  - ◆ floating docks, pontoons, coffer-dams, floating landing stages, buoys, floating tanks, barges, lighters, floating cranes, non-recreational inflatable rafts etc.
- manufacture of sections for ships and floating structures

*This class excludes:*

- *manufacture of parts of vessels, other than major hull assemblies:*
  - ◆ *manufacture of sails, see 1392*
  - ◆ *manufacture of ships' propellers, see 2599*
  - ◆ *manufacture of iron or steel anchors, see 2599*
  - ◆ *manufacture of marine engines, see 2811*
- *manufacture of navigational instruments, see 2651*
- *manufacture of lighting equipment for ships, see 2740*
- *manufacture of amphibious motor vehicles, see 2910*
- *manufacture of inflatable boats or rafts for recreation, see 3012*
- *specialized repair and maintenance of ships and floating structures, see 3315*
- *ship-breaking, see 3830*
- *interior installation of boats, see 4330*

### **3012 Building of pleasure and sporting boats**

This class includes:

- manufacture of inflatable boats and rafts
- building of sailboats with or without auxiliary motor
- building of motor boats
- building of recreation-type hovercraft
- manufacture of personal watercraft
- manufacture of other pleasure and sporting boats:
  - ◆ canoes, kayaks, rowing boats, skiffs

*This class excludes:*

- *manufacture of parts of pleasure and sporting boats:*
  - ◆ *manufacture of sails, see 1392*
  - ◆ *manufacture of iron or steel anchors, see 2599*
  - ◆ *manufacture of marine engines, see 2811*
- *manufacture of sailboards and surfboards, see 3230*
- *maintenance, repair or alteration of pleasure boats, see 3315*

### **302 Manufacture of railway locomotives and rolling stock**

See class 3020.

### **3020 Manufacture of railway locomotives and rolling stock**

This class includes:

- manufacture of electric, diesel, steam and other rail locomotives
- manufacture of self-propelled railway or tramway coaches, vans and trucks, maintenance or service vehicles
- manufacture of railway or tramway rolling stock, not self-propelled:
  - ◆ passenger coaches, goods vans, tank wagons, self-discharging vans and wagons, workshop vans, crane vans, tenders etc.
- manufacture of specialized parts of railway or tramway locomotives or of rolling stock:



- ◆ bogies, axles and wheels, brakes and parts of brakes; hooks and coupling devices, buffers and buffer parts; shock absorbers; wagon and locomotive frames; bodies; corridor connections etc.

This class also includes:

- manufacture of mechanical and electromechanical signalling, safety and traffic control equipment for railways, tramways, inland waterways, roads, parking facilities, airfields etc.
- manufacture of mining locomotives and mining rail cars
- manufacture of railway car seats

*This class excludes:*

- *manufacture of unassembled rails, see 2410*
- *manufacture of assembled railway track fixtures, see 2599*
- *manufacture of electric motors, see 2710*
- *manufacture of electrical signalling, safety or traffic-control equipment, see 2790*
- *manufacture of engines and turbines, see 2811*

### **303 Manufacture of air and spacecraft and related machinery**

See class 3030.

### **3030 Manufacture of air and spacecraft and related machinery**

This class includes:

- manufacture of airplanes for the transport of goods or passengers, for use by the defence forces, for sport or other purposes
- manufacture of helicopters
- manufacture of gliders, hang-gliders
- manufacture of dirigibles and hot air balloons
- manufacture of parts and accessories of the aircraft of this class:
  - ◆ major assemblies such as fuselages, wings, doors, control surfaces, landing gear, fuel tanks, nacelles etc.
  - ◆ airscrews, helicopter rotors and propelled rotor blades
  - ◆ motors and engines of a kind typically found on aircraft
  - ◆ parts of turbojets and turboprops for aircraft
- manufacture of ground flying trainers
- manufacture of spacecraft and launch vehicles, satellites, planetary probes, orbital stations, shuttles
- manufacture of intercontinental ballistic missiles (ICBM)

This class also includes:

- overhaul and conversion of aircraft or aircraft engines
- manufacture of aircraft seats

*This class excludes:*

- *manufacture of parachutes, see 1392*
- *manufacture of military ordinance and ammunition, see 2520*
- *manufacture of telecommunication equipment for satellites, see 2630*
- *manufacture of aircraft instrumentation and aeronautical instruments, see 2651*
- *manufacture of air navigation systems, see 2651*

- *manufacture of lighting equipment for aircraft, see 2740*
- *manufacture of ignition parts and other electrical parts for internal combustion engines, see 2790*
- *manufacture of pistons, piston rings and carburetors, see 2811*
- *manufacture of aircraft launching gear, aircraft carrier catapults and related equipment, see 2829*

### **304 Manufacture of military fighting vehicles**

See class 3040.

### **3040 Manufacture of military fighting vehicles**

This class includes:

- manufacture of tanks
- manufacture of armored amphibious military vehicles
- manufacture of other military fighting vehicles

*This class excludes:*

- *manufacture of weapons and ammunitions, see 2520*

### **309 Manufacture of transport equipment n.e.c.**

This group includes the manufacture of transport equipment other than motor vehicles and rail, water, air or space transport equipment and military vehicles.

### **3091 Manufacture of motorcycles**

This class includes:

- manufacture of motorcycles, mopeds and cycles fitted with an auxiliary engine
- manufacture of engines for motorcycles
- manufacture of sidecars
- manufacture of parts and accessories for motorcycles

*This class excludes:*

- *manufacture of bicycles, see 3092*
- *manufacture of invalid carriages, see 3092*

### **3092 Manufacture of bicycles and invalid carriages**

This class includes:

- manufacture of non-motorized bicycles and other cycles, including (delivery) tricycles, tandems, children's bicycles and tricycles
- manufacture of parts and accessories of bicycles
- manufacture of invalid carriages with or without motor
- manufacture of parts and accessories of invalid carriages
- manufacture of baby carriages

*This class excludes:*

- *manufacture of bicycles with auxiliary motor, see 3091*
- *manufacture of wheeled toys designed to be ridden, including plastic bicycles and tricycles, see 3240*

**3099 Manufacture of other transport equipment n.e.c.**

This class includes:

- manufacture of hand-propelled vehicles: luggage trucks, handcarts, sledges, shopping carts etc.
- manufacture of vehicles drawn by animals: sulkies, donkey-carts, hearses etc.

*This class excludes:*

- *works trucks, whether or not fitted with lifting or handling equipment, whether or not self-propelled, of the type used in factories (including hand trucks and wheelbarrows), see 2816*
- *decorative restaurant carts, such as a desert cart, food wagons, see 3100*

**31 Manufacture of furniture**

This division includes the manufacture of furniture and related products of any material except stone, concrete and ceramic. The processes used in the manufacture of furniture are standard methods of forming materials and assembling components, including cutting, moulding and laminating. The design of the article, for both aesthetic and functional qualities, is an important aspect of the production process.

Some of the processes used in furniture manufacturing are similar to processes that are used in other segments of manufacturing. For example, cutting and assembly occurs in the production of wood trusses that are classified in division 16 (Manufacture of wood and wood products). However, the multiple processes distinguish wood furniture manufacturing from wood product manufacturing. Similarly, metal furniture manufacturing uses techniques that are also employed in the manufacturing of roll-formed products classified in division 25 (Manufacture of fabricated metal products). The molding process for plastics furniture is similar to the molding of other plastics products. However, the manufacture of plastics furniture tends to be a specialized activity.

**310 Manufacture of furniture**

See class 3100.

**3100 Manufacture of furniture**

This class includes the manufacture of furniture of any kind, any material (except stone, concrete or ceramic) for any place and various purposes.

This class includes:

- manufacture of chairs and seats for offices, workrooms, hotels, restaurants, public and domestic premises
- manufacture of chairs and seats for theatres, cinemas and the like
- manufacture of sofas, sofa beds and sofa sets
- manufacture of garden chairs and seats
- manufacture of special furniture for shops: counters, display cases, shelves etc.
- manufacture of furniture for churches, schools, restaurants
- manufacture of office furniture
- manufacture of kitchen furniture
- manufacture of furniture for bedrooms, living rooms, gardens etc.
- manufacture of cabinets for sewing machines, televisions etc.
- manufacture of laboratory benches, stools and other laboratory seating, laboratory furniture (e.g. cabinets and tables)

This class also includes:

- finishing such as upholstery of chairs and seats
- finishing of furniture such as spraying, painting, French polishing and upholstering
- manufacture of mattress supports
- manufacture of mattresses:
  - ◆ mattresses fitted with springs or stuffed or internally fitted with a supporting material
  - ◆ uncovered cellular rubber or plastic mattresses
- decorative restaurant carts, such as dessert carts, food wagons

*This class excludes:*

- manufacture of pillows, pouffes, cushions, quilts and eiderdowns, see 1392*
- manufacture of inflatable rubber mattresses, see 2219*
- manufacture of furniture of ceramics, concrete and stone, see 2393, 2395, 2396*
- manufacture of lighting fittings or lamps, see 2740*
- blackboards, see 2817*
- manufacture of car seats, railway seats, aircraft seats, see 2930, 3020, 3030*
- modular furniture attachment and installation, partition installation, laboratory equipment furniture installation, see 4330*

## **32 Other manufacturing**

This division includes the manufacture of a variety of goods not covered in other parts of the classification. Since this is a residual division, production processes, input materials and use of the produced goods can vary widely and usual criteria for grouping classes into divisions have not been applied here.

### **321 Manufacture of jewellery, bijouterie and related articles**

This group includes the manufacture of jewellery and imitation jewellery articles.

#### **3211 Manufacture of jewellery and related articles**

This class includes:

- production of worked pearls
- production of precious and semi-precious stones in the worked state, including the working of industrial quality stones and synthetic or reconstructed precious or semi-precious stones
- working of diamonds
- manufacture of jewellery of precious metal or of base metals clad with precious metals, or precious or semi-precious stones, or of combinations of precious metal and precious or semi-precious stones or of other materials
- manufacture of goldsmiths' articles of precious metals or of base metals clad with precious metals:
  - ◆ dinnerware, flatware, hollowware, toilet articles, office or desk articles, articles for religious use etc.
- manufacture of technical or laboratory articles of precious metal (except instruments and parts thereof): crucibles, spatulas, electroplating anodes etc.
- manufacture of precious metal watch bands, wristbands, watch straps and cigarette cases
- manufacture of coins, including coins for use as legal tender, whether or not of precious metal

This class also includes:

— engraving of personal precious and non-precious metal products

*This class excludes:*

— *manufacture of non-metal watch bands (fabric, leather, plastic etc.), see 1512*

— *manufacture of articles of base metal plated with precious metal (except imitation jewellery), see division 25*

— *manufacture of watchcases, see 2652*

— *manufacture of (non-precious) metal watch bands, see 3212*

— *manufacture of imitation jewellery, see 3212*

### **3212 Manufacture of imitation jewellery and related articles**

This class includes:

— manufacture of costume or imitation jewellery:

- ◆ rings, bracelets, necklaces, and similar articles of jewellery made from base metals plated with precious metals
- ◆ jewellery containing imitation stones such as imitation gems stones, imitation diamonds, and similar

— manufacture of metal watch bands (except precious metal)

*This class excludes:*

— *manufacture of jewellery made from precious metals or clad with precious metals, see 3211*

— *manufacture of jewellery containing genuine gem stones, see 3211*

— *manufacture of precious metal watch bands, see 3211*

### **322 Manufacture of musical instruments**

See class 3220.

### **3220 Manufacture of musical instruments**

This class includes:

— manufacture of stringed instruments

— manufacture of keyboard stringed instruments, including automatic pianos

— manufacture of keyboard pipe organs, including harmoniums and similar keyboard instruments with free metal reeds

— manufacture of accordions and similar instruments, including mouth organs

— manufacture of wind instruments

— manufacture of percussion musical instruments

— manufacture of musical instruments, the sound of which is produced electronically

— manufacture of musical boxes, fairground organs, calliopes etc.

— manufacture of instrument parts and accessories:

- ◆ metronomes, tuning forks, pitch pipes, cards, discs and rolls for automatic mechanical instruments etc.

This class also includes:

— manufacture of whistles, call horns and other mouth-blown sound signalling instruments

*This class excludes:*

- *reproduction of pre-recorded sound and video tapes and discs, see 1820*
- *manufacture of microphones, amplifiers, loudspeakers, headphones and similar components, see 2640*
- *manufacture of record players, tape recorders and the like, see 2640*
- *manufacture of toy musical instruments, see 3240*
- *restoring of organs and other historic musical instruments, see 3319*
- *publishing of pre-recorded sound and video tapes and discs, see 5920*
- *piano tuning, see 9529*

### **323 Manufacture of sports goods**

See class 3230.

### **3230 Manufacture of sports goods**

This class includes the manufacture of sporting and athletic goods (except apparel and footwear).

This class includes:

- manufacture of articles and equipment for sports, outdoor and indoor games, of any material:
  - ◆ hard, soft and inflatable balls
  - ◆ rackets, bats and clubs
  - ◆ skis, bindings and poles
  - ◆ ski-boots
  - ◆ sailboards and surfboards
  - ◆ requisites for sport fishing, including landing nets
  - ◆ requisites for hunting, mountain climbing etc.
  - ◆ leather sports gloves and sports headgear
  - ◆ ice skates, roller skates etc.
  - ◆ bows and crossbows
  - ◆ gymnasium, fitness centre or athletic equipment

*This class excludes:*

- *manufacture of boat sails, see 1392*
- *manufacture of sports apparel, see 1410*
- *manufacture of saddlery and harness, see 1512*
- *manufacture of whips and riding crops, see 1512*
- *manufacture of sports footwear, see 1520*
- *manufacture of sporting weapons and ammunition, see 2520*
- *manufacture of metal weights as used for weightlifting, see 2599*
- *manufacture of automatic bowling alley equipment (e.g. pin-setters), see 2829*
- *manufacture of sports vehicles other than toboggans and the like, see divisions 29 and 30*
- *manufacture of boats, see 3012*
- *manufacture of billiard tables, see 3240*
- *manufacture of ear and noise plugs (e.g. for swimming and noise protection), see 3290*

### **324 Manufacture of games and toys**

See class 3240.

**3240 Manufacture of games and toys**

This class includes the manufacture of dolls, toys and games (including electronic games), scale models and children's vehicles (except metal bicycles and tricycles).

This class includes:

- manufacture of dolls and doll garments, parts and accessories
- manufacture of action figures
- manufacture of toy animals
- manufacture of toy musical instruments
- manufacture of playing cards
- manufacture of board games and similar games
- manufacture of electronic games: chess etc.
- manufacture of reduced-size ("scale") models and similar recreational models, electrical trains, construction sets etc.
- manufacture of coin-operated games, billiards, special tables for casino games, etc.
- manufacture of articles for funfair, table or parlour games
- manufacture of wheeled toys designed to be ridden, including plastic bicycles and tricycles
- manufacture of puzzles and similar articles

*This class excludes:*

- *manufacture of video game consoles, see 2640*
- *manufacture of bicycles, see 3092*
- *writing and publishing of software for video game consoles, see 5820, 6201*

**325 Manufacture of medical and dental instruments and supplies**

See class 3250.

**3250 Manufacture of medical and dental instruments and supplies**

This class includes the manufacture of laboratory apparatus, surgical and medical instruments, surgical appliances and supplies, dental equipment and supplies, orthodontic goods, dentures and orthodontic appliances. Included is the manufacture of medical, dental and similar furniture, where the additional specific functions determine the purpose of the product, such as dentist's chairs with built-in hydraulic functions.

This class includes:

- manufacture of surgical drapes and sterile string and tissue
- manufacture of dental fillings and cements (except denture adhesives), dental wax and other dental plaster preparations
- manufacture of bone reconstruction cements
- manufacture of dental laboratory furnaces
- manufacture of laboratory ultrasonic cleaning machinery
- manufacture of laboratory sterilizers
- manufacture of laboratory type distilling apparatus, laboratory centrifuges
- manufacture of medical, surgical, dental or veterinary furniture, such as:
  - ◆ operating tables
  - ◆ examination tables
  - ◆ hospital beds with mechanical fittings
  - ◆ dentists' chairs
- manufacture of bone plates and screws, syringes, needles, catheters, cannulae, etc.

- manufacture of dental instruments (including dentists' chairs incorporating dental equipment)
- manufacture of artificial teeth, bridges, etc., made in dental labs
- manufacture of orthopedic and prosthetic devices
- manufacture of glass eyes
- manufacture of medical thermometers
- manufacture of ophthalmic goods, eyeglasses, sunglasses, lenses ground to prescription, contact lenses, safety goggles

*This class excludes:*

- *manufacture of denture adhesives, see 2023*
- *manufacture of medical impregnated wadding, dressings etc., see 2100*
- *manufacture of electromedical and electrotherapeutic equipment, see 2660*
- *manufacture of wheelchairs, see 3092*

### **329 Other manufacturing n.e.c.**

See class 3290.

### **3290 Other manufacturing n.e.c.**

This class includes:

- manufacture of protective safety equipment
  - ◆ manufacture of fire-resistant and protective safety clothing
  - ◆ manufacture of linemen's safety belts and other belts for occupational use
  - ◆ manufacture of cork life preservers
  - ◆ manufacture of plastics hard hats and other personal safety equipment of plastics (e.g. athletic helmets)
  - ◆ manufacture of fire-fighting protection suits
  - ◆ manufacture of metal safety headgear and other metal personal safety devices
  - ◆ manufacture of ear and noise plugs (e.g. for swimming and noise protection)
  - ◆ manufacture of gas masks
- manufacture of brooms and brushes, including brushes constituting parts of machines, hand-operated mechanical floor sweepers, mops and feather dusters, paint brushes, paint pads and rollers, squeegees and other brushes, brooms, mops etc.
- manufacture of shoe and clothes brushes
- manufacture of pens and pencils of all kinds whether or not mechanical
- manufacture of pencil leads
- manufacture of date, sealing or numbering stamps, hand-operated devices for printing, or embossing labels, hand printing sets, prepared typewriter ribbons and inked pads
- manufacture of globes
- manufacture of umbrellas, sun-umbrellas, walking sticks, seat-sticks
- manufacture of buttons, press-fasteners, snap-fasteners, press-studs, slide fasteners
- manufacture of cigarette lighters
- manufacture of articles of personal use: smoking pipes, scent sprays, vacuum flasks and other vacuum vessels for personal or household use, wigs, false beards, eyebrows
- manufacture of miscellaneous articles: candles, tapers and the like; bouquets, wreaths and floral baskets; artificial flowers, fruit and foliage; jokes and novelties; hand sieves and hand riddles; tailors' dummies; burial caskets etc.
- taxidermy activities



*This class excludes:*

- *manufacture of lighter wicks, see 1399*
- *manufacture of workwear and service apparel (e.g. laboratory coats, work overalls, uniforms), see 1410*
- *manufacture of paper novelties, see 1709*
- *manufacture of plastic novelties, see 2220*

### **33 Repair and installation of machinery and equipment**

This division includes the specialized repair of goods produced in the manufacturing sector with the aim to restore machinery, equipment and other products to working order. The provision of general or routine maintenance (i.e. servicing) on such products to ensure they work efficiently and to prevent breakdown and unnecessary repairs is included.

This division does only include specialized repair and maintenance activities. A substantial amount of repair is also done by manufacturers of machinery, equipment and other goods, in which case the classification of units engaged in these repair and manufacturing activities is done according to the value-added principle which would often assign these combined activities to the manufacture of the good. The same principle is applied for combined trade and repair.

The rebuilding or remanufacturing of machinery and equipment is considered a manufacturing activity and included in other divisions of this section.

Repair and maintenance of goods that are utilized as capital goods as well as consumer goods is typically classified as repair and maintenance of household goods (e.g. office and household furniture repair, see 9524).

Also included in this division is the specialized installation of machinery. However, the installation of equipment that forms an integral part of buildings or similar structures, such as installation of electrical wiring, installation of escalators or installation of air-conditioning systems, is classified as construction.

This division excludes the cleaning of industrial machinery (see class 8129) and the repair and maintenance of computers, communications equipment and household goods (see division 95).

#### **331 Repair of fabricated metal products, machinery and equipment**

This group includes the specialized repair of goods produced in the manufacturing sector with the aim to restore these metal products, machinery, equipment and other products to working order. The provision of general or routine maintenance (i.e. servicing) on such products to ensure they work efficiently and to prevent breakdown and unnecessary repairs is included.

*This group excludes:*

- *rebuilding or remanufacturing of machinery and equipment, see corresponding class in divisions 25-31*
- *cleaning of industrial machinery, see 8129*
- *repair and maintenance of computers and communications equipment, see group 951*
- *repair and maintenance of household goods, see group 952*

#### **3311 Repair of fabricated metal products**

This class includes the repair and maintenance of fabricated metal products of division 25.

This class includes:

- repair of metal tanks, reservoirs and containers
- repair and maintenance for pipes and pipelines
- mobile welding repair
- repair of steel shipping drums
- repair and maintenance of steam or other vapour generators
- repair and maintenance of auxiliary plant for use with steam generators:
  - ◆ condensers, economizers, superheaters, steam collectors and accumulators
- repair and maintenance of nuclear reactors, except isotope separators
- repair and maintenance of parts for marine or power boilers
- platework repair of central heating boilers and radiators
- repair and maintenance of fire arms and ordnance (including repair of sporting and recreational guns)

*This class excludes:*

- repair of central heating systems etc., see 4322
- repair of mechanical locking devices, safes etc., see 8020

### **3312 Repair of machinery**

This class includes the repair and maintenance of industrial machinery and equipment like sharpening or installing commercial and industrial machinery blades and saws; the provision of welding (e.g. automotive, general) repair services; the repair of agricultural and other heavy and industrial machinery and equipment (e.g. forklifts and other materials handling equipment, machine tools, commercial refrigeration equipment, construction equipment and mining machinery), comprising machinery and equipment of division 28.

This class includes:

- repair and maintenance of non-automotive engines, e.g. ship or rail engines
- repair and maintenance of pumps and related equipment
- repair and maintenance of fluid power equipment
- repair of valves
- repair of gearing and driving elements
- repair and maintenance of industrial process furnaces
- repair and maintenance of materials handling equipment
- repair and maintenance of commercial refrigeration equipment and air purifying equipment
- repair and maintenance of commercial-type general-purpose machinery
- repair of other power-driven hand-tools
- repair and maintenance of metal cutting and metal forming machine tools and accessories
- repair and maintenance of other machine tools
- repair and maintenance of agricultural tractors
- repair and maintenance of agricultural machinery and forestry and logging machinery
- repair and maintenance of metallurgy machinery
- repair and maintenance of mining, construction, and oil and gas field machinery
- repair and maintenance of food, beverage, and tobacco processing machinery
- repair and maintenance of textile apparel, and leather production machinery
- repair and maintenance of papermaking machinery
- repair and maintenance of other special-purpose machinery of division 28

- repair and maintenance of weighing equipment
- repair and maintenance of vending machines
- repair and maintenance of cash registers
- repair and maintenance of photocopy machines
- repair of calculators, electronic or not
- repair of typewriters

*This class excludes:*

- *installation, repair and maintenance of furnaces and other heating equipment, see 4322*
- *installation, repair and maintenance of elevators and escalators, see 4329*

### **3313 Repair of electronic and optical equipment**

This class includes the repair and maintenance of goods produced in groups 265, 266 and 267, except those that are considered household goods.

This class includes:

- repair and maintenance of the measuring, testing, navigating and control equipment of group 265, such as:
  - ♦ aircraft engine instruments
  - ♦ automotive emissions testing equipment
  - ♦ meteorological instruments
  - ♦ physical, electrical and chemical properties testing and inspection equipment
  - ♦ surveying instruments
  - ♦ radiation detection and monitoring instruments
- repair and maintenance of irradiation, electromedical and electrotherapeutic equipment of class 2660, such as:
  - ♦ magnetic resonance imaging equipment
  - ♦ medical ultrasound equipment
  - ♦ pacemakers
  - ♦ hearing aids
  - ♦ electrocardiographs
  - ♦ electromedical endoscopic equipment
  - ♦ irradiation apparatus
- repair and maintenance of optical instruments and equipment of class 2670, if the use is mainly commercial, such as:
  - ♦ binoculars
  - ♦ microscopes (except electron and proton microscopes)
  - ♦ telescopes
  - ♦ prisms and lenses (except ophthalmic)
  - ♦ photographic equipment

*This class excludes:*

- *repair and maintenance of photocopy machines, see 3312*
- *repair and maintenance of computers and peripheral equipment, see 9511*
- *repair and maintenance of computer projectors, see 9511*
- *repair and maintenance of communication equipment, see 9512*
- *repair and maintenance of commercial TV and video cameras, see 9512*
- *repair of household-type video cameras, see 9521*
- *repair of watches and clocks, see 9529*

**3314 Repair of electrical equipment**

This class includes the repair and maintenance of goods of division 27, except those in class 2750 (domestic appliances).

This class includes:

- repair and maintenance of power, distribution, and specialty transformers
- repair and maintenance of electric motors, generators, and motor generator sets
- repair and maintenance of switchgear and switchboard apparatus
- repair and maintenance of relays and industrial controls
- repair and maintenance of primary and storage batteries
- repair and maintenance of electric lighting equipment
- repair and maintenance of current-carrying wiring devices and non current-carrying wiring devices for wiring electrical circuits

*This class excludes:*

- *repair and maintenance of computers and peripheral computer equipment, see 9511*
- *repair and maintenance of telecommunications equipment, see 9512*
- *repair and maintenance of consumer electronics, see 9521*
- *repair of watches and clocks, see 9529*

**3315 Repair of transport equipment, except motor vehicles**

This class includes the repair and maintenance of transport equipment of division 30, except motorcycles and bicycles. However, the factory rebuilding or overhaul of ships, locomotives, railroad cars and aircraft is classified in division 30.

This class includes:

- repair and routine maintenance of ships
- repair and maintenance of pleasure boats
- repair and maintenance of locomotives and railroad cars (except factory rebuilding or factory conversion)
- repair and maintenance of aircraft (except factory conversion, factory overhaul, factory rebuilding)
- repair and maintenance of aircraft engines
- repair of animal drawn buggies and wagons

*This class excludes:*

- *factory rebuilding of ships, see 3010*
- *factory rebuilding of locomotives and railroad cars, see 3020*
- *factory rebuilding of aircraft, see 3030*
- *repair of ship or rail engines, see 3312*
- *ship scaling, dismantling, see 3830*
- *repair and maintenance of motorcycles, see 4540*
- *repair of bicycles and invalid carriages, see 9529*

**3319 Repair of other equipment**

This class includes the repair and maintenance of equipment not covered in other groups of this division.

This class includes:

- repair of fishing nets, including mending
- repair of ropes, riggings, canvas and tarps
- repair of fertilizer and chemical storage bags

- repair or reconditioning of wooden pallets, shipping drums or barrels, and similar items
- repair of pinball machines and other coin-operated games
- restoring of organs and other historical musical instruments

*This class excludes:*

- *repair of household and office type furniture, furniture restoration, see 9524*
- *repair of bicycles and invalid carriages, see 9529*
- *repair and alteration of clothing, see 9529*

### **332 Installation of industrial machinery and equipment**

See class 3320.

### **3320 Installation of industrial machinery and equipment**

This class includes the specialized installation of machinery. However, the installation of equipment that forms an integral part of buildings or similar structures, such as installation of escalators, electrical wiring, burglar alarm systems or air-conditioning systems, is classified as construction.

This class includes:

- installation of industrial machinery in industrial plant
- installation of industrial process control equipment
- installation of other industrial equipment, e.g.:
  - ◆ communications equipment
  - ◆ mainframe and similar computers
  - ◆ irradiation and electromedical equipment etc.
- dismantling large-scale machinery and equipment
- activities of millwrights
- machine rigging
- installation of bowling alley equipment

*This class excludes:*

- *installation of electrical wiring, burglar alarm systems, see 4321*
- *installation of air-conditioning systems, see 4322*
- *installation of elevators, escalators, automated doors, vacuum cleaning systems etc., see 4329*
- *installation of doors, staircases, shop fittings, furniture etc., see 4330*
- *installation (setting-up) of personal computers, see 6209*

## **Section D**

### **Electricity, gas, steam and air conditioning supply**

This section includes the activity of providing electric power, natural gas, steam, hot water and the like through a permanent infrastructure (network) of lines, mains and pipes. The dimension of the network is not decisive; also included are the distribution of electricity, gas, steam, hot water and the like in industrial parks or residential buildings.

This section therefore includes the operation of electric and gas utilities, which generate, control and distribute electric power or gas. Also included is the provision of steam and air-conditioning supply.

This section excludes the operation of water and sewerage utilities, see 36, 37. This section also excludes the (typically long-distance) transport of gas through pipelines.

**35 Electricity, gas, steam and air conditioning supply**

See section D.

**351 Electric power generation, transmission and distribution**

See class 3510.

**3510 Electric power generation, transmission and distribution**

This class includes the generation of bulk electric power, transmission from generating facilities to distribution centers and distribution to end users.

This class includes:

- operation of generation facilities that produce electric energy, including thermal, nuclear, hydroelectric, gas turbine, diesel and renewable
- operation of transmission systems that convey the electricity from the generation facility to the distribution system
- operation of distribution systems (i.e. consisting of lines, poles, meters, and wiring) that convey electric power received from the generation facility or the transmission system to the final consumer
- sale of electricity to the user
- activities of electric power brokers or agents that arrange the sale of electricity via power distribution systems operated by others
- operation of electricity and transmission capacity exchanges for electric power

*This class excludes:*

- production of electricity through incineration of waste, see 3821

**352 Manufacture of gas; distribution of gaseous fuels through mains**

See class 3520.

**3520 Manufacture of gas; distribution of gaseous fuels through mains**

This class includes the manufacture of gas and the distribution of natural or synthetic gas to the consumer through a system of mains. Gas marketers or brokers, which arrange the sale of natural gas over distribution systems operated by others, are included.

The separate operation of gas pipelines, typically done over long distances, connecting producers with distributors of gas, or between urban centers, is excluded from this class and classified with other pipeline transport activities.

This class includes:

- production of gas for the purpose of gas supply by carbonation of coal, from by-products of agriculture or from waste
- manufacture of gaseous fuels with a specified calorific value, by purification, blending and other processes from gases of various types including natural gas
- transportation, distribution and supply of gaseous fuels of all kinds through a system of mains
- sale of gas to the user through mains
- activities of gas brokers or agents that arrange the sale of gas over gas distribution systems operated by others
- commodity and transport capacity exchanges for gaseous fuels

*This class excludes:*

- *operation of coke ovens, see 1910*
- *manufacture of refined petroleum products, see 1920*
- *manufacture of industrial gases, see 2011*
- *wholesale of gaseous fuels, see 4661*
- *retail sale of bottled gas, see 4773*
- *direct selling of fuel, see 4799*
- *(long-distance) transportation of gases by pipelines, see 4930*

### **353 Steam and air conditioning supply**

See class 3530.

### **3530 Steam and air conditioning supply**

This class includes:

- production, collection and distribution of steam and hot water for heating, power and other purposes
- production and distribution of cooled air
- production and distribution of chilled water for cooling purposes
- production of ice, including ice for food and non-food (e.g. cooling) purposes

## **Section E**

### **Water supply; sewerage, waste management and remediation activities**

This section includes activities related to the management (including collection, treatment and disposal) of various forms of waste, such as solid or non-solid industrial or household waste, as well as contaminated sites. The output of the waste or sewage treatment process can either be disposed of or become an input into other production processes. Activities of water supply are also grouped in this section, since they are often carried out in connection with, or by units also engaged in, the treatment of sewage.

### **36 Water collection, treatment and supply**

This division includes the collection, treatment and distribution of water for domestic and industrial needs. Collection of water from various sources, as well as distribution by various means is included.

### **360 Water collection, treatment and supply**

See class 3600.

### **3600 Water collection, treatment and supply**

This class includes water collection, treatment and distribution activities for domestic and industrial needs. Collection of water from various sources, as well as distribution by various means is included.

The operation of irrigation canals is also included; however the provision of irrigation services through sprinklers, and similar agricultural support services, is not included.

This class includes:

- collection of water from rivers, lakes, wells etc.
- collection of rain water
- purification of water for water supply purposes
- treatment of water for industrial and other purposes
- desalting of sea or ground water to produce water as the principal product of interest
- distribution of water through mains, by trucks or other means
- operation of irrigation canals

*This class excludes:*

- *operation of irrigation equipment for agricultural purposes, see 0161*
- *treatment of wastewater in order to prevent pollution, see 3700*
- *(long-distance) transport of water via pipelines, see 4930*

### **37 Sewerage**

This division includes the operation of sewer systems or sewage treatment facilities that collect, treat, and dispose of sewage.

#### **370 Sewerage**

See class 3700.

#### **3700 Sewerage**

This class includes:

- operation of sewer systems or sewer treatment facilities
- collecting and transporting of human or industrial wastewater from one or several users, as well as rain water by means of sewerage networks, collectors, tanks and other means of transport (sewage vehicles etc.)
- emptying and cleaning of cesspools and septic tanks, sinks and pits from sewage; servicing of chemical toilets
- treatment of wastewater (including human and industrial wastewater, water from swimming pools etc.) by means of physical, chemical and biological processes like dilution, screening, filtering, sedimentation etc.
- maintenance and cleaning of sewers and drains, including sewer rodding

### **38 Waste collection, treatment and disposal activities; materials recovery**

This division includes the collection, treatment, and disposal of waste materials. This also includes local hauling of waste materials and the operation of materials recovery facilities (i.e. those that sort recoverable materials from a waste stream).

#### **381 Waste collection**

This group includes the collection of waste from households and businesses by means of refuse bins, wheeled bins, containers, etc. It includes collection of non-hazardous and hazardous waste e.g. waste from households, used batteries, used cooking oils and fats, waste oil from ships and used oil from garages, as well as construction and demolition waste.



### 3811 Collection of non-hazardous waste

This class includes:

- collection of non-hazardous solid waste (i.e. garbage) within a local area, such as collection of waste from households and businesses by means of refuse bins, wheeled bins, containers etc may include mixed recoverable materials
- collection of recyclable materials
- collection of used cooking oils and fats
- collection of refuse in litter-bins in public places

This class also includes:

- collection of construction and demolition waste
- collection and removal of debris such as brush and rubble
- collection of waste output of textile mills
- operation of waste transfer stations for non-hazardous waste

*This class excludes:*

- collection of hazardous waste, see 3812
- operation of landfills for the disposal of non-hazardous waste, see 3821
- operation of facilities where commingled recoverable materials such as paper, plastics, etc. are sorted into distinct categories, see 3830

### 3812 Collection of hazardous waste

This class includes the collection of solid and non-solid hazardous waste, i.e. explosive, oxidizing, flammable, toxic, irritant, carcinogenic, corrosive, infectious and other substances and preparations harmful for human health and environment. It may also entail identification, treatment, packaging and labeling of waste for the purposes of transport.

This class includes:

- collection of hazardous waste, such as:
  - ◆ used oil from shipment or garages
  - ◆ bio-hazardous waste
  - ◆ used batteries
- operation of waste transfer stations for hazardous waste

*This class excludes:*

- remediation and clean up of contaminated buildings, mine sites, soil, ground water, e.g. asbestos removal, see 3900

### 382 Waste treatment and disposal

This group includes the disposal and treatment prior to disposal of various forms of waste by different means, such as waste treatment of organic waste with the aim of disposal; treatment and disposal of toxic live or dead animals and other contaminated waste; treatment and disposal of transition radioactive waste from hospitals, etc.; dumping of refuse on land or in water; burial or ploughing-under of refuse; disposal of used goods such as refrigerators to eliminate harmful waste; disposal of waste by incineration or combustion.

Included is also the generation of electricity resulting from waste incineration processes.

*This group excludes:*

- treatment and disposal of wastewater, see 3700

**3821 Treatment and disposal of non-hazardous waste**

This class includes the disposal, treatment prior to disposal and other treatment of solid or non-solid non-hazardous waste.

This class includes:

- operation of landfills for the disposal of non-hazardous waste
- disposal of non-hazardous waste by combustion or incineration or other methods, with or without the resulting production of electricity or steam, substitute fuels, biogas, ashes or other by-products for further use etc.
- treatment of organic waste for disposal
- production of compost from organic waste

*This class excludes:*

- incineration and combustion of hazardous waste, see 3822
- operation of facilities where commingled recoverable materials such as paper, plastics, used beverage cans and metals, are sorted into distinct categories, see 3830
- decontamination, clean up of land, water; toxic material abatement, see 3900

**3822 Treatment and disposal of hazardous waste**

This class includes the disposal and treatment prior to disposal of solid or non-solid hazardous waste, including waste that is explosive, oxidizing, flammable, toxic, irritant, carcinogenic, corrosive or infectious and other substances and preparations harmful for human health and environment.

This class includes:

- operation of facilities for treatment of hazardous waste
- treatment and disposal of toxic live or dead animals and other contaminated waste
- incineration of hazardous waste
- disposal of used goods such as refrigerators to eliminate harmful waste
- treatment, disposal and storage of radioactive nuclear waste including:
  - ♦ treatment and disposal of transition radioactive waste, i.e. decaying within the period of transport, from hospitals
  - ♦ encapsulation, preparation and other treatment of nuclear waste for storage

*This class excludes:*

- incineration of non-hazardous waste, see 3821
- decontamination, clean up of land, water; toxic material abatement, see 3900
- reprocessing of nuclear fuels, see 2011

**383 Materials recovery**

See class 3830.

**3830 Materials recovery**

This class includes:

- processing of metal and non-metal waste and scrap and other articles into secondary raw materials, usually involving a mechanical or chemical transformation process
- recovery of materials from waste streams in the form of:
  - ♦ separating and sorting recoverable materials from non-hazardous waste streams (i.e. garbage)

- ◆ separating and sorting of commingled recoverable materials, such as paper, plastics, used beverage cans and metals, into distinct categories

Examples of the mechanical or chemical transformation processes that are undertaken are:

- mechanical crushing of metal waste such as used cars, washing machines, bikes etc. with subsequent sorting and separation
- dismantling of automobiles, computers, televisions and other equipment for materials recovery
- mechanical reduction of large iron pieces such as railway wagons
- shredding of metal waste, end-of-life vehicles etc.
- other methods of mechanical treatment as cutting, pressing to reduce the volume
- ship-breaking
- reclaiming metals out of photographic waste, e.g. fixer solution or photographic films and paper
- reclaiming of rubber such as used tires to produce secondary raw material
- sorting and pelleting of plastics to produce secondary raw material for tubes, flower pots, pallets and the like
- processing (cleaning, melting, grinding) of plastic or rubber waste to granulates
- crushing, cleaning and sorting of glass
- crushing, cleaning and sorting of other waste such as demolition waste to obtain secondary raw material
- processing of used cooking oils and fats into secondary raw materials
- processing of other food, beverage and tobacco waste and residual substances into secondary raw materials

*This class excludes:*

- manufacture of new final products from (whether or not self-produced) secondary metal raw materials, such as spinning yarn from garnetted stock, making pulp from paper waste, retreading tyres or production of metal from metal scrap, see corresponding classes in section C (Manufacturing)*
- reprocessing of nuclear fuels, see 2011*
- remelting ferrous waste and scrap, see 2410*
- treatment and disposal of non-hazardous waste, see 3821*
- treatment of organic waste for disposal, see 3821*
- energy recovery from non-hazardous waste incineration processes, see 3821*
- disposal of used goods such as refrigerators to eliminate harmful waste, see 3822*
- treatment and disposal of transition radioactive waste from hospitals etc., see 3822*
- treatment and disposal of toxic, contaminated waste, see 3822*
- dismantling of automobiles, computers, televisions and other equipment to obtain and re-sell usable parts, see section G*
- wholesale of recoverable materials, see 4669*

### **39 Remediation activities and other waste management services**

This division includes the provision of remediation services, i.e. the cleanup of contaminated buildings and sites, soil, surface or ground water.

### **390 Remediation activities and other waste management services**

See class 3900.

**3900 Remediation activities and other waste management services**

This class includes:

- decontamination of soils and groundwater at the place of pollution, either in situ or ex situ, using e.g. mechanical, chemical or biological methods
- decontamination of industrial plants or sites, including nuclear plants and sites
- decontamination and cleaning up of surface water following accidental pollution, e.g. through collection of pollutants or through application of chemicals
- cleaning up of oil spills and other pollutions on land, in surface water, in ocean and seas, including coastal areas
- asbestos, lead paint, and other toxic material abatement
- clearing of landmines and the like (including detonation)
- other specialized pollution-control activities

*This class excludes:*

- treatment and disposal of non-hazardous waste, see 3821*
- treatment and disposal of hazardous waste, see 3822*
- outdoor sweeping and watering of streets etc., see 8129*

## Section F Construction

This section includes general construction and specialized construction activities for buildings and civil engineering works. It includes new work, repair, additions and alterations, the erection of prefabricated buildings or structures on the site and also construction of a temporary nature.

General construction is the construction of entire dwellings, office buildings, stores and other public and utility buildings, farm buildings etc., or the construction of civil engineering works such as motorways, streets, bridges, tunnels, railways, airfields, harbours and other water projects, irrigation systems, sewerage systems, industrial facilities, pipelines and electric lines, sports facilities etc.

This work can be carried out on own account or on a fee or contract basis. Portions of the work and sometimes even the whole practical work can be subcontracted out. A unit that carries the overall responsibility for a construction project is classified here.

Also included is the repair of buildings and engineering works.

This section includes the complete construction of buildings (division 41), the complete construction of civil engineering works (division 42), as well as specialized construction activities, if carried out only as a part of the construction process (division 43).

The renting of construction equipment with operator is classified with the specific construction activity carried out with this equipment.

This section also includes the development of building projects for buildings or civil engineering works by bringing together financial, technical and physical means to realize the construction projects for later sale. If these activities are carried out not for later sale of the construction projects, but for their operation (e.g. renting of space in these buildings, manufacturing activities in these plants), the unit would not be classified here, but according to its operational activity, i.e. real estate, manufacturing etc.

**41 Construction of buildings**

This division includes general construction of buildings of all kinds. It includes new work, repair, additions and alterations, the erection of pre-fabricated buildings or structures on the site and also construction of temporary nature.

Included is the construction of entire dwellings, office buildings, stores and other public and utility buildings, farm buildings, etc.

#### 410 Construction of buildings

See class 4100.

#### 4100 Construction of buildings

This class includes the construction of complete residential or non-residential buildings, on own account for sale or on a fee or contract basis. Outsourcing parts or even the whole construction process is possible. If only specialized parts of the construction process are carried out, the activity is classified in division 43.

This class includes:

- construction of all types of residential buildings:
  - ◆ single-family houses
  - ◆ multi-family buildings, including high-rise buildings
- construction of all types of non-residential buildings:
  - ◆ buildings for industrial production, e.g. factories, workshops, assembly plants etc.
  - ◆ hospitals, schools, office buildings
  - ◆ hotels, stores, shopping malls, restaurants
  - ◆ airport buildings
  - ◆ indoor sports facilities
  - ◆ parking garages, including underground parking garages
  - ◆ warehouses
  - ◆ religious buildings
- assembly and erection of prefabricated constructions on the site

This class also includes:

- remodeling or renovating existing residential structures

*This class excludes:*

- erection of complete prefabricated constructions from self-manufactured parts not of concrete, see divisions 16 and 25
- construction of industrial facilities, except buildings, see 4290
- architectural and engineering activities, see 7110
- project management activities related to construction, see 7110

#### 42 Civil engineering

This division includes general construction for civil engineering objects. It includes new work, repair, additions and alterations, the erection of pre-fabricated structures on the site and also construction of temporary nature.

Included is the construction of heavy constructions such as motorways, streets, bridges, tunnels, railways, airfields, harbours and other water projects, irrigation systems, sewerage systems, industrial facilities, pipelines and electric lines, outdoor sports facilities, etc. This work can be carried out on own account or on a fee or contract basis. Portions of the work and sometimes even the whole practical work can be subcontracted out.

#### 421 Construction of roads and railways

See class 4210.

**4210 Construction of roads and railways**

This class includes:

- construction of motorways, streets, roads, other vehicular and pedestrian ways
- surface work on streets, roads, highways, bridges or tunnels:
  - ◆ asphalt paving of roads
  - ◆ road painting and other marking
  - ◆ installation of crash barriers, traffic signs and the like
- construction of bridges, including those for elevated highways
- construction of tunnels
- construction of railways and subways
- construction of airfield runways

*This class excludes:*

- installation of street lighting and electrical signals, see 4321
- architectural and engineering activities, see 7110
- project management activities related to civil engineering works, see 7110

**422 Construction of utility projects**

See class 4220.

**4220 Construction of utility projects**

This class includes the construction of distribution lines and related buildings and structures that are integral part of these systems.

This class includes:

- construction of civil engineering constructions for:
  - ◆ long-distance pipelines, communication and power lines
  - ◆ urban pipelines, urban communication and power lines; ancillary urban works
  - ◆ water main and line construction
  - ◆ irrigation systems (canals)
  - ◆ reservoirs
- construction of:
  - ◆ sewer systems, including repair
  - ◆ sewage disposal plants
  - ◆ pumping stations
  - ◆ power plants

This class also includes:

- water well drilling

*This class excludes:*

- project management activities related to civil engineering works, see 7110

**429 Construction of other civil engineering projects**

See class 4290.

**4290 Construction of other civil engineering projects**

This class includes:

- construction of industrial facilities, except buildings, such as:
  - ◆ refineries
  - ◆ chemical plants
- construction of:
  - ◆ waterways, harbour and river works, pleasure ports (marinas), locks, etc.
  - ◆ dams and dykes
- dredging of waterways
- construction work, other than buildings, such as:
  - ◆ outdoor sports facilities

This class also includes:

- land subdivision with land improvement (e.g. adding of roads, utility infrastructure etc.)

*This class excludes:*

- *project management activities related to civil engineering works, see 7110*

**43 Specialized construction activities**

This division includes specialized construction activities (special trades), i.e. the construction of parts of buildings and civil engineering works without responsibility for the entire project. These activities are usually specialized in one aspect common to different structures, requiring specialized skills or equipment, such as pile driving, foundation work, carcass work, concrete work, brick laying, stone setting, scaffolding, roof covering, etc. The erection of steel structures is included, provided that the parts are not produced by the same unit. Specialized construction activities are mostly carried out under subcontract, but especially in repair construction it is done directly for the owner of the property.

Also included are building finishing and building completion activities.

Included is the installation of all kind of utilities that make the construction function as such. These activities are usually performed at the site of the construction, although parts of the job may be carried out in a special shop. Included are activities such as plumbing, installation of heating and air-conditioning systems, antennas, alarm systems and other electrical work, sprinkler systems, elevators and escalators, etc. Also included are insulation work (water, heat, sound), sheet metal work, commercial refrigerating work, the installation of illumination and signalling systems for roads, railways, airports, harbours, etc. Also included is the repair of the same type as the above-mentioned activities.

Building completion activities encompass activities that contribute to the completion or finishing of a construction such as glazing, plastering, painting, floor and wall tiling or covering with other materials like parquet, carpets, wallpaper, etc., floor sanding, finish carpentry, acoustical work, cleaning of the exterior, etc. Also included is the repair of the same type as the above-mentioned activities.

The renting of construction equipment with operator is classified with the associated construction activity.

**431 Demolition and site preparation**

This group includes activities of preparing a site for subsequent construction activities, including the removal of previously existing structures.

**4311 Demolition**

This class includes:

- demolition or wrecking of buildings and other structures

**4312 Site preparation**

This class includes the preparation of sites for subsequent construction activities.

This class includes:

- clearing of building sites
- earth moving: excavation, landfill, levelling and grading of construction sites, trench digging, rock removal, blasting, etc.
- drilling, boring and core sampling for construction, geophysical, geological or similar purposes

This class also includes:

- site preparation for mining:
  - ◆ overburden removal and other development and preparation of mineral properties and sites, except oil and gas sites
- building site drainage
- drainage of agricultural or forestry land

*This class excludes:*

- drilling of production oil or gas wells, see 0610, 0620
- test drilling and test hole boring for mining operations (other than oil and gas extraction), see 0990
- decontamination of soil, see 3900
- water well drilling, see 4220
- shaft sinking, see 4390
- oil and gas field exploration, geophysical, geological and seismic surveying, see 7110

**432 Electrical, plumbing and other construction installation activities**

This group includes installation activities that support the functioning of a building as such, including installation of electrical systems, plumbing (water, gas and sewage systems), heat and air-conditioning systems, elevators etc.

**4321 Electrical installation**

This class includes the installation of electrical systems in all kinds of buildings and civil engineering structures.

This class includes:

- installation of:
  - ◆ electrical wiring and fittings
  - ◆ telecommunications wiring
  - ◆ computer network and cable television wiring, including fibre optic
  - ◆ satellite dishes
  - ◆ lighting systems
  - ◆ fire alarms
  - ◆ burglar alarm systems



- ◆ street lighting and electrical signals
- ◆ airport runway lighting

This class also includes:

—connecting of electric appliances and household equipment, including baseboard heating

*This class excludes:*

- construction of communications and power transmission lines, see 4220*
- monitoring or remote monitoring of electronic security alarm systems, such as burglar and fire alarms, including their maintenance, see 8020*

### **4322 Plumbing, heat and air-conditioning installation**

This class includes the installation of plumbing, heating and air-conditioning systems, including additions, alterations, maintenance and repair.

This class includes:

- installation in buildings or other construction projects of:
  - ◆ heating systems (electric, gas and oil)
  - ◆ furnaces, cooling towers
  - ◆ non-electric solar energy collectors
  - ◆ plumbing and sanitary equipment
  - ◆ ventilation, refrigeration or air-conditioning equipment and ducts
  - ◆ gas fittings
  - ◆ steam piping
  - ◆ fire sprinkler systems
  - ◆ lawn sprinkler systems
- duct work installation

*This class excludes:*

- installation of electric baseboard heating, see 4321*

### **4329 Other construction installation**

This class includes the installation of equipment other than electrical, plumbing, heating and air-conditioning systems or industrial machinery in buildings and civil engineering structures, including maintenance and repair.

This class includes:

- installation in buildings or other construction projects of:
  - ◆ elevators, escalators
  - ◆ automated and revolving doors
  - ◆ lightning conductors
  - ◆ vacuum cleaning systems
  - ◆ thermal, sound or vibration insulation

*This class excludes:*

- installation of industrial machinery, see 3320*

### **433 Building completion and finishing**

See class 4330.

**4330 Building completion and finishing**

This class includes:

- application in buildings or other construction projects of interior and exterior plaster or stucco, including related lathing materials
- installation of doors (except automated and revolving), windows, door and window frames, of wood or other materials
- installation of fitted kitchens, staircases, shop fittings and the like
- installation of furniture
- interior completion such as ceilings, wooden wall coverings, movable partitions, etc.
- laying, tiling, hanging or fitting in buildings or other construction projects of:
  - ◆ ceramic, concrete or cut stone wall or floor tiles, ceramic stove fitting
  - ◆ parquet and other wooden floor coverings
  - ◆ carpets and linoleum floor coverings, including of rubber or plastic
  - ◆ terrazzo, marble, granite or slate floor or wall coverings
  - ◆ wallpaper
- interior and exterior painting of buildings
- painting of civil engineering structures
- installation of glass, mirrors, etc.
- cleaning of new buildings after construction
- other building completion work n.e.c.

This class also includes:

- interior installation of shops, mobile homes, boats etc.

*This class excludes:*

- *painting of roads, see 4210*
- *installation of automated and revolving doors, see 4329*
- *general interior cleaning of buildings and other structures, see 8121*
- *specialized interior and exterior cleaning of buildings, see 8129*
- *activities of interior decoration designers, see 7410*
- *assembly of self-standing furniture, see 9524*

**439 Other specialized construction activities**

See class 4390.

**4390 Other specialized construction activities**

This class includes:

- construction activities specializing in one aspect common to different kind of structures, requiring specialized skill or equipment:
  - ◆ construction of foundations, including pile driving
  - ◆ damp proofing and water proofing works
  - ◆ de-humidification of buildings
  - ◆ shaft sinking
  - ◆ erection of non-self-manufactured steel elements
  - ◆ steel bending
  - ◆ bricklaying and stone setting
  - ◆ roof covering for residential buildings
  - ◆ scaffolds and work platform erecting and dismantling, excluding renting of scaffolds and work platforms

- ♦ erection of chimneys and industrial ovens
- ♦ work with specialist access requirements necessitating climbing skills and the use of related equipment, e.g. working at height on tall structures
- subsurface work
- construction of outdoor swimming pools
- steam cleaning, sand blasting and similar activities for building exteriors
- renting of cranes with operator

*This class excludes:*

- renting of construction machinery and equipment without operator, see 7730

## Section G

### Wholesale and retail trade; repair of motor vehicles and motorcycles

This section includes wholesale and retail sale (i.e. sale without transformation) of any type of goods and the rendering of services incidental to the sale of these goods. Wholesaling and retailing are the final steps in the distribution of goods. Goods bought and sold are also referred to as merchandise.

Also included in this section are the repair of motor vehicles and motorcycles.

Sale without transformation is considered to include the usual operations (or manipulations) associated with trade, for example sorting, grading and assembling of goods, mixing (blending) of goods (for example sand), bottling (with or without preceding bottle cleaning), packing, breaking bulk and repacking for distribution in smaller lots, storage (whether or not frozen or chilled), cleaning and drying of agricultural products, cutting out of wood fibreboards or metal sheets as secondary activities.

Division 45 includes all activities related to the sale and repair of motor vehicles and motorcycles, while divisions 46 and 47 include all other sale activities. The distinction between division 46 (wholesale) and division 47 (retail sale) is based on the predominant type of customer.

Wholesale is the resale (sale without transformation) of new and used goods to retailers, to industrial, commercial, institutional or professional users, or to other wholesalers, or involves acting as an agent or broker in buying goods for, or selling goods to, such persons or companies. The principal types of businesses included are merchant wholesalers, i.e. wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, exporters, importers, and cooperative buying associations, sales branches and sales offices (but not retail stores) that are maintained by manufacturing or mining units apart from their plants or mines for the purpose of marketing their products and that do not merely take orders to be filled by direct shipments from the plants or mines. Also included are merchandise brokers, commission merchants and agents and assemblers, buyers and cooperative associations engaged in the marketing of farm products. Wholesalers frequently physically assemble, sort and grade goods in large lots, break bulk, repack and redistribute in smaller lots, for example pharmaceuticals; store, refrigerate, deliver and install goods, engage in sales promotion for their customers and label design.

Retailing is the resale (sale without transformation) of new and used goods mainly to the general public for personal or household consumption or utilization, by shops, department stores, stalls, mail-order houses, door-to-door sales persons, hawkers and peddlers, consumer cooperatives, auction houses etc. Most retailers take title to the goods they sell, but some act as agents for a principal and sell either on consignment or on a commission basis.

#### 45 Wholesale and retail trade and repair of motor vehicles and motorcycles

This division includes all activities (except manufacture and renting) related to motor vehicles and motorcycles, including lorries and trucks, such as the wholesale and retail sale of new and second-hand vehicles, the repair and maintenance of vehicles and the

wholesale and retail sale of parts and accessories for motor vehicles and motorcycles. Also included are activities of commission agents involved in wholesale or retail sale of vehicles.

This division also includes activities such as washing, polishing of vehicles etc.

This division does not include the retail sale of automotive fuel and lubricating or cooling products or the renting of motor vehicles or motorcycles.

#### **451 Sale of motor vehicles**

See class 4510.

#### **4510 Sale of motor vehicles**

This class includes:

— wholesale and retail sale of new and used vehicles:

- ◆ passenger motor vehicles, including specialized passenger motor vehicles such as ambulances and minibuses, etc.
- ◆ lorries, trailers and semi-trailers
- ◆ camping vehicles such as caravans and motor homes

This class also includes:

- wholesale and retail sale of off-road motor vehicles (jeeps, etc.)
- wholesale and retail sale by commission agents
- car auctions

*This class excludes:*

- wholesale and retail sale of parts and accessories for motor vehicles, see 4530
- renting of motor vehicles with driver, see 4922
- renting of trucks with driver, see 4923
- renting of motor vehicles and trucks without driver, see 7710

#### **452 Maintenance and repair of motor vehicles**

See class 4520.

#### **4520 Maintenance and repair of motor vehicles**

This class includes:

— maintenance and repair of motor vehicles:

- ◆ mechanical repairs
- ◆ electrical repairs
- ◆ electronic injection systems repair
- ◆ ordinary servicing
- ◆ bodywork repair
- ◆ repair of motor vehicle parts
- ◆ washing, polishing, etc.
- ◆ spraying and painting
- ◆ repair of screens and windows
- ◆ repair of motor vehicle seats

— tyre and tube repair, fitting or replacement

— anti-rust treatment

— installation of parts and accessories not as part of the manufacturing process

*This class excludes:*

— retreading and rebuilding of tyres, see 2211

#### **453 Sale of motor vehicle parts and accessories**

See class 4530.

#### **4530 Sale of motor vehicle parts and accessories**

This class includes:

— wholesale and retail sale of all kinds of parts, components, supplies, tools and accessories for motor vehicles, such as:

- ♦ rubber tires and inner tubes for tires
- ♦ spark plugs, batteries, lighting equipment and electrical parts

*This class excludes:*

— retail sale of automotive fuel, see 4730

#### **454 Sale, maintenance and repair of motorcycles and related parts and accessories**

See class 4540.

#### **4540 Sale, maintenance and repair of motorcycles and related parts and accessories**

This class includes:

- wholesale and retail sale of motorcycles, including mopeds
- wholesale and retail sale of parts and accessories for motorcycles (including by commission agents and mail order houses)
- maintenance and repair of motorcycles

*This class excludes:*

— wholesale of bicycles and related parts and accessories, see 4649

— retail sale of bicycles and related parts and accessories, see 4763

— renting of motorcycles, see 7730

— repair and maintenance of bicycles, see 9529

#### **46 Wholesale trade, except of motor vehicles and motorcycles**

This division includes wholesale trade on own account or on a fee or contract basis (commission trade) related to domestic wholesale trade as well as international wholesale trade (import/export).

Wholesale is the resale (sale without transformation) of new and used goods to retailers, business-to-business trade, such as to industrial, commercial, institutional or professional users, or resale to other wholesalers, or involves acting as an agent or broker in buying goods for, or selling goods to, such persons or companies. The principal types of businesses included are merchant wholesalers, i.e. wholesalers who take title to the goods they sell, such as wholesale merchants or jobbers, industrial distributors, exporters, importers, and cooperative buying associations, sales branches and sales offices (but not retail stores) that are maintained by manufacturing or mining units apart from their plants or mines for the purpose of marketing their products and that do not merely take orders to be filled by direct shipments from the plants or mines. Also included are mer-

chandise brokers, commission merchants and agents and assemblers, buyers and cooperative associations engaged in the marketing of farm products.

Wholesalers frequently physically assemble, sort and grade goods in large lots, break bulk, repack and redistribute in smaller lots, for example pharmaceuticals; store, refrigerate, deliver and install goods, engage in sales promotion for their customers and label design.

This division excludes the wholesale of motor vehicles, caravans and motorcycles, as well as motor vehicle accessories (see division 45), the renting and leasing of goods (see division 77) and the packing of solid goods and bottling of liquid or gaseous goods, including blending and filtering, for third parties (see class 8292).

#### **461 Wholesale on a fee or contract basis**

See class 4610.

#### **4610 Wholesale on a fee or contract basis**

This class includes:

- activities of commission agents and all other wholesalers who trade on behalf and on the account of others
- activities of those involved in bringing sellers and buyers together or undertaking commercial transactions on behalf of a principal, including on the internet
- such agents involved in the sale of:
  - ◆ agricultural raw materials, live animals, textile raw materials and semi-finished goods
  - ◆ fuels, ores, metals and industrial chemicals, including fertilizers
  - ◆ food, beverages and tobacco
  - ◆ textiles, clothing, fur, footwear and leather goods
  - ◆ timber and building materials
  - ◆ machinery, including office machinery and computers, industrial equipment, ships and aircraft
  - ◆ furniture, household goods and hardware

This class also includes:

- activities of wholesale auctioneering houses

*This class excludes:*

- *wholesale trade in own name, see groups 462 to 469*
- *activities of commission agents for motor vehicles, see 4510*
- *auctions of motor vehicles, see 4510*
- *retail sale by non-store commission agents, see 4799*
- *activities of insurance agents, see 6622*
- *activities of real estate agents, see 6820*

#### **462 Wholesale of agricultural raw materials and live animals**

See class 4620.

#### **4620 Wholesale of agricultural raw materials and live animals**

This class includes:

- wholesale of grains and seeds

- wholesale of oleaginous fruits
- wholesale of flowers and plants
- wholesale of unmanufactured tobacco
- wholesale of live animals
- wholesale of hides and skins
- wholesale of leather
- wholesale of agricultural material, waste, residues and by-products used for animal feed

*This class excludes:*

- wholesale of textile fibres, see 4669

#### **463 Wholesale of food, beverages and tobacco**

See class 4630.

#### **4630 Wholesale of food, beverages and tobacco**

This class includes:

- wholesale of fruit and vegetables
- wholesale of dairy products
- wholesale of eggs and egg products
- wholesale of edible oils and fats of animal or vegetable origin
- wholesale of meat and meat products
- wholesale of fishery products
- wholesale of sugar, chocolate and sugar confectionery
- wholesale of bakery products
- wholesale of beverages
- wholesale of coffee, tea, cocoa and spices
- wholesale of tobacco products

This class also includes:

- buying of wine in bulk and bottling without transformation
- wholesale of feed for pet animals

*This class excludes:*

- blending of wine or distilled spirits, see 1101, 1102

#### **464 Wholesale of household goods**

This group includes the wholesale of household goods, including textiles.

#### **4641 Wholesale of textiles, clothing and footwear**

This class includes:

- wholesale of yarn
- wholesale of fabrics
- wholesale of household linen etc.
- wholesale of haberdashery: needles, sewing thread etc.
- wholesale of clothing, including sports clothes
- wholesale of clothing accessories such as gloves, ties and braces

- wholesale of footwear
- wholesale of fur articles
- wholesale of umbrellas

*This class excludes:*

- *wholesale of jewellery and leather goods, see 4649*
- *wholesale of textile fibres, see 4669*

#### **4649 Wholesale of other household goods**

This class includes:

- wholesale of household furniture
- wholesale of household appliances
- wholesale of consumer electronics:
  - ◆ radio and TV equipment
  - ◆ CD and DVD players and recorders
  - ◆ stereo equipment
  - ◆ video game consoles
- wholesale of lighting equipment
- wholesale of cutlery
- wholesale of china and glassware
- wholesale of woodenware, wickerwork and corkware etc.
- wholesale of pharmaceutical and medical goods
- wholesale of perfumeries, cosmetics and soaps
- wholesale of bicycles and their parts and accessories
- wholesale of stationery, books, magazines and newspapers
- wholesale of photographic and optical goods (e.g. sunglasses, binoculars, magnifying glasses)
- wholesale of recorded audio and video tapes, CDs, DVDs
- wholesale of leather goods and travel accessories
- wholesale of watches, clocks and jewellery
- wholesale of musical instruments, games and toys, sports goods

*This class excludes:*

- *wholesale of blank audio and video tapes, CDs, DVDs, see 4652*
- *wholesale of radio and TV broadcasting equipment, see 4652*
- *wholesale of office furniture, see 4659*

#### **465 Wholesale of machinery, equipment and supplies**

This group includes the wholesale of computers, telecommunications equipment, specialized machinery for all kinds of industries and general-purpose machinery.

#### **4651 Wholesale of computers, computer peripheral equipment and software**

This class includes:

- wholesale of computers and computer peripheral equipment
- wholesale of software

*This class excludes:*

- *wholesale of electronic parts, see 4652*



- *wholesale of office machinery and equipment, (except computers and peripheral equipment), see 4659*
- *wholesale of computer-controlled machinery, see 4659*

#### **4652 Wholesale of electronic and telecommunications equipment and parts**

This class includes:

- wholesale of electronic valves and tubes
- wholesale of semiconductor devices
- wholesale of microchips and integrated circuits
- wholesale of printed circuits
- wholesale of blank audio and video tapes and diskettes, magnetic and optical disks (CDs, DVDs)
- wholesale of telephone and communications equipment

*This class excludes:*

- *wholesale of recorded audio and video tapes, CDs, DVDs, see 4649*
- *wholesale of consumer electronics, see 4649*
- *wholesale of computers and computer peripheral equipment, see 4651*

#### **4653 Wholesale of agricultural machinery, equipment and supplies**

This class includes:

- wholesale of agricultural machinery and equipment:
  - ♦ ploughs, manure spreaders, seeders
  - ♦ harvesters
  - ♦ threshers
  - ♦ milking machines
  - ♦ poultry-keeping machines, bee-keeping machines
  - ♦ tractors used in agriculture and forestry

This class also includes:

- lawn mowers however operated

#### **4659 Wholesale of other machinery and equipment**

This class includes:

- wholesale of office machinery and equipment, except computers and computer peripheral equipment
- wholesale of office furniture
- wholesale of transport equipment except motor vehicles, motorcycles and bicycles
- wholesale of production-line robots
- wholesale of wires and switches and other installation equipment for industrial use
- wholesale of other electrical material such as electrical motors, transformers
- wholesale of machine tools of any type and for any material
- wholesale of other machinery n.e.c. for use in industry, trade and navigation and other services

This class also includes:

- wholesale of computer-controlled machine tools
- wholesale of computer-controlled machinery for the textile industry and of computer-controlled sewing and knitting machines

— wholesale of measuring instruments and equipment

*This class excludes:*

— wholesale of motor vehicles, trailers and caravans, see 4510

— wholesale of motor vehicle parts, see 4530

— wholesale of motorcycles, see 4540

— wholesale of bicycles, see 4649

— wholesale of computers and peripheral equipment, see 4651

— wholesale of electronic parts and telephone and communications equipment, see 4652

#### **466 Other specialized wholesale**

This group includes other specialized wholesale activities not classified in other groups of this division. This includes the wholesale of intermediate products, except agricultural, typically not for household use.

#### **4661 Wholesale of solid, liquid and gaseous fuels and related products**

This class includes:

— wholesale of fuels, greases, lubricants, oils such as:

- ◆ charcoal, coal, coke, fuel wood, naphtha
- ◆ crude petroleum, crude oil, diesel fuel, gasoline, fuel oil, heating oil, kerosene
- ◆ liquefied petroleum gases, butane and propane gas
- ◆ lubricating oils and greases, refined petroleum products

#### **4662 Wholesale of metals and metal ores**

This class includes:

- wholesale of ferrous and non-ferrous metal ores
- wholesale of ferrous and non-ferrous metals in primary forms
- wholesale of ferrous and non-ferrous semi-finished metal products n.e.c.
- wholesale of gold and other precious metals

*This class excludes:*

— wholesale of metal scrap, see 4669

#### **4663 Wholesale of construction materials, hardware, plumbing and heating equipment and supplies**

This class includes:

- wholesale of wood in the rough
- wholesale of products of primary processing of wood
- wholesale of paint and varnish
- wholesale of construction materials:
  - ◆ sand, gravel
- wholesale of wallpaper and floor coverings
- wholesale of flat glass
- wholesale of hardware and locks
- wholesale of fittings and fixtures
- wholesale of hot water heaters

- wholesale of sanitary equipment:
  - ◆ baths, washbasins, toilets and other sanitary porcelain
- wholesale of sanitary installation equipment:
  - ◆ tubes, pipes, fittings, taps, T-pieces, connections, rubber pipes etc.
- wholesale of tools such as hammers, saws, screwdrivers and other hand tools

#### **4669 Wholesale of waste and scrap and other products n.e.c.**

This class includes:

- wholesale of industrial chemicals:
  - ◆ aniline, printing ink, essential oils, industrial gases, chemical glues, colouring matter, synthetic resin, methanol, paraffin, scents and flavourings, soda, industrial salt, acids and sulphurs, starch derivatives etc.
- wholesale of fertilizers and agrochemical products
- wholesale of plastic materials in primary forms
- wholesale of rubber
- wholesale of textile fibres etc.
- wholesale of paper in bulk
- wholesale of precious stones
- wholesale of metal and non-metal waste and scrap and materials for recycling, including collecting, sorting, separating, stripping of used goods such as cars in order to obtain reusable parts, packing and repacking, storage and delivery, but without a real transformation process. Additionally, the purchased and sold waste has a remaining value.

This class includes:

- dismantling of automobiles, computers, televisions and other equipment to obtain and re-sell usable parts

*This class excludes:*

- *collection of household and industrial waste, see group 381*
- *treatment of waste, not for a further use in an industrial manufacturing process, but with the aim of disposal, see group 382*
- *processing of waste and other articles into secondary raw material when a real transformation process is required (the resulting secondary raw material is fit for direct use in an industrial manufacturing process, but is not a final product), see 3830*
- *dismantling of automobiles, computers, televisions and other equipment for materials recovery, see 3830*
- *shredding of cars by means of a mechanical process, see 3830*
- *ship-breaking, see 3830*
- *retail sale of second-hand goods, see 4774*

#### **469 Non-specialized wholesale trade**

See class 4690.

#### **4690 Non-specialized wholesale trade**

This class includes:

- wholesale of a variety of goods without any particular specialization

**47 Retail trade, except of motor vehicles and motorcycles**

This division includes the resale (sale without transformation) of new and used goods mainly to the general public for personal or household consumption or utilization, by shops, department stores, stalls, mail-order houses, hawkers and peddlers, consumer cooperatives etc.

Retail trade is classified first by type of sale outlet (retail trade in stores: groups 471 to 477; retail trade not in stores: groups 478 and 479). Retail trade in stores includes the retail sale of used goods (class 4774). For retail sale in stores, there exists a further distinction between specialized retail sale (groups 472 to 477) and non-specialized retail sale (group 471). The above groups are further subdivided by the range of products sold. Sale not via stores is subdivided according to the forms of trade, such as retail sale via stalls and markets (group 478) and other non-store retail sale, e.g. mail order, door-to-door, by vending machines etc. (group 479).

The goods sold in this division are limited to goods usually referred to as consumer goods or retail goods. Therefore goods not usually entering the retail trade, such as cereal grains, ores, industrial machinery etc., are excluded. This division also includes units engaged primarily in selling to the general public, from displayed goods, products such as personal computers, stationery, paint or timber, although these sales may not be for personal or household use. Some processing of goods may be involved, but only incidental to selling, e.g. sorting or repackaging of goods, installation of a domestic appliance etc.

This division also includes the retail sale by commission agents and activities of retail auctioning houses.

This division excludes:

- sale of farmers' products by farmers, see division 01
- manufacture and sale of goods, which is generally classified as manufacturing in divisions 10–32
- sale of motor vehicles, motorcycles and their parts, see division 45
- trade in cereal grains, ores, crude petroleum, industrial chemicals, iron and steel and industrial machinery and equipment, see division 46
- sale of food and drinks for consumption on the premises and sale of takeaway food, see division 56
- renting of personal and household goods to the general public, see group 772

**471 Retail sale in non-specialized stores**

This group includes the retail sale of a variety of product lines in the same unit (non-specialized stores), such as supermarkets or department stores.

**4711 Retail sale in non-specialized stores with food, beverages or tobacco predominating**

This class includes:

- retail sale of a large variety of goods of which, however, food products, beverages or tobacco should be predominant, such as:
  - ♦ retail sale activities of general stores that have, apart from their main sales of food products, beverages or tobacco, several other types of goods such as wearing apparel, furniture, appliances, hardware, cosmetics etc.

*This class excludes:*

- retail sale of fuel in combination with food, beverages etc., with fuel sales dominating, see 4730

**4719 Other retail sale in non-specialized stores**

This class includes:

—retail sale of a large variety of goods of which food products, beverages or tobacco are not predominant, such as:

- ◆ retail sale activities of department stores carrying a general line of goods, including wearing apparel, furniture, appliances, hardware, cosmetics, jewellery, toys, sports goods etc.

**472 Retail sale of food, beverages and tobacco in specialized stores**

This group includes retail sale in stores specialized in selling food, beverage or tobacco products.

**4721 Retail sale of food in specialized stores**

This class includes:

—retail sale of any the following types of goods:

- ◆ fresh or preserved fruit and vegetables
- ◆ dairy products and eggs
- ◆ meat and meat products (including poultry)
- ◆ fish, other seafood and products thereof
- ◆ bakery products
- ◆ sugar confectionery
- ◆ other food products

*This class excludes:*

—*manufacturing of bakery products, i.e. baking on premises, see 1071*

**4722 Retail sale of beverages in specialized stores**

This class includes:

—retail sale of beverages (not for consumption on the premises):

- ◆ alcoholic beverages
- ◆ non-alcoholic beverages

**4723 Retail sale of tobacco products in specialized stores**

This class includes:

- retail sale of tobacco
- retail sale of tobacco products

**473 Retail sale of automotive fuel in specialized stores**

See class 4730.

**4730 Retail sale of automotive fuel in specialized stores**

This class includes:

—retail sale of fuel for motor vehicles and motorcycles

This class also includes:

—retail sale of lubricating products and cooling products for motor vehicles

*This class excludes:*

- *wholesale of fuels, see 4661*
- *retail sale of fuel in combination with food, beverages etc., with food and beverage sales dominating, see 4711*
- *retail sale of liquefied petroleum gas for cooking or heating, see 4773*

#### **474 Retail sale of information and communications equipment in specialized stores**

This group includes the retail sale of information and communications equipment, such as computers and peripheral equipment, telecommunications equipment and consumer electronics, by specialized stores.

#### **4741 Retail sale of computers, peripheral units, software and telecommunications equipment in specialized stores**

This class includes:

- retail sale of computers
- retail sale of computer peripheral equipment
- retail sale of video game consoles
- retail sale of non-customized software, including video games
- retail sale of telecommunication equipment

*This class excludes:*

- *retail sale of blank tapes and disks, see 4762*

#### **4742 Retail sale of audio and video equipment in specialized stores**

This class includes:

- retail sale of radio and television equipment
- retail sale of stereo equipment
- retail sale of CD and DVD players and recorders

#### **475 Retail sale of other household equipment in specialized stores**

This group includes the retail sale of household equipment, such as textiles, hardware, carpets, electrical appliances or furniture, in specialized stores.

#### **4751 Retail sale of textiles in specialized stores**

This class includes:

- retail sale of fabrics
- retail sale of knitting yarn
- retail sale of basic materials for rug, tapestry or embroidery making
- retail sale of textiles
- retail sale of haberdashery: needles, sewing thread etc.

*This class excludes:*

- *retail sale of clothing, see 4771*

#### **4752 Retail sale of hardware, paints and glass in specialized stores**

This class includes:

- retail sale of hardware

- retail sale of paints, varnishes and lacquers
- retail sale of flat glass
- retail sale of other building material such as bricks, wood, sanitary equipment
- retail sale of do-it-yourself material and equipment

This class also includes:

- retail sale of lawnmowers, however operated
- retail sale of saunas

#### **4753 Retail sale of carpets, rugs, wall and floor coverings in specialized stores**

This class includes:

- retail sale of carpets and rugs
- retail sale of curtains and net curtains
- retail sale of wallpaper and floor coverings

*This class excludes:*

- retail sale of cork floor tiles, see 4752

#### **4759 Retail sale of electrical household appliances, furniture, lighting equipment and other household articles in specialized stores**

This class includes:

- retail sale of household furniture
- retail sale of articles for lighting
- retail sale of household utensils and cutlery, crockery, glassware, china and pottery
- retail sale of wooden, cork and wickerwork goods
- retail sale of household appliances
- retail sale of musical instruments and scores
- retail sale of security systems, such as locking devices, safes, and vaults, without installation or maintenance services
- retail sale of household articles and equipment n.e.c.

*This class excludes:*

- retail sale of antiques, see 4774

#### **476 Retail sale of cultural and recreation goods in specialized stores**

This group includes the retail sale in specialized stores of cultural and recreation goods, such as books, newspapers, music and video recordings, sporting equipment, games and toys.

#### **4761 Retail sale of books, newspapers and stationary in specialized stores**

This class includes:

- retail sale of books of all kinds
- retail sale of newspapers and stationery

This class also includes:

- retail sale of office supplies such as pens, pencils, paper etc.

*This class excludes:*

- retail sale of second-hand or antique books, see 4774

**4762 Retail sale of music and video recordings in specialized stores**

This class includes:

- retail sale of musical records, audio tapes, compact discs and cassettes
- retail sale of video tapes and DVDs

This class also includes:

- retail sale of blank tapes and discs

**4763 Retail sale of sporting equipment in specialized stores**

This class includes:

- retail sale of sports goods, fishing gear, camping goods, boats and bicycles

**4764 Retail sale of games and toys in specialized stores**

This class includes:

- retail sale of games and toys, made of all materials

*This class excludes:*

- retail sale of video game consoles, see 4741
- retail sale of non-customized software, including video games, see 4741

**477 Retail sale of other goods in specialized stores**

This group includes the sale in specialized stores carrying a particular line of products not included in other parts of the classification, such as clothing, footwear and leather articles, pharmaceutical and medical goods, watches, souvenirs, cleaning materials, weapons, flowers and pets and others. Also included is the retail sale of used goods in specialized stores.

**4771 Retail sale of clothing, footwear and leather articles in specialized stores**

This class includes:

- retail sale of articles of clothing
- retail sale of articles of fur
- retail sale of clothing accessories such as gloves, ties, braces etc.
- retail sale of umbrellas
- retail sale of footwear
- retail sale of leather goods
- retail sale of travel accessories of leather and leather substitutes

*This class excludes:*

- retail sale of textiles, see 4751

**4772 Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles in specialized stores**

This class includes:

- retail sale of pharmaceuticals
- retail sale of medical and orthopaedic goods
- retail sale of perfumery and cosmetic articles



**4773 Other retail sale of new goods in specialized stores**

This class includes:

- retail sale of photographic, optical and precision equipment
- activities of opticians
- retail sale of watches, clocks and jewellery
- retail sale of flowers, plants, seeds, fertilizers, pet animals and pet food
- retail sale of souvenirs, craftwork and religious articles
- activities of commercial art galleries
- retail sale of household fuel oil, bottled gas, coal and fuel wood
- retail sale of cleaning materials
- retail sale of weapons and ammunition
- retail sale of stamps and coins
- retail sale of non-food products n.e.c.

**4774 Retail sale of second-hand goods**

This class includes:

- retail sale of second-hand books
- retail sale of other second-hand goods
- retail sale of antiques
- activities of auctioning houses (retail)

*This class excludes:*

- retail sale of second-hand motor vehicles, see 4510
- activities of Internet auctions and other non-store auctions (retail), see 4791, 4799
- activities of pawn shops, see 6492

**478 Retail sale via stalls and markets**

This group includes the retail sale of any kind of new or second hand product in a usually movable stall either along a public road or at a fixed marketplace.

**4781 Retail sale via stalls and markets of food, beverages and tobacco products**

This class includes:

- retail sale of food, beverages and tobacco products via stalls or markets

*This class excludes:*

- retail sale of prepared food for immediate consumption (mobile food vendors), see 5610

**4782 Retail sale via stalls and markets of textiles, clothing and footwear**

This class includes:

- retail sale of textiles, clothing and footwear via stalls or markets

**4789 Retail sale via stalls and markets of other goods**

This class includes:

- retail sale of other goods via stalls or markets, such as:
  - ♦ carpets and rugs

- ◆ books
- ◆ games and toys
- ◆ household appliances and consumer electronics
- ◆ music and video recordings

#### **479 Retail trade not in stores, stalls or markets**

This group includes retail sale activities by mail order houses, over the Internet, through door-to-door sales, vending machines etc.

##### **4791 Retail sale via mail order houses or via Internet**

This class includes retail sale activities via mail order houses or via Internet, i.e. retail sale activities where the buyer makes his choice on the basis of advertisements, catalogues, information provided on a website, models or any other means of advertising and places his order by mail, phone or over the Internet (usually through special means provided by a website). The products purchased can be either directly downloaded from the Internet or physically delivered to the customer.

This class includes:

- retail sale of any kind of product by mail order
- retail sale of any kind of product over the Internet

This class also includes:

- direct sale via television, radio and telephone
- Internet retail auctions

##### **4799 Other retail sale not in stores, stalls or markets**

This class includes:

- retail sale of any kind of product in any way that is not included in previous classes:
  - ◆ by direct sales or door-to-door sales persons
  - ◆ through vending machines etc.
- direct selling of fuel (heating oil, fire wood etc.), delivered directly to the customers premises
- activities of non-store auctions (retail)
- retail sale by (non-store) commission agents

*This class excludes:*

- *delivery of products by stores, see groups 471–477*

## **Section H Transportation and storage**

This section includes the provision of passenger or freight transport, whether scheduled or not, by rail, pipeline, road, water or air and associated activities such as terminal and parking facilities, cargo handling, storage etc. Included in this section is the renting of transport equipment with driver or operator. Also included are postal and courier activities.

This section excludes maintenance and repair of motor vehicles and other transportation equipment (see classes 4520 and 3315, respectively), the construction, maintenance and repair of roads, railroads, harbours, airfields (see classes 4210 and 4290), as well as the renting of transport equipment without driver or operator (see classes 7710 and 7730).

**49 Land transport and transport via pipelines**

This division includes the transport of passengers and freight via road and rail, as well as freight transport via pipelines.

**491 Transport via railways**

This group includes rail transportation of passengers and/or freight using railroad rolling stock on mainline networks, usually spread over an extensive geographic area. Freight rail transport over short-line freight railroads is included here.

*This group excludes:*

- urban and suburban passenger land transport, see 4921
- related activities such as switching and shunting, see 5221
- operation of railroad infrastructure, see 5221

**4911 Passenger rail transport, interurban**

This class includes:

- passenger transport by inter-urban railways
- operation of sleeping cars or dining cars as an integrated operation of railway companies

*This class excludes:*

- passenger transport by urban and suburban transit systems, see 4921
- passenger terminal activities, see 5221
- operation of sleeping cars or dining cars when operated by separate units, see 5590, 5610

**4912 Freight rail transport**

This class includes:

- freight transport on mainline rail networks as well as short-line freight railroads

*This class excludes:*

- storage and warehousing, see 5210
- freight terminal activities, see 5221
- cargo handling, see 5224

**492 Other land transport**

This group includes all land-based transport activities other than rail transport. However, rail transport as part of urban or suburban transport systems is included here.

**4921 Urban and suburban passenger land transport**

This class includes:

- land transport of passengers by urban or suburban transport systems. This may include different modes of land transport, such as by motorbus, tramway, streetcar, trolley bus, underground and elevated railways etc. The transport is carried out on scheduled routes normally following a fixed time schedule, entailing the picking up and setting down of passengers at normally fixed stops.

This class also includes:

- town-to-airport or town-to-station lines

— operation of funicular railways, aerial cableways etc. if part of urban or suburban transit systems

*This class excludes:*

— passenger transport by inter-urban railways, see 4911

#### **4922 Other passenger land transport**

This class includes:

— other passenger road transport:

- ◆ scheduled long-distance bus services
- ◆ charters, excursions and other occasional coach services
- ◆ taxi operation
- ◆ airport shuttles

— operation of telfers (téléphériques), funiculars, ski and cable lifts if not part of urban or suburban transit systems

This class also includes:

- other renting of private cars with driver
- operation of school buses and buses for transport of employees
- passenger transport by man- or animal-drawn vehicles

*This class excludes:*

— ambulance transport, see 8690

#### **4923 Freight transport by road**

This class includes:

— all freight transport operations by road:

- ◆ logging haulage
- ◆ stock haulage
- ◆ refrigerated haulage
- ◆ heavy haulage
- ◆ bulk haulage, including haulage in tanker trucks
- ◆ haulage of automobiles
- ◆ transport of waste and waste materials, without collection or disposal

This class also includes:

- furniture removal
- renting of trucks with driver
- freight transport by man or animal-drawn vehicles

*This class excludes:*

— log hauling within the forest, as part of logging operations, see 0240

— distribution of water by trucks, see 3600

— operation of terminal facilities for handling freight, see 5221

— crating and packing services for transport, see 5229

— post and courier activities, see 5310, 5320

— waste transport as integrated part of waste collection activities, see 3811, 3812

**493 Transport via pipeline**

See class 4930.

**4930 Transport via pipeline**

This class includes:

—transport of gases, liquids, water, slurry and other commodities via pipelines

This class also includes:

—operation of pump stations

*This class excludes:*

—*distribution of natural or manufactured gas, water or steam, see 3520, 3530, 3600*

—*transport of water, liquids etc. by trucks, see 4923*

**50 Water transport**

This division includes the transport of passengers or freight over water, whether scheduled or not. Also included are the operation of towing or pushing boats, excursion, cruise or sightseeing boats, ferries, water taxis etc. Although the location is an indicator for the separation between sea and inland water transport, the deciding factor is the type of vessel used. All transport on sea-going vessels is classified in group 501, while transport using other vessels is classified in group 502.

This division excludes restaurant and bar activities on board ships (see class 5610, 5630), if carried out by separate units.

**501 Sea and coastal water transport**

This group includes the transport of passengers or freight on vessels designed for operating on sea or coastal waters. Also included is the transport of passengers or freight on great lakes etc. when similar types of vessels are used.

**5011 Sea and coastal passenger water transport**

This class includes:

—transport of passengers over seas and coastal waters, whether scheduled or not:

- ◆ operation of excursion, cruise or sightseeing boats
- ◆ operation of ferries, water taxis etc.

This class also includes:

—renting of pleasure boats with crew for sea and coastal water transport (e.g. for fishing cruises)

*This class excludes:*

—*restaurant and bar activities on board ships, when provided by separate units, see 5610, 5630*

—*operation of "floating casinos"; see 9200*

**5012 Sea and coastal freight water transport**

This class includes:

—transport of freight over seas and coastal waters, whether scheduled or not

— transport by towing or pushing of barges, oil rigs etc.

*This class excludes:*

— storage of freight, see 5210

— harbour operation and other auxiliary activities such as docking, pilotage, lighterage, vessel salvage, see 5222

— cargo handling, see 5224

## **502 Inland water transport**

This group includes the transport of passengers or freight on inland waters, involving vessels that are not suitable for sea transport.

### **5021 Inland passenger water transport**

This class includes:

— transport of passenger via rivers, canals, lakes and other inland waterways, including inside harbours and ports

This class also includes:

— renting of pleasure boats with crew for inland water transport

### **5022 Inland freight water transport**

This class includes:

— transport of freight via rivers, canals, lakes and other inland waterways, including inside harbours and ports

## **51 Air transport**

This division includes the transport of passengers or freight by air or via space.

This division excludes the overhaul of aircraft or aircraft engines (see class 3315) and support activities, such as the operation of airports, (see class 5223). This division also excludes activities that make use of aircraft, but not for the purpose of transportation, such as crop spraying (see class 0161), aerial advertising (see class 7310) or aerial photography (see class 7420).

### **511 Passenger air transport**

See class 5110.

#### **5110 Passenger air transport**

This class includes:

— transport of passengers by air over regular routes and on regular schedules

— charter flights for passengers

— scenic and sightseeing flights

This class also includes:

— renting of air-transport equipment with operator for the purpose of passenger transportation

— general aviation activities, such as:

♦ transport of passengers by aero clubs for instruction or pleasure

**512 Freight air transport**

See class 5120.

**5120 Freight air transport**

This class includes:

- transport freight by air over regular routes and on regular schedules
- non-scheduled transport of freight by air
- launching of satellites and space vehicles
- space transport

This class also includes:

- renting of air-transport equipment with operator for the purpose of freight transportation

**52 Warehousing and support activities for transportation**

This division includes warehousing and support activities for transportation, such as operating of transport infrastructure (e.g. airports, harbours, tunnels, bridges, etc.), the activities of transport agencies and cargo handling.

**521 Warehousing and storage**

See class 5210.

**5210 Warehousing and storage**

This class includes:

- operation of storage and warehouse facilities for all kind of goods:
  - ♦ operation of grain silos, general merchandise warehouses, refrigerated warehouses, storage tanks etc.

This class also includes:

- storage of goods in foreign trade zones
- blast freezing

*This class excludes:*

- *parking facilities for motor vehicles, see 5221*
- *operation of self storage facilities, see 6810*
- *renting of vacant space, see 6810*

**522 Support activities for transportation**

This group includes activities supporting the transport of passengers or freight, such as operation of parts of the transport infrastructure or activities related to handling freight immediately before or after transport or between transport segments. The operation and maintenance of all transport facilities is included.

**5221 Service activities incidental to land transportation**

This class includes:

- activities related to land transport of passengers, animals or freight:

- ◆ operation of terminal facilities such as railway stations, bus stations, stations for the handling of goods
- ◆ operation of railroad infrastructure
- ◆ operation of roads, bridges, tunnels, car parks or garages, bicycle parkings
- switching and shunting
- towing and road side assistance

This class also includes:

- liquefaction of gas for transportation purposes

*This class excludes:*

- cargo handling, see 5224

### **5222 Service activities incidental to water transportation**

This class includes:

- activities related to water transport of passengers, animals or freight:
  - ◆ operation of terminal facilities such as harbours and piers
  - ◆ operation of waterway locks etc.
  - ◆ navigation, pilotage and berthing activities
  - ◆ lighterage, salvage activities
  - ◆ lighthouse activities

*This class excludes:*

- cargo handling, see 5224
- operation of marinas, see 9329

### **5223 Service activities incidental to air transportation**

This class includes:

- activities related to air transport of passengers, animals or freight:
  - ◆ operation of terminal facilities such as airway terminals etc.
  - ◆ airport and air-traffic-control activities
  - ◆ ground service activities on airfields etc.

This class also includes:

- firefighting and fire-prevention services at airports

*This class excludes:*

- cargo handling, see 5224
- operation of flying schools, see 8530, 8549

### **5224 Cargo handling**

This class includes:

- loading and unloading of goods or passengers' luggage irrespective of the mode of transport used for transportation
- stevedoring
- loading and unloading of freight railway cars

*This class excludes:*

- operation of terminal facilities, see 5221, 5222 and 5223



**5229 Other transportation support activities**

This class includes:

- forwarding of freight
- arranging or organizing of transport operations by rail, road, sea or air
- organization of group and individual consignments (including pickup and delivery of goods and grouping of consignments)
- logistics activities, i.e. planning, designing and supporting operations of transportation, warehousing and distribution
- issue and procurement of transport documents and waybills
- activities of customs agents
- activities of sea-freight forwarders and air-cargo agents
- brokerage for ship and aircraft space
- goods-handling operations, e.g. temporary crating for the sole purpose of protecting the goods during transit, uncrating, sampling, weighing of goods

*This class excludes:*

- courier activities, see 5320*
- provision of motor, marine, aviation and transport insurance, see 6512*
- activities of travel agencies, see 7911*
- activities of tour operators, see 7912*
- tourist assistance activities, see 7990*

**53 Postal and courier activities**

This division includes postal and courier activities, such as pickup, transport and delivery of letters and parcels under various arrangements. Local delivery and messenger services are also included.

**531 Postal activities**

See class 5310.

**5310 Postal activities**

This class includes the activities of postal services operating under a universal service obligation. The activities include use of the universal service infrastructure, including retail locations, sorting and processing facilities, and carrier routes to pickup and deliver the mail. The delivery can include letter-post, i.e. letters, postcards, printed papers (newspaper, periodicals, advertising items, etc.), small packets, goods or documents. Also included are other services necessary to support the universal service obligation.

This class includes:

- pickup, sorting, transport and delivery (domestic or international) of letter-post and (mail-type) parcels and packages by postal services operating under a universal service obligation. One or more modes of transport may be involved and the activity may be carried out with either self-owned (private) transport or via public transport.
- collection of letter-mail and parcels from public letter-boxes or from post offices
- distribution and delivery of mail and parcels

*This class excludes:*

- postal giro, postal savings activities and money order activities, see 6419*

**532 Courier activities**

See class 5320.

**5320 Courier activities**

This class includes courier activities not operating under a universal service obligation.

This class includes:

- pickup, sorting, transport and delivery (domestic or international) of letter-post and (mail-type) parcels and packages by firms not operating under a universal service obligation. One or more modes of transport may be involved and the activity may be carried out with either self-owned (private) transport or via public transport.
- distribution and delivery of mail and parcels

This class also includes:

- home delivery services

*This class excludes:*

- transport of freight, see (according to mode of transport) 4912, 4923, 5012, 5022, 5120

**Section I****Accommodation and food service activities**

This section includes the provision of short-stay accommodation for visitors and other travellers and the provision of complete meals and drinks fit for immediate consumption. The amount and type of supplementary services provided within this section can vary widely.

This section excludes the provision of long-term accommodation as primary residences, which is classified in Real estate activities (section L). Also excluded is the preparation of food or drinks that are either not fit for immediate consumption or that are sold through independent distribution channels, i.e. through wholesale or retail trade activities. The preparation of these foods is classified in Manufacturing (section C).

**55 Accommodation**

This division includes the provision of short-stay accommodation for visitors and other travellers. Also included is the provision of longer-term accommodation for students, workers and similar individuals. Some units may provide only accommodation while others provide a combination of accommodation, meals and/or recreational facilities.

This division excludes activities related to the provision of long-term primary residences in facilities such as apartments typically leased on a monthly or annual basis classified in Real Estate (section L).

**551 Short term accommodation activities**

See class 5510.

**5510 Short term accommodation activities**

This class includes the provision of accommodation, typically on a daily or weekly basis, principally for short stay by visitors. This includes the provision of furnished accommodation in guest rooms and suites or complete self-contained units with kitchens, with or without daily or other regular housekeeping services, and may often include a range of additional services such as food and beverage services, parking, laundry services, swim-

ming pools and exercise rooms, recreational facilities and conference and convention facilities.

This class includes the provision of short-term accommodation provided by:

- hotels
- resort hotels
- suite / apartment hotels
- motels
- motor hotels
- guesthouses
- pensions
- bed and breakfast units
- visitor flats and bungalows
- time-share units
- holiday homes
- chalets, housekeeping cottages and cabins
- youth hostels and mountain refuges

*This class excludes:*

- provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis, see division 68

## **552 Camping grounds, recreational vehicle parks and trailer parks**

See class 5520.

### **5520 Camping grounds, recreational vehicle parks and trailer parks**

This class includes:

- provision of accommodation in campgrounds, trailer parks, recreational camps and fishing and hunting camps for short stay visitors
- provision of space and facilities for recreational vehicles

This class also includes accommodation provided by:

- protective shelters or plain bivouac facilities for placing tents and/or sleeping bags

## **559 Other accommodation**

See class 5590.

### **5590 Other accommodation**

This class includes the provision of temporary or longer-term accommodation in single or shared rooms or dormitories for students, migrant (seasonal) workers and other individuals.

This class includes accommodation provided by:

- student residences
- school dormitories
- workers hostels
- rooming and boarding houses
- railway sleeping cars

**56 Food and beverage service activities**

This division includes food and beverage serving activities providing complete meals or drinks fit for immediate consumption, whether in traditional restaurants, self-service or take-away restaurants, whether as permanent or temporary stands with or without seating. Decisive is the fact that meals fit for immediate consumption are offered, not the kind of facility providing them.

Excluded is the production of meals not fit for immediate consumption or not planned to be consumed immediately or of prepared food which is not considered to be a meal (see divisions 10: Manufacture of food products and 11: Manufacture of beverages). Also excluded is the sale of not self-manufactured food that is not considered to be a meal or of meals that are not fit for immediate consumption (see section G: Wholesale and retail trade; ...).

**561 Restaurants and mobile food service activities**

See class 5610.

**5610 Restaurants and mobile food service activities**

This class includes the provision of food services to customers, whether they are served while seated or serve themselves from a display of items, whether they eat the prepared meals on the premises, take them out or have them delivered. This includes the preparation and serving of meals for immediate consumption from motorized vehicles or non-motorized carts.

This class includes activities of:

- restaurants
- cafeterias
- fast-food restaurants
- pizza delivery
- take-out eating places
- ice cream truck vendors
- mobile food carts
- food preparation in market stalls

This class also includes:

- restaurant and bar activities connected to transportation, when carried out by separate units

*This class excludes:*

- concession operation of eating facilities, see 5629

**562 Event catering and other food service activities**

This group includes catering activities for individual events or for a specified period of time and the operation of food concessions, such as at sports or similar facilities.

**5621 Event catering**

This class includes the provision of food services based on contractual arrangements with the customer, at the location specified by the customer, for a specific event.

This class includes:

- event catering

*This class excludes:*

- *manufacture of perishable food items for resale, see 1079*
- *retail sale of perishable food items, see division 47*

### **5629 Other food service activities**

This class includes industrial catering, i.e. the provision of food services based on contractual arrangements with the customer, for a specific period of time.

Also included is the operation of food concessions at sports and similar facilities. The food is often prepared in a central unit.

This class includes:

- activities of food service contractors (e.g. for transportation companies)
- operation of food concessions at sports and similar facilities
- operation of canteens or cafeterias (e.g. for factories, offices, hospitals or schools) on a concession basis

*This class excludes:*

- *manufacture of perishable food items for resale, see 1079*
- *retail sale of perishable food items, see division 47*

### **563 Beverage serving activities**

See class 5630.

### **5630 Beverage serving activities**

This class includes the preparation and serving of beverages for immediate consumption on the premises.

This class includes activities of:

- bars
- taverns
- cocktail lounges
- discotheques (with beverage serving predominant)
- beer parlors and pubs
- coffee shops
- fruit juice bars
- mobile beverage vendors

*This class excludes:*

- *reselling packaged/prepared beverages, see 4711, 4722, 4781, 4799*
- *operation of discotheques and dance floors without beverage serving, see 9329*

## **Section J Information and communication**

This section includes the production and distribution of information and cultural products, the provision of the means to transmit or distribute these products, as well as data or communications, information technology activities and the processing of data and other information service activities.

The main components of this section are publishing activities (division 58), including software publishing, motion picture and sound recording activities (division 59), radio and TV broadcasting

and programming activities (division 60), telecommunications activities (division 61) and information technology activities (division 62) and other information service activities (division 63).

Publishing includes the acquisition of copyrights to content (information products) and making this content available to the general public by engaging in (or arranging for) the reproduction and distribution of this content in various forms. All the feasible forms of publishing (in print, electronic or audio form, on the internet, as multimedia products such as CD-ROM reference books etc.) are included in this section.

Activities related to production and distribution of TV programming span divisions 59, 60 and 61, reflecting different stages in this process. Individual components, such as movies, television series etc. are produced by activities in division 59, while the creation of a complete television channel programme, from components produced in division 59 or other components (such as live news programming) is included in division 60. Division 60 also includes the broadcasting of this programme by the producer. The distribution of the complete television programme by third parties, i.e. without any alteration of the content, is included in division 61. This distribution in division 61 can be done through broadcasting, satellite or cable systems.

## **58 Publishing activities**

This division includes the publishing of books, brochures, leaflets, dictionaries, encyclopaedias, atlases, maps and charts; publishing of newspapers, journals and periodicals; directory and mailing list and other publishing, as well as software publishing.

Publishing includes the acquisition of copyrights to content (information products) and making this content available to the general public by engaging in (or arranging for) the reproduction and distribution of this content in various forms. All the feasible forms of publishing (in print, electronic or audio form, on the Internet, as multimedia products such as CD-ROM reference books etc.), except publishing of motion pictures, are included in this division.

This division excludes the publishing of motion pictures, video tapes and movies on DVD or similar media (division 59) and the production of master copies for records or audio material (division 59). Also excluded are printing (see 1811) and the mass reproduction of recorded media (see 1820).

## **581 Publishing of books, periodicals and other publishing activities**

This group includes activities of publishing books, newspapers, magazines and other periodicals, directories and mailing lists, and other works such as photos, engravings, postcards, timetables, forms, posters and reproductions of works of art. These works are characterized by the intellectual creativity required in their development and are usually protected by copyright.

### **5811 Book publishing**

This class includes the activities of publishing books in print, electronic (CD, electronic displays etc.) or audio form or on the Internet.

This class includes:

- publishing of books, brochures, leaflets and similar publications, including publishing of dictionaries and encyclopedias
- publishing of atlases, maps and charts
- publishing of audio books
- publishing of encyclopedias etc. on CD-ROM

*This class excludes:*

- *production of globes, see 3290*
- *publishing of advertising material, see 5819*

—publishing of music and sheet books, see 5920

—activities of independent authors, see 9000

### 5812 Publishing of directories and mailing lists

This class includes the publishing of lists of facts/information (databases) that are protected in their form, but not in their content. These lists can be published in printed or electronic form.

This class includes:

- publishing of mailing lists
- publishing of telephone books
- publishing of other directories and compilations, such as case law, pharmaceutical compendia etc.

### 5813 Publishing of newspapers, journals and periodicals

This class includes:

- publishing of newspapers, including advertising newspapers
- publishing of periodicals and other journals, including publishing of radio and television schedules

Publishing can be done in print or electronic form, including on the Internet.

### 5819 Other publishing activities

This class includes:

- publishing (including on-line) of:
  - ♦ catalogs
  - ♦ photos, engravings and postcards
  - ♦ greeting cards
  - ♦ forms
  - ♦ posters, reproduction of works of art
  - ♦ advertising material
  - ♦ other printed matter
- on-line publishing of statistics or other information

*This class excludes:*

—retail sale of software, see 4741

—publishing of advertising newspapers, see 5813

—on-line provision of software (application hosting and application service provisioning), see 6311

### 582 Software publishing

See class 5820.

### 5820 Software publishing

This class includes:

- publishing of ready-made (non-customized) software:
  - ♦ operating systems
  - ♦ business and other applications
  - ♦ computer games for all platforms

*This class excludes:*

- *reproduction of software, see 1820*
- *retail sale of non-customized software, see 4741*
- *production of software not associated with publishing, see 6201*
- *on-line provision of software (application hosting and application service provisioning), see 6311*

## **59 Motion picture, video and television programme production, sound recording and music publishing activities**

This division includes production of theatrical and non-theatrical motion pictures whether on film, videotape or disc for direct projection in theatres or for broadcasting on television; supporting activities such as film editing, cutting, dubbing etc.; distribution of motion pictures and other film productions to other industries; as well as motion picture or other film productions projection. Also included is the buying and selling of distribution rights for motion pictures or other film productions.

This division also includes the sound recording activities, i.e. production of original sound master recordings, releasing, promoting and distributing them, publishing of music as well as sound recording service activities in a studio or elsewhere.

### **591 Motion picture, video and television programme activities**

This group includes production of theatrical and non-theatrical motion pictures whether on film, videotape, DVD or other media, including digital distribution, for direct projection in theatres or for broadcasting on television; supporting activities such as film editing, cutting, dubbing etc.; distribution of motion pictures or other film productions (video tapes, DVDs, etc) to other industries; as well as their projection. Buying and selling of motion picture or any other film production distribution rights is also included.

### **5911 Motion picture, video and television programme production activities**

This class includes:

- *production of motion pictures, videos, television programmes or television commercials*

*This class excludes:*

- *film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see 1820*
- *wholesale of recorded video tapes, CDs, DVDs, see 4649*
- *retail trade of video tapes, CDs, DVDs, see 4762*
- *post-production activities, see 5912*
- *reproduction of motion picture film for theatrical distribution, see 5912*
- *sound recording and recording of books on tape, see 5920*
- *creating a complete television channel programme, see 6020*
- *television broadcasting, see 6020*
- *film processing other than for the motion picture industry, see 7420*
- *activities of personal theatrical or artistic agents or agencies, see 7490*
- *renting of video tapes, DVDs to the general public, see 7722*
- *real-time (i.e. simultaneous) closed captioning of live television performances, meetings, conferences, etc., see 8299*
- *activities of own account actors, cartoonists, directors, stage designers and technical specialists, see 9000*



**5912 Motion picture, video and television programme post-production activities**

This class includes:

—post-production activities such as:

- ◆ editing, titling, subtitling, credits
- ◆ closed captioning
- ◆ computer-produced graphics, animation and special effects
- ◆ film/tape transfers

—activities of motion picture film laboratories and activities of special laboratories for animated films:

- ◆ developing and processing motion picture film
- ◆ reproduction of motion picture film for theatrical distribution

This class also includes:

—activities of stock footage film libraries etc.

*This class excludes:*

—*film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see 1820*

—*wholesale of recorded video tapes, CDs, DVDs, see 4649*

—*retail trade of video tapes, CDs, DVDs, see 4762*

—*film processing other than for the motion picture industry, see 7420*

—*renting of video tapes, DVDs to the general public, see 7722*

—*activities of own account actors, cartoonists, directors, stage designers and technical specialists, see 9000*

**5913 Motion picture, video and television programme distribution activities**

This class includes:

—distributing film, video tapes, DVDs and similar productions to motion picture theatres, television networks and stations and exhibitors

This class also includes:

—acquiring film, video tape and DVD distribution rights

*This class excludes:*

—*film duplicating (except reproduction of motion picture film for theatrical distribution) as well as reproduction of audio and video tapes, CDs or DVDs from master copies, see 1820*

—*reproduction of motion picture film for theatrical distribution, see 5912*

**5914 Motion picture projection activities**

This class includes:

—motion picture or videotape projection in cinemas, in the open air or in other projection facilities

—activities of cine-clubs

**592 Sound recording and music publishing activities**

See class 5920.

**5920 Sound recording and music publishing activities**

This class includes:

- production of original (sound) master recordings, such as tapes, CDs
- sound recording service activities in a studio or elsewhere, including the production of taped (i.e. non-live) radio programming, audio for film, television etc.
- music publishing, i.e. activities of:
  - ◆ acquiring and registering copyrights for musical compositions
  - ◆ promoting, authorizing and using these compositions in recordings, radio, television, motion pictures, live performances, print and other media
  - ◆ distributing sound recordings to wholesalers, retailers or directly to the public

Units engaged in these activities may own the copyright or act as administrator of the music copyrights on behalf of the copyright owners.

This class also includes:

- publishing of music and sheet books

*This class excludes:*

- reproduction from master copies of music or other sound recordings, see 1820
- wholesale of recorded audio tapes and disks, see 4649

**60 Programming and broadcasting activities**

This division includes the activities of creating content or acquiring the right to distribute content and subsequently broadcasting that content, such as radio, television and data programs of entertainment, news, talk, and the like. Also included is data broadcasting, typically integrated with radio or TV broadcasting. The broadcasting can be performed using different technologies, over-the-air, via satellite, via a cable network or via Internet. This division also includes the production of programs that are typically narrowcast in nature (limited format, such as news, sports, education or youth-oriented programming) on a subscription or fee basis, to a third party, for subsequent broadcasting to the public.

This division excludes the distribution of cable and other subscription programming (see division 61).

**601 Radio broadcasting**

See class 6010.

**6010 Radio broadcasting**

This class includes:

- broadcasting audio signals through radio broadcasting studios and facilities for the transmission of aural programming to the public, to affiliates or to subscribers

This class also includes:

- activities of radio networks, i.e. assembling and transmitting aural programming to the affiliates or subscribers via over-the-air broadcasts, cable or satellite
- radio broadcasting activities over the Internet (Internet radio stations)
- data broadcasting integrated with radio broadcasting

*This class excludes:*

- production of taped radio programming, see 5920

**602 Television programming and broadcasting activities**

See class 6020.

**6020 Television programming and broadcasting activities**

This class includes:

—creation of a complete television channel programme, from purchased programme components (e.g. movies, documentaries etc.), self produced programme components (e.g. local news, live reports) or a combination thereof

This complete television programme can be either broadcast by the producing unit or produced for transmission by third party distributors, such as cable companies or satellite television providers.

The programming may be of a general or specialized nature (e.g. limited formats such as news, sports, education or youth oriented programming), may be made freely available to users or may be available only on a subscription basis.

This class also includes:

- programming of video-on-demand channels
- data broadcasting integrated with television broadcasting

*This class excludes:*

- production of television programme elements (e.g. movies, documentaries, commercials), see 5911*
- assembly of a package of channels and distribution of that package via cable or satellite to viewers, see division 61*

**61 Telecommunications**

This division includes the activities of providing telecommunications and related service activities, i.e. transmitting voice, data, text, sound and video. The transmission facilities that carry out these activities may be based on a single technology or a combination of technologies. The commonality of activities classified in this division is the transmission of content, without being involved in its creation. The breakdown in this division is based on the type of infrastructure operated.

In the case of transmission of television signals this may include the bundling of complete programming channels (produced in division 60) in to programme packages for distribution.

**611 Wired telecommunications activities**

See class 6110.

**6110 Wired telecommunications activities**

This class includes:

- operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound and video using a wired telecommunications infrastructure, including:
  - ♦ operating and maintaining switching and transmission facilities to provide point-to-point communications via landlines, microwave or a combination of landlines and satellite linkups
  - ♦ operating of cable distribution systems (e.g. for distribution of data and television signals)

- ◆ furnishing telegraph and other non-vocal communications using own facilities

The transmission facilities that carry out these activities, may be based on a single technology or a combination of technologies.

This class also includes:

- purchasing access and network capacity from owners and operators of networks and providing telecommunications services using this capacity to businesses and households
- provision of Internet access by the operator of the wired infrastructure

*This class excludes:*

- telecommunications resellers, see 6190

## **612 Wireless telecommunications activities**

See class 6120.

## **6120 Wireless telecommunications activities**

This class includes:

- operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound, and video using a wireless telecommunications infrastructure
- maintaining and operating paging as well as cellular and other wireless telecommunications networks

The transmission facilities provide omni-directional transmission via airwaves and may be based on a single technology or a combination of technologies.

This class also includes:

- purchasing access and network capacity from owners and operators of networks and providing wireless telecommunications services (except satellite) using this capacity to businesses and households
- provision of Internet access by the operator of the wireless infrastructure

*This class excludes:*

- telecommunications resellers, see 6190

## **613 Satellite telecommunications activities**

See class 6130.

## **6130 Satellite telecommunications activities**

This class includes:

- operating, maintaining or providing access to facilities for the transmission of voice, data, text, sound and video using a satellite telecommunications infrastructure
- delivery of visual, aural or textual programming received from cable networks, local television stations or radio networks to consumers via direct-to-home satellite systems (The units classified here do not generally originate programming material.)

This class also includes:

- provision of Internet access by the operator of the satellite infrastructure

*This class excludes:*

- telecommunications resellers, see 6190

**619 Other telecommunications activities**

See class 6190.

**6190 Other telecommunications activities**

This class includes:

- provision of specialized telecommunications applications, such as satellite tracking, communications telemetry, and radar station operations
- operation of satellite terminal stations and associated facilities operationally connected with one or more terrestrial communications systems and capable of transmitting telecommunications to or receiving telecommunications from satellite systems
- provision of Internet access over networks between the client and the ISP not owned or controlled by the ISP, such as dial-up Internet access etc.
- provision of telephone and Internet access in facilities open to the public
- provision of telecommunications services over existing telecom connections:
  - ◆ VOIP (Voice Over Internet Protocol) provision
- telecommunications resellers (i.e. purchasing and reselling network capacity without providing additional services)

*This class excludes:*

- provision of Internet access by operators of telecommunications infrastructure, see 6110, 6120, 6130

**62 Computer programming, consultancy and related activities**

This division includes the following activities of providing expertise in the field of information technologies: writing, modifying, testing and supporting software; planning and designing computer systems that integrate computer hardware, software and communication technologies; on-site management and operation of clients' computer systems and/or data processing facilities; and other professional and technical computer-related activities.

**620 Computer programming, consultancy and related activities**

See division 62.

**6201 Computer programming activities**

This class includes the writing, modifying, testing and supporting of software.

This class includes:

- designing the structure and content of, and/or writing the computer code necessary to create and implement:
  - ◆ systems software (including updates and patches)
  - ◆ software applications (including updates and patches)
  - ◆ databases
  - ◆ web pages
- customizing of software, i.e. modifying and configuring an existing application so that it is functional within the clients' information system environment

*This class excludes:*

- publishing packaged software, see 5820

- planning and designing computer systems that integrate computer hardware, software and communication technologies, even though providing software might be an integral part, see 6202

### **6202 Computer consultancy and computer facilities management activities**

This class includes:

- planning and designing of computer systems that integrate computer hardware, software and communication technologies

The units classified in this class may provide the hardware and software components of the system as part of their integrated services or these components may be provided by third parties or vendors. The units classified in this class often install the system and train and support the users of the system.

This class also includes:

- provision of on-site management and operation of clients' computer systems and/or data processing facilities, as well as related support services

*This class excludes:*

- separate sale of computer hardware or software, see 4651, 4741*
- separate installation of mainframe and similar computers, see 3320*
- separate installation (setting-up) of personal computers, see 6209*
- separate software installation, see 6209*

### **6209 Other information technology and computer service activities**

This class includes other information technology and computer related activities not elsewhere classified, such as:

- computer disaster recovery
- installation (setting-up) of personal computers
- software installation

*This class excludes:*

- installation of mainframe and similar computers, see 3320*
- computer programming, see 6201*
- computer consultancy, see 6202*
- computer facilities management, see 6202*
- data processing and hosting, see 6311*

## **63 Information service activities**

This division includes the activities of web search portals, data processing and hosting activities, as well as other activities that primarily supply information.

### **631 Data processing, hosting and related activities; web portals**

This group includes the provision of infrastructure for hosting, data processing services and related activities, as well as the provision of search facilities and other portals for the Internet.

**6311 Data processing, hosting and related activities**

This class includes:

- provision of infrastructure for hosting, data processing services and related activities
- specialized hosting activities such as:
  - ◆ Web hosting
  - ◆ streaming services
  - ◆ application hosting
- application service provisioning
- general time-share provision of mainframe facilities to clients
- data processing activities:
  - ◆ complete processing of data supplied by clients
  - ◆ generation of specialized reports from data supplied by clients
- provision of data entry services

**6312 Web portals**

This class includes:

- operation of web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format
- operation of other websites that act as portals to the Internet, such as media sites providing periodically updated content

**639 Other information service activities**

This group includes the activities of news agencies and all other remaining information service activities.

*This group excludes:*

- activities of libraries and archives, see 9101

**6391 News agency activities**

This class includes:

- news syndicate and news agency activities furnishing news, pictures and features to the media

*This class excludes:*

- activities of independent photojournalists, see 7420
- activities of independent journalists, see 9000

**6399 Other information service activities n.e.c.**

This class includes other information service activities not elsewhere classified, such as:

- telephone based information services
- information search services on a contract or fee basis
- news clipping services, press clipping services, etc.

*This class excludes:*

- activities of call centers, see 8220

## Section K

### Financial and insurance activities

This section includes financial service activities, including insurance, reinsurance and pension funding activities and activities to support financial services.

This section also includes the activities of holding assets, such as activities of holding companies and the activities of trusts, funds and similar financial entities.

#### 64 Financial service activities, except insurance and pension funding

This division includes the activities of obtaining and redistributing funds other than for the purpose of insurance or pension funding or compulsory social security.

*Note:* National institutional arrangements are likely to play a significant role in determining the classification within this division.

#### 641 Monetary intermediation

This group includes the obtaining of funds in the form of transferable deposits, i.e. funds that are fixed in money terms, obtained on a day-to-day basis and, apart from central banking, obtained from non-financial sources.

#### 6411 Central banking

This class includes:

- issuing and managing the country's currency
- monitoring and control of the money supply
- taking deposits that are used for clearance between financial institutions
- supervising banking operations
- holding the country's international reserves
- acting as banker to the government

The activities of central banks will vary for institutional reasons.

#### 6419 Other monetary intermediation

This class includes the receiving of deposits and/or close substitutes for deposits and extending of credit or lending funds. The granting of credit can take a variety of forms, such as loans, mortgages, credit cards etc. These activities are generally carried out by monetary institutions other than central banks, such as:

- banks
- savings banks
- credit unions

This class also includes:

- postal giro and postal savings bank activities
- credit granting for house purchase by specialized deposit-taking institutions
- money order activities

*This class excludes:*

- credit granting for house purchase by specialized non-depository institutions, see 6492
- credit card transaction processing and settlement activities, see 6619



**642 Activities of holding companies**

See class 6420.

**6420 Activities of holding companies**

This class includes the activities of holding companies, i.e. units that hold the assets (owning controlling-levels of equity) of a group of subsidiary corporations and whose principal activity is owning the group. The holding companies in this class do not provide any other service to the businesses in which the equity is held, i.e. they do not administer or manage other units.

*This class excludes:*

— *active management of companies and enterprises, strategic planning and decision making of the company, see 7010*

**643 Trusts, funds and similar financial entities**

See class 6430.

**6430 Trusts, funds and similar financial entities**

This class includes legal entities organized to pool securities or other financial assets, without managing, on behalf of shareholders or beneficiaries. The portfolios are customized to achieve specific investment characteristics, such as diversification, risk, rate of return and price volatility. These entities earn interest, dividends and other property income, but have little or no employment and no revenue from the sale of services.

This class includes:

- open-end investment funds
- closed-end investment funds
- trusts, estates or agency accounts, administered on behalf of the beneficiaries under the terms of a trust agreement, will or agency agreement
- unit investment trust funds

*This class excludes:*

- *funds and trusts that earn revenue from the sale of goods or services, see ISIC class according to their principal activity*
- *activities of holding companies, see 6420*
- *pension funding, see 6530*
- *management of funds, see 6630*

**649 Other financial service activities, except insurance and pension funding activities**

This group includes financial service activities other than those conducted by monetary institutions.

*This group excludes:*

- *insurance and pension funding activities, see division 65*

**6491 Financial leasing**

This class includes:

—leasing where the term approximately covers the expected life of the asset and the lessee acquires substantially all the benefits of its use and takes all the risks associated with its ownership. The ownership of the asset may or may not eventually be transferred. Such leases cover all or virtually all costs including interest.

*This class excludes:*

—operational leasing, see division 77, according to type of goods leased

#### **6492 Other credit granting**

This class includes:

—financial service activities primarily concerned with making loans by institutions not involved in monetary intermediation, where the granting of credit can take a variety of forms, such as loans, mortgages, credit cards etc., providing the following types of services:

- ◆ granting of consumer credit
- ◆ international trade financing
- ◆ provision of long-term finance to industry by industrial banks
- ◆ money lending outside the banking system
- ◆ credit granting for house purchase by specialized non-depository institutions
- ◆ pawnshops and pawnbrokers

*This class excludes:*

—credit granting for house purchase by specialized institutions that also take deposits, see 6419

—operational leasing, see division 77, according to type of goods leased

—grant-giving activities by membership organizations, see 9499

#### **6499 Other financial service activities, except insurance and pension funding activities, n.e.c.**

This class includes:

—other financial service activities primarily concerned with distributing funds other than by making loans:

- ◆ factoring activities
- ◆ writing of swaps, options and other hedging arrangements
- ◆ activities of viatical settlement companies

—own-account investment activities, such as by venture capital companies, investment clubs etc.

*This class excludes:*

—financial leasing, see 6491

—security dealing on behalf of others, see 6612

—trade, leasing and renting of real estate property, see division 68

—bill collection without debt buying up, see 8291

—grant-giving activities by membership organizations, see 9499

#### **65 Insurance, reinsurance and pension funding, except compulsory social security**

This division includes the underwriting annuities and insurance policies and investing premiums to build up a portfolio of financial assets to be used against future claims. Provision of direct insurance and reinsurance are included.

**651 Insurance**

This group includes life insurance and life reinsurance with or without a substantial savings element and other non-life insurance.

**6511 Life insurance**

This class includes:

— underwriting annuities and life insurance policies, disability income insurance policies, and accidental death and dismemberment insurance policies (with or without a substantial savings element).

**6512 Non-life insurance**

This class includes:

— provision of insurance services other than life insurance:

- ◆ accident and fire insurance
- ◆ health insurance
- ◆ travel insurance
- ◆ property insurance
- ◆ motor, marine, aviation and transport insurance
- ◆ pecuniary loss and liability insurance

**652 Reinsurance**

See class 6520.

**6520 Reinsurance**

This class includes:

— activities of assuming all or part of the risk associated with existing insurance policies originally underwritten by other insurance carriers

**653 Pension funding**

See class 6530.

**6530 Pension funding**

This class includes legal entities (i.e. funds, plans and/or programmes) organized to provide retirement income benefits exclusively for the sponsor's employees or members. This includes pension plans with defined benefits, as well as individual plans where benefits are simply defined through the member's contribution.

This class includes:

- employee benefit plans
- pension funds and plans
- retirement plans

*This class excludes:*

- *management of pension funds, see 6630*
- *compulsory social security schemes, see 8430*

**66 Activities auxiliary to financial service and insurance activities**

This division includes the provision of services involved in or closely related to financial service activities, but not themselves providing financial services. The primary breakdown of this division is according to the type of financial transaction or funding served.

**661 Activities auxiliary to financial service activities, except insurance and pension funding**

This group includes the furnishing of physical or electronic marketplaces for the purpose of facilitating the buying and selling of stocks, stock options, bonds or commodity contracts.

**6611 Administration of financial markets**

This class includes:

- operation and supervision of financial markets other than by public authorities, such as:
  - ◆ commodity contracts exchanges
  - ◆ futures commodity contracts exchanges
  - ◆ securities exchanges
  - ◆ stock exchanges
  - ◆ stock or commodity options exchanges

**6612 Security and commodity contracts brokerage**

This class includes:

- dealing in financial markets on behalf of others (e.g. stock broking) and related activities
- securities brokerage
- commodity contracts brokerage
- activities of bureaux de change etc.

*This class excludes:*

- *dealing in markets on own account, see 6499*
- *portfolio management, on a fee or contract basis, see 6630*

**6619 Other activities auxiliary to financial service activities**

This class includes activities auxiliary to financial service activities not elsewhere classified, such as:

- financial transaction processing and settlement activities, including for credit card transactions
- investment advisory services
- activities of mortgage advisers and brokers

This class also includes:

- trustee, fiduciary and custody services on a fee or contract basis

*This class excludes:*

- *activities of insurance agents and brokers, see 6622*
- *management of funds, see 6630*

**662 Activities auxiliary to insurance and pension funding**

This group includes acting as agent (i.e. broker) in selling annuities and insurance policies or providing other employee benefits and insurance and pension related services such as claims adjustment and third party administration.

**6621 Risk and damage evaluation**

This class includes the provision of administration services of insurance, such as assessing and settling insurance claims.

This class includes:

- assessing insurance claims
  - ◆ claims adjusting
  - ◆ risk assessing
  - ◆ risk and damage evaluation
  - ◆ average and loss adjusting
- settling insurance claims

*This class excludes:*

- appraisal of real estate, see 6820
- appraisal for other purposes, see 7490
- investigation activities, see 8030

**6622 Activities of insurance agents and brokers**

This class includes:

- activities of insurance agents and brokers (insurance intermediaries) in selling, negotiating or soliciting of annuities and insurance and reinsurance policies

**6629 Other activities auxiliary to insurance and pension funding**

This class includes:

- activities involved in or closely related to insurance and pension funding (except claims adjusting and activities of insurance agents):
  - ◆ salvage administration
  - ◆ actuarial services

*This class excludes:*

- marine salvage activities, see 5222

**663 Fund management activities**

See class 6630.

**6630 Fund management activities**

This class includes portfolio and fund management activities on a fee or contract basis, for individuals, businesses and others.

This class includes:

- management of pension funds
- management of mutual funds
- management of other investment funds

## Section L

### Real estate activities

This section includes acting as lessors, agents and/or brokers in one or more of the following: selling or buying real estate, renting real estate, providing other real estate services such as appraising real estate or acting as real estate escrow agents. Activities in this section may be carried out on own or leased property and may be done on a fee or contract basis. Also included is the building of structures, combined with maintaining ownership or leasing of such structures.

This section includes real estate property managers.

#### 68 Real estate activities

See section L.

#### 681 Real estate activities with own or leased property

See class 6810.

#### 6810 Real estate activities with own or leased property

This class includes:

- buying, selling, renting and operating of self-owned or leased real estate, such as:
  - ◆ apartment buildings and dwellings
  - ◆ non-residential buildings, including exhibition halls, self-storage facilities, malls and shopping centers
  - ◆ land
- provision of homes and furnished or unfurnished flats or apartments for more permanent use, typically on a monthly or annual basis

This class also includes:

- development of building projects for own operation, i.e. for renting of space in these buildings
- subdividing real estate into lots, without land improvement
- operation of residential mobile home sites

*This class excludes:*

- development of building projects for sale, see 4100
- subdividing and improving of land, see 4290
- operation of hotels, suite hotels and similar accommodation, see 5510
- operation of campgrounds, trailer parks and similar accommodation, see 5520
- operation of workers hostels, rooming houses and similar accommodation, see 5590

#### 682 Real estate activities on a fee or contract basis

See class 6820.

#### 6820 Real estate activities on a fee or contract basis

This class includes the provision of real estate activities on a fee or contract basis including real estate related services.

This class includes:

- activities of real estate agents and brokers

- intermediation in buying, selling and renting of real estate on a fee or contract basis
- management of real estate on a fee or contract basis
- appraisal services for real estate
- activities of real estate escrow agents

*This class excludes:*

- *legal activities, see 6910*
- *facilities support services, see 8110*
- *management of facilities, such as military bases, prisons and other facilities (except computer facilities management), see 8110*

## Section M

### Professional, scientific and technical activities

This section includes specialized professional, scientific and technical activities. These activities require a high degree of training, and make specialized knowledge and skills available to users.

#### 69 Legal and accounting activities

This division includes legal representation of one party's interest against another party, whether or not before courts or other judicial bodies by, or under supervision of, persons who are members of the bar, such as advice and representation in civil cases, advice and representation in criminal actions, advice and representation in connection with labour disputes. It also includes preparation of legal documents such as articles of incorporation, partnership agreements or similar documents in connection with company formation, patents and copyrights, preparation of deeds, wills, trusts, etc. as well as other activities of notaries public, civil law notaries, bailiffs, arbitrators, examiners and referees. It also includes accounting and bookkeeping services such as auditing of accounting records, preparing financial statements and bookkeeping.

#### 691 Legal activities

See class 6910.

#### 6910 Legal activities

This class includes:

- legal representation of one party's interest against another party, whether or not before courts or other judicial bodies by, or under supervision of, persons who are members of the bar:
  - ◆ advice and representation in civil cases
  - ◆ advice and representation in criminal cases
  - ◆ advice and representation in connection with labour disputes
- general counselling and advising, preparation of legal documents:
  - ◆ articles of incorporation, partnership agreements or similar documents in connection with company formation
  - ◆ patents and copyrights
  - ◆ preparation of deeds, wills, trusts etc.
- other activities of notaries public, civil law notaries, bailiffs, arbitrators, examiners and referees

*This class excludes:*

- *law court activities, see 8423*

**692 Accounting, bookkeeping and auditing activities; tax consultancy**

See class 6920.

**6920 Accounting, bookkeeping and auditing activities; tax consultancy**

This class includes:

- recording of commercial transactions from businesses or others
- preparation or auditing of financial accounts
- examination of accounts and certification of their accuracy
- preparation of personal and business income tax returns
- advisory activities and representation on behalf of clients before tax authorities

*This class excludes:*

- *data-processing and tabulation activities, see 6311*
- *management consultancy activities, such as design of accounting systems, cost accounting programmes, budgetary control procedures, see 7020*
- *bill collection, see 8291*

**70 Activities of head offices; management consultancy activities**

This division includes the provision of advice and assistance to businesses and other organizations on management issues, such as strategic and organizational planning; financial planning and budgeting; marketing objectives and policies; human resource policies, practices, and planning; production scheduling; and control planning. It also includes the overseeing and managing of other units of the same company or enterprise, i.e. the activities of head offices.

**701 Activities of head offices**

See class 7010.

**7010 Activities of head offices**

This class includes the overseeing and managing of other units of the company or enterprise; undertaking the strategic or organizational planning and decision making role of the company or enterprise; exercising operational control and manage the day-to-day operations of their related units.

This class includes activities of:

- head offices
- centralized administrative offices
- corporate offices
- district and regional offices
- subsidiary management offices

*This class excludes:*

- *activities of holding companies, not engaged in managing, see 6420*

**702 Management consultancy activities**

See class 7020.



**7020 Management consultancy activities**

This class includes the provision of advice, guidance and operational assistance to businesses and other organizations on management issues, such as strategic and organizational planning; decision areas that are financial in nature; marketing objectives and policies; human resource policies, practices and planning; production scheduling and control planning.

This provision of business services may include advice, guidance or operational assistance to businesses and the public service regarding:

- public relations and communication
- lobbying activities
- design of accounting methods or procedures, cost accounting programmes, budgetary control procedures
- advice and help to businesses and public services in planning, organization, efficiency and control, management information etc.

*This class excludes:*

- design of computer software for accounting systems, see 6201*
- legal advice and representation, see 6910*
- accounting, bookkeeping and auditing activities, tax consulting, see 6920*
- architectural, engineering and other technical advisory activities, see 7110, 7490*
- advertising activities, see 7310*
- market research and public opinion polling, see 7320*
- executive placement or search consulting services, see 7810*
- educational consulting activities, see 8550*

**71 Architectural and engineering activities; technical testing and analysis**

This division includes the provision of architectural services, engineering services, drafting services, building inspection services and surveying and mapping services. It also includes the performance of physical, chemical, and other analytical testing services.

**711 Architectural and engineering activities and related technical consultancy**

See class 7110.

**7110 Architectural and engineering activities and related technical consultancy**

This class includes the provision of architectural services, engineering services, drafting services, building inspection services and surveying and mapping services and the like.

This class includes:

- architectural consulting activities:
  - ◆ building design and drafting
  - ◆ town and city planning and landscape architecture
- engineering design (i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems) and consulting activities for:
  - ◆ machinery, industrial processes and industrial plant
  - ◆ projects involving civil engineering, hydraulic engineering, traffic engineering
  - ◆ water management projects

- ◆ projects elaboration and realization relative to electrical and electronic engineering, mining engineering, chemical engineering, mechanical, industrial and systems engineering, safety engineering
- ◆ project management activities related to construction
- elaboration of projects using air conditioning, refrigeration, sanitary and pollution control engineering, acoustical engineering etc.
- geophysical, geologic and seismic surveying
- geodetic surveying activities:
  - ◆ land and boundary surveying activities
  - ◆ hydrologic surveying activities
  - ◆ subsurface surveying activities
  - ◆ cartographic and spatial information activities

*This class excludes:*

- test drilling in connection with mining operations, see 0910, 0990
- development or publishing of associated software, see 5820, 6201
- activities of computer consultants, see 6202, 6209
- technical testing, see 7120
- research and development activities related to engineering, see 7210
- industrial design, see 7410
- interior decorating, see 7410
- aerial photography, see 7420

## **712 Technical testing and analysis**

See class 7120.

## **7120 Technical testing and analysis**

This class includes:

- performance of physical, chemical and other analytical testing of all types of materials and products (see below for exceptions):
  - ◆ acoustics and vibration testing
  - ◆ testing of composition and purity of minerals etc.
  - ◆ testing activities in the field of food hygiene, including veterinary testing and control in relation to food production
  - ◆ testing of physical characteristics and performance of materials, such as strength, thickness, durability, radioactivity etc.
  - ◆ qualification and reliability testing
  - ◆ performance testing of complete machinery: motors, automobiles, electronic equipment etc.
  - ◆ radiographic testing of welds and joints
  - ◆ failure analysis
  - ◆ testing and measuring of environmental indicators: air and water pollution etc.
- certification of products, including consumer goods, motor vehicles, aircraft, pressurized containers, nuclear plants etc.
- periodic road-safety testing of motor vehicles
- testing with use of models or mock-ups (e.g. of aircraft, ships, dams etc.)
- operation of police laboratories

*This class excludes:*

— *testing of animal specimens, see 7500*

— *medical laboratory testing, see 8690*

## **72 Scientific research and development**

This division includes the activities of three types of research and development: 1) basic research: experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundations of phenomena and observable facts, without particular application or use in view, 2) applied research: original investigation undertaken in order to acquire new knowledge, directed primarily towards a specific practical aim or objective and 3) experimental development: systematic work, drawing on existing knowledge gained from research and/or practical experience, directed to producing new materials, products and devices, to installing new processes, systems and services, and to improving substantially those already produced or installed.

Research and experimental development activities in this division are subdivided into two categories: natural sciences and engineering; social sciences and the humanities.

This division excludes market research (see class 7320).

### **721 Research and experimental development on natural sciences and engineering**

See class 7210.

### **7210 Research and experimental development on natural sciences and engineering**

This class includes:

— research and experimental development on natural science and engineering:

- ◆ research and development on natural sciences
- ◆ research and development on engineering and technology
- ◆ research and development on medical sciences
- ◆ research and development on biotechnology
- ◆ research and development on agricultural sciences
- ◆ interdisciplinary research and development, predominantly on natural sciences and engineering

### **722 Research and experimental development on social sciences and humanities**

See class 7220.

### **7220 Research and experimental development on social sciences and humanities**

This class includes:

— research and development on social sciences

— research and development on humanities

— interdisciplinary research and development, predominantly on social sciences and humanities

*This class excludes:*

— *market research, see 7320*

**73 Advertising and market research**

This division includes the creation of advertising campaigns and placement of such advertising in periodicals, newspapers, radio and television, or other media as well as the design of display structures and sites.

**731 Advertising**

See class 7310.

**7310 Advertising**

This class includes the provision of a full range of advertising services (i.e. through in-house capabilities or subcontracting), including advice, creative services, production of advertising material, media planning and buying.

This class includes:

—creation and realization of advertising campaigns:

- ◆ creating and placing advertising in newspapers, periodicals, radio, television, the Internet and other media
- ◆ creating and placing of outdoor advertising, e.g. billboards, panels, bulletins and frames, window dressing, showroom design, car and bus carding etc.
- ◆ media representation, i.e. sale of time and space for various media soliciting advertising
- ◆ aerial advertising
- ◆ distribution or delivery of advertising material or samples
- ◆ provision of advertising space on billboards etc.
- ◆ creation of stands and other display structures and sites

—conducting marketing campaigns and other advertising services aimed at attracting and retaining customers:

- ◆ promotion of products
- ◆ point-of-sale marketing
- ◆ direct mail advertising
- ◆ marketing consulting

*This class excludes:*

- publishing of advertising material, see 5819
- production of commercial messages for radio, television and film, see 5911
- public-relations activities, see 7020
- market research, see 7320
- graphic design activities, see 7410
- advertising photography, see 7420
- convention and trade show organizers, see 8230
- mailing activities, see 8219

**732 Market research and public opinion polling**

See class 7320.

**7320 Market research and public opinion polling**

This class includes:

- investigation into market potential, acceptance and familiarity of products and buying habits of consumers for the purpose of sales promotion and development of new products, including statistical analyses of the results
- investigation into collective opinions of the public about political, economic and social issues and statistical analysis thereof

## 74 Other professional, scientific and technical activities

This division includes the provision of professional scientific and technical services (except legal and accounting activities; architecture and engineering activities; technical testing and analysis; management and management consultancy activities; research and development and advertising activities).

### 741 Specialized design activities

See class 7410.

### 7410 Specialized design activities

This class includes:

- fashion design related to textiles, wearing apparel, shoes, jewelry, furniture and other interior decoration and other fashion goods as well as other personal or household goods
- industrial design, i.e. creating and developing designs and specifications that optimize the use, value and appearance of products, including the determination of the materials, construction, mechanism, shape, colour and surface finishes of the product, taking into consideration human characteristics and needs, safety, market appeal and efficiency in production, distribution, use and maintenance
- activities of graphic designers
- activities of interior decorators

*This class excludes:*

- *design and programming of web pages, see 6201*
- *architectural design, see 7110*
- *engineering design, i.e. applying physical laws and principles of engineering in the design of machines, materials, instruments, structures, processes and systems, see 7110*
- *theatrical stage-set design, see 9000*

### 742 Photographic activities

See class 7420.

### 7420 Photographic activities

This class includes:

- commercial and consumer photograph production:
  - ♦ portrait photography for passports, schools, weddings etc.
  - ♦ photography for commercials, publishers, fashion, real estate or tourism purposes
  - ♦ aerial photography
  - ♦ videotaping of events: weddings, meetings etc.
- film processing:
  - ♦ developing, printing and enlarging from client-taken negatives or cine-films

- ◆ film developing and photo printing laboratories
  - ◆ one hour photo shops (not part of camera stores)
  - ◆ mounting of slides
  - ◆ copying and restoring or transparency retouching in connection with photographs
- activities of photojournalists

This class also includes:

- microfilming of documents

*This class excludes:*

- processing motion picture film related to the motion picture and television industries, see 5912
- cartographic and spatial information activities, see 7110

#### **749 Other professional, scientific and technical activities n.e.c.**

See class 7490.

#### **7490 Other professional, scientific and technical activities n.e.c.**

This class includes a great variety of service activities generally delivered to commercial clients. It includes those activities for which more advanced professional, scientific and technical skill levels are required, but does not include ongoing, routine business functions that are generally of short duration.

This class includes:

- translation and interpretation activities
- business brokerage activities, i.e. arranging for the purchase and sale of small and medium-sized businesses, including professional practices, but not including real estate brokerage
- patent brokerage activities (arranging for the purchase and sale of patents)
- appraisal activities other than for real estate and insurance (for antiques, jewellery, etc.)
- bill auditing and freight rate information
- activities of quantity surveyors
- weather forecasting activities
- security consulting
- agronomy consulting
- environmental consulting
- other technical consulting
- activities of consultants other than architecture, engineering and management consultants

This class also includes:

- activities carried on by agents and agencies on behalf of individuals usually involving the obtaining of engagements in motion picture, theatrical production or other entertainment or sports attractions and the placement of books, plays, artworks, photographs etc., with publishers, producers etc.

*This class excludes:*

- wholesale of used motor vehicles by auctioning, see 4510
- online auction activities (retail), see 4791

- *activities of auctioning houses (retail), see 4799*
- *activities of real estate brokers, see 6820*
- *bookkeeping activities, see 6920*
- *activities of management consultants, see 7020*
- *activities of architecture and engineering consultants, see 7110*
- *engineering design activities, see 7110*
- *display of advertisement and other advertising design, see 7310*
- *creation of stands and other display structures and sites, see 7310*
- *industrial design activities, see 7410*
- *activities of convention and trade show organizers, see 8230*
- *activities of independent auctioneers, see 8299*
- *administration of loyalty programmes, see 8299*
- *consumer credit and debt counselling, see 8890*
- *activities of authors of scientific and technical books, see 9000*
- *activities of independent journalists, see 9000*

## 75 Veterinary activities

This division includes the provision of animal health care and control activities for farm animals or pet animals. These activities are carried out by qualified veterinarians in veterinary hospitals as well as when visiting farms, kennels or homes, in own consulting and surgery rooms or elsewhere. It also includes animal ambulance activities.

## 750 Veterinary activities

See class 7500.

## 7500 Veterinary activities

This class includes:

- animal health care and control activities for farm animals
- animal health care and control activities for pet animals

These activities are carried out by qualified veterinarians when working in veterinary hospitals as well as when visiting farms, kennels or homes, in own consulting and surgery rooms or elsewhere.

This class also includes:

- activities of veterinary assistants or other auxiliary veterinary personnel
- clinico-pathological and other diagnostic activities pertaining to animals
- animal ambulance activities

*This class excludes:*

- *farm animal boarding activities without health care, see 0162*
- *sheep shearing, see 0162*
- *herd testing services, droving services, agistment services, poultry caponizing, see 0162*
- *activities related to artificial insemination, see 0162*
- *pet animal boarding activities without health care, see 9609*

## Section N

### Administrative and support service activities

This section includes a variety of activities that support general business operations. These activities differ from those in section M, since their primary purpose is not the transfer of specialized knowledge.

#### 77 Rental and leasing activities

This division includes the renting and leasing of tangible and non-financial intangible assets, including a wide array of tangible goods, such as automobiles, computers, consumer goods and industrial machinery and equipment to customers in return for a periodic rental or lease payment. It is subdivided into: (1) the renting of motor vehicles, (2) the renting of recreational and sports equipment and personal and household equipment, (3) the leasing of other machinery and equipment of the kind often used for business operations, including other transport equipment and (4) the leasing of intellectual property products and similar products.

Only the provision of operating leases is included in this division.

This division excludes financial leasing activities (see class 6491), renting of real estate (see section L) and the renting of equipment with operator. The latter is classified according to the activities carried out with this equipment, e.g. construction (section F) or transportation (section H).

#### 771 Renting and leasing of motor vehicles

See class 7710.

#### 7710 Renting and leasing of motor vehicles

This class includes:

—renting and operational leasing of the following types of vehicles:

- ◆ passenger cars (without drivers)
- ◆ trucks, utility trailers and recreational vehicles

*This class excludes:*

- renting or leasing of vehicles or trucks with driver, see 4922, 4923
- financial leasing, see 6491

#### 772 Renting and leasing of personal and household goods

This group includes the renting of personal and household goods as well as renting of recreational and sports equipment and video tapes. Activities generally include short-term renting of goods although in some instances, the goods may be leased for longer periods of time.

#### 7721 Renting and leasing of recreational and sports goods

This class includes:

—renting of recreational and sports equipment:

- ◆ pleasure boats, canoes, sailboats,
- ◆ bicycles
- ◆ beach chairs and umbrellas



- ◆ other sports equipment
- ◆ skis

*This class excludes:*

- renting of video tapes and disks, see 7722
- renting of other personal and household goods n.e.c., see 7729
- renting of leisure and pleasure equipment as an integral part of recreational facilities, see 9329

### **7722 Renting of video tapes and disks**

This class includes:

- renting of video tapes, records, CDs, DVDs etc.

### **7729 Renting and leasing of other personal and household goods**

This class includes:

- renting of all kinds of household or personal goods, to households or industries (except recreational and sports equipment):
  - ◆ textiles, wearing apparel and footwear
  - ◆ furniture, pottery and glass, kitchen and tableware, electrical appliances and house wares
  - ◆ jewellery, musical instruments, scenery and costumes
  - ◆ books, journals and magazines
  - ◆ machinery and equipment used by amateurs or as a hobby e.g. tools for home repairs
  - ◆ flowers and plants
  - ◆ electronic equipment for household use

*This class excludes:*

- renting of cars, trucks, trailers and recreational vehicles without driver, see 7710
- renting of recreational and sports goods, see 7721
- renting of video tapes and disks, see 7722
- renting of motorcycles and caravans without driver, see 7730
- renting of office furniture, see 7730
- provision of linen, work uniforms and related items by laundries, see 9601

### **773 Renting and leasing of other machinery, equipment and tangible goods**

See class 7730.

### **7730 Renting and leasing of other machinery, equipment and tangible goods**

This class includes:

- renting and operational leasing, without operator, of other machinery and equipment that are generally used as capital goods by industries:
  - ◆ engines and turbines
  - ◆ machine tools
  - ◆ mining and oilfield equipment
  - ◆ professional radio, television and communication equipment
  - ◆ motion picture production equipment
  - ◆ measuring and controlling equipment

- ◆ other scientific, commercial and industrial machinery
- renting and operational leasing of land-transport equipment (other than motor vehicles) without drivers:
  - ◆ motorcycles, caravans and campers etc.
  - ◆ railroad vehicles
- renting and operational leasing of water-transport equipment without operator:
  - ◆ commercial boats and ships
- renting and operational leasing of air transport equipment without operator:
  - ◆ airplanes
  - ◆ hot-air balloons
- renting and operational leasing of agricultural and forestry machinery and equipment without operator:
  - ◆ renting of products produced by class 2821, such as agricultural tractors etc.
- renting and operational leasing of construction and civil-engineering machinery and equipment without operator:
  - ◆ crane lorries
  - ◆ scaffolds and work platforms, without erection and dismantling
- renting and operational leasing of office machinery and equipment without operator:
  - ◆ computers and computer peripheral equipment
  - ◆ duplicating machines, typewriters and word-processing machines
  - ◆ accounting machinery and equipment: cash registers, electronic calculators etc.
  - ◆ office furniture

This class also includes:

- renting of accommodation or office containers
- renting of containers
- renting of pallets
- renting of animals (e.g. herds, race horses)

*This class excludes:*

- renting of agricultural and forestry machinery or equipment with operator, see 0161, 0240
- renting of construction and civil engineering machinery or equipment with operator, see division 43
- renting of water-transport equipment with operator, see division 50
- renting of air-transport equipment with operator, see division 51
- financial leasing, see 6491
- renting of pleasure boats, see 7721
- renting of bicycles, see 7721

#### **774 Leasing of intellectual property and similar products, except copyrighted works**

See class 7740.

#### **7740 Leasing of intellectual property and similar products, except copyrighted works**

This class includes the activities of allowing others to use intellectual property products and similar products for which a royalty payment or licensing fee is paid to the owner of the product (i.e. the asset holder). The leasing of these products can take various forms, such as permission for reproduction, use in subsequent processes or products, operating businesses under a franchise etc. The current owners may or may not have created these products.

This class includes:

- leasing of intellectual property products (except copyrighted works, such as books or software)
- receiving royalties or licensing fees for the use of:
  - ◆ patented entities
  - ◆ trademarks or service marks
  - ◆ brand names
  - ◆ mineral exploration and evaluation
  - ◆ franchise agreements

*This class excludes:*

- acquisition of rights and publishing, see divisions 58 and 59*
- producing, reproducing and distributing copyrighted works (books, software, film), see divisions 58 and 59*
- leasing of real estate, see group 681*
- leasing of tangible products (assets), see groups 771, 772, 773*
- renting of video tapes and disks, see 7722*
- renting of books, see 7729*

## **78 Employment activities**

This division includes activities of listing employment vacancies and referring or placing applicants for employment, where the individuals referred or placed are not employees of the employment agencies, supplying workers to clients' businesses for limited periods of time to supplement the working force of the client, and the activities of providing human resources and human resource management services for others on a contract or fee basis. This division also includes executive search and placement activities and activities of theatrical casting agencies.

This division excludes the activities of agents for individual artists (see class 7490).

### **781 Activities of employment placement agencies**

See class 7810.

### **7810 Activities of employment placement agencies**

This class includes listing employment vacancies and referring or placing applicants for employment, where the individuals referred or placed are not employees of the employment agencies.

This class includes:

- personnel search, selection referral and placement activities, including executive placement and search activities
- activities of casting agencies and bureaus, such as theatrical casting agencies
- activities of on-line employment placement agencies

*This class excludes:*

- activities of personal theatrical or artistic agents or agencies, see 7490*

### **782 Temporary employment agency activities**

See class 7820.

**7820 Temporary employment agency activities**

This class includes:

—supplying workers to clients' businesses for limited periods of time to temporarily replace or supplement the working force of the client, where the individuals provided are employees of the temporary help service unit

Units classified here do not provide direct supervision of their employees at the clients' work sites.

**783 Other human resources provision**

See class 7830.

**7830 Other human resources provision**

This class includes:

—provision of human resources for client businesses

This provision of human resources is typically done on a long-term or permanent basis and the units classified here may perform a wide range of human resource and personnel management duties associated with this provision.

The units classified here represent the employer of record for the employees on matters relating to payroll, taxes, and other fiscal and human resource issues, but they are not responsible for direction and supervision of employees.

*This class excludes:*

—provision of human resources functions together with supervision or running of the business, see the class in the respective economic activity of that business

—provision of human resources to temporarily replace or supplement the workforce of the client, see 7820

**79 Travel agency, tour operator, reservation service and related activities**

This division includes the activity of selling travel, tour, transportation and accommodation services to the general public and commercial clients and the activity of arranging and assembling tours that are sold through travel agencies or directly by agents such as tour operators, as well as other travel-related services including reservation services. The activities of tourist guides and tourism promotion activities are also included.

**791 Travel agency and tour operator activities**

This group includes the activities of agencies, primarily engaged in selling travel, tour, transportation and accommodation services to the general public and commercial clients and the activity of arranging and assembling tours that are sold through travel agencies or directly by agents such as tour operators.

**7911 Travel agency activities**

This class includes:

—activities of agencies primarily engaged in selling travel, tour, transportation and accommodation services to the general public and commercial clients

**7912 Tour operator activities**

This class includes:

—arranging and assembling tours that are sold through travel agencies or directly by tour operators. The tours may include any or all of the following:

- ♦ transportation
- ♦ accommodation
- ♦ food
- ♦ visits to museums, historical or cultural sites, theatrical, musical or sporting events

**799 Other reservation service and related activities**

See class 7990.

**7990 Other reservation service and related activities**

This class includes:

—provision of other travel-related reservation services:

- ♦ reservations for transportation, hotels, restaurants, car rentals, entertainment and sport etc.

—provision of time-share exchange services

—ticket sales activities for theatrical, sports and other amusement and entertainment events

—provision of visitor assistance services:

- ♦ provision of travel information to visitors
- ♦ activities of tourist guides

—tourism promotion activities

*This class excludes:*

—*activities of travel agencies and tour operators, see 7911, 7912*

—*organization and management of events such as meetings, conventions and conferences, see 8230*

**80 Security and investigation activities**

This division includes security-related services such as: investigation and detective services; guard and patrol services; picking up and delivering money, receipts, or other valuable items with personnel and equipment to protect such properties while in transit; operation of electronic security alarm systems, such as burglar and fire alarms, where the activity focuses on remote monitoring these systems, but often involves also sale, installation and repair services. If the latter components are provided separate, they are excluded from this division and classified in retail sale, construction etc.

**801 Private security activities**

See class 8010.

**8010 Private security activities**

This class includes the provision of one or more of the following: guard and patrol services, picking up and delivering money, receipts or other valuable items with personnel and equipment to protect such properties while in transit.

This class includes:

- armored car services
- bodyguard services
- polygraph services
- fingerprinting services
- security guard services

*This class excludes:*

- *public order and safety activities, see 8423*

## **802 Security systems service activities**

See class 8020.

## **8020 Security systems service activities**

This class includes:

- monitoring or remote monitoring of electronic security alarm systems, such as burglar and fire alarms, including their maintenance
- installing, repairing, rebuilding, and adjusting mechanical or electronic locking devices, safes and security vaults

The units carrying out these activities may also engage in selling such security systems, mechanical or electronic locking devices, safes and security vaults.

*This class excludes:*

- *installation of security systems, such as burglar and fire alarms, without later monitoring, see 4321*
- *selling security systems, mechanical or electronic locking devices, safes and security vaults, without monitoring, installation or maintenance services, see 4759*
- *security consultants, see 7490*
- *public order and safety activities, see 8423*
- *providing key duplication services, see 9529*

## **803 Investigation activities**

See class 8030.

## **8030 Investigation activities**

This class includes:

- investigation and detective service activities
- activities of all private investigators, independent of the type of client or purpose of investigation

## **81 Services to buildings and landscape activities**

This division includes the provision of a number of general support services, such as the provision of a combination of support services within a client's facilities, the interior and exterior cleaning of buildings of all types, cleaning of industrial machinery, cleaning of trains, buses, planes, etc., cleaning of the inside of road and sea tankers, disinfecting and exterminating activities for buildings, ships, trains, etc., bottle cleaning, street sweeping, snow and ice removal, provision of landscape care and maintenance services and provision of these services along with the design of landscape plans and/or the construction (i.e. installation) of walkways, retaining walls, decks, fences, ponds, and similar structures.

**811 Combined facilities support activities**

See class 8110.

**8110 Combined facilities support activities**

This class includes:

—provision of a combination of support services within a client's facility, such as general interior cleaning, maintenance, trash disposal, guard and security, mail routing, reception, laundry and related services to support operations within facilities

Units classified here provide operating staff to carry out these support activities, but are not involved with or responsible for the core business or activities of the client.

*This class excludes:*

—provision of only one of the support services (e.g. general interior cleaning services) or addressing only a single function (e.g. heating), see the appropriate class according to the service provided

—provision of management and operating staff for the complete operation of a client's establishment, such as a hotel, restaurant, mine, or hospital, see the class of the unit operated

—provision of on site management and operation of a client's computer systems and/or data processing facilities, see 6202

—operation of correctional facilities on a contract or fee basis, see 8423

**812 Cleaning activities**

This group includes the activities of general interior cleaning of all types of buildings, exterior cleaning of buildings, specialized cleaning activities for buildings or other specialized cleaning activities, cleaning of industrial machinery, cleaning of the inside of road and sea tankers, disinfecting and extermination activities for buildings and industrial machinery, bottle cleaning, street sweeping, snow and ice removal.

*This group excludes:*

—agricultural pest control, see 0161

—cleaning of new buildings immediately after construction, 4330

—steam-cleaning, sand blasting and similar activities for building exteriors, see 4390

—carpet and rug shampooing, drapery and curtain cleaning, see 9601

**8121 General cleaning of buildings**

This class includes:

—general (non-specialized) cleaning of all types of buildings, such as:

- ◆ offices
- ◆ houses or apartments
- ◆ factories
- ◆ shops
- ◆ institutions

—general (non-specialized) cleaning of other business and professional premises and multiunit residential buildings

These activities cover mostly interior cleaning although they may include the cleaning of associated exterior areas such as windows or passageways.

*This class excludes:*

—specialized interior cleaning activities, such as chimney cleaning, cleaning of fireplaces, stoves, furnaces, incinerators, boilers, ventilation ducts, exhaust units, see 8129

**8129 Other building and industrial cleaning activities**

This class includes:

- exterior cleaning of buildings of all types, including offices, factories, shops, institutions and other business and professional premises and multiunit residential buildings
- specialized cleaning activities for buildings such as window cleaning, chimney cleaning and cleaning of fireplaces, stoves, furnaces, incinerators, boilers, ventilation ducts and exhaust units
- swimming pool cleaning and maintenance services
- cleaning of industrial machinery
- bottle cleaning
- cleaning of trains, buses, planes, etc.
- cleaning of the inside of road and sea tankers
- disinfecting and exterminating activities
- street sweeping and snow and ice removal
- other building and industrial cleaning activities, n.e.c.

*This class excludes:*

- agriculture pest control, see 0161
- cleaning of sewers and drains, see 3700
- automobile cleaning, car wash, see 4520

**813 Landscape care and maintenance service activities**

See class 8130.

**8130 Landscape care and maintenance service activities**

This class includes:

- planting, care and maintenance of:
  - ◆ parks and gardens for:
    - private and public housing
    - public and semi-public buildings (schools, hospitals, administrative buildings, church buildings etc.)
    - municipal grounds (parks, green areas, cemeteries etc.)
    - highway greenery (roads, train lines and tramlines, waterways, ports)
    - industrial and commercial buildings
  - ◆ greenery for:
    - buildings (roof gardens, façade greenery, indoor gardens)
    - sports grounds (e.g. football fields, golf courses etc.), play grounds, lawns for sunbathing and other recreational parks
    - stationary and flowing water (basins, alternating wet areas, ponds, swimming pools, ditches, watercourses, plant sewage systems)
  - ◆ plants for protection against noise, wind, erosion, visibility and dazzling

This class also includes:

- maintenance of land in order to keep it in good ecological condition

*This class excludes:*

- commercial production and planting for commercial production of plants, trees, see divisions 01 and 02
- tree nurseries (except forest tree nurseries), see 0130



- *maintenance of land to keep it in good condition for agricultural use, see 0161*
- *construction activities for landscaping purposes, see section F*
- *landscape design and architecture activities, see 7110*
- *operation of botanical gardens, see 9103*

## **82 Office administrative, office support and other business support activities**

This division includes the provision of a range of day-to-day office administrative services, as well as ongoing routine business support functions for others, on a contract or fee basis.

This division also includes all support service activities typically provided to businesses not elsewhere classified.

Units classified in this division do not provide operating staff to carry out the complete operations of a business.

### **821 Office administrative and support activities**

This group includes the provision of a range of day-to-day office administrative services, such as financial planning, billing and record keeping, personnel and physical distribution and logistics for others on a contract or fee basis.

This group includes also support activities for others on a contract or fee basis, that are ongoing routine business support functions that businesses and organizations traditionally do for themselves.

Units classified in this group do not provide operating staff to carry out the complete operations of a business. Units engaged in one particular aspect of these activities are classified according to that particular activity.

#### **8211 Combined office administrative service activities**

This class includes:

- provision of a combination of day-to-day office administrative services, such as reception, financial planning, billing and record keeping, personnel and physical distribution (mail services) and logistics for others on a contract or fee basis.

*This class excludes:*

- *provision of operating staff to carry out the complete operations of a business, see class according to the business/activity performed*
- *provision of only one particular aspect of these activities, see class according to that particular activity*

#### **8219 Photocopying, document preparation and other specialized office support activities**

This class includes a variety of copying, document preparation and specialized office support activities. The document copying/printing activities included here cover only short-run type printing activities.

This class includes:

- document preparation
- document editing or proofreading
- typing, word processing, or desktop publishing
- secretarial support services
- transcription of documents, and other secretarial services

- letter or resume writing
- provision of mailbox rental and other mailing activities (except direct mail advertising)
- photocopying
- duplicating
- blueprinting
- other document copying services without also providing printing services, such as offset printing, quick printing, digital printing, prepress services

*This class excludes:*

- *printing of documents (offset printing, quick printing etc.), see 1811*
- *direct mail advertising, see 7310*
- *specialized stenotype services such as court reporting, see 8299*
- *public stenography services, see 8299*

## **822 Activities of call centres**

See class 8220.

## **8220 Activities of call centres**

This class includes:

- activities of inbound call centres, answering calls from clients by using human operators, automatic call distribution, computer telephone integration, interactive voice response systems or similar methods to receive orders, provide product information, deal with customer requests for assistance or address customer complaints
- activities of outbound call centers using similar methods to sell or market goods or services to potential customers, undertake market research or public opinion polling and similar activities for clients

## **823 Organization of conventions and trade shows**

See class 8230.

## **8230 Organization of conventions and trade shows**

This class includes:

- organization, promotion and/or management of events, such as business and trade shows, conventions, conferences and meetings, whether or not including the management and provision of the staff to operate the facilities in which these events take place

## **829 Business support service activities n.e.c.**

This group includes the activities of collection agencies, credit bureaus and all support activities typically provided to businesses not elsewhere classified.

## **8291 Activities of collection agencies and credit bureaus**

This class includes:

- collection of payments for claims and remittance of payments collected to the clients, such as bill or debt collection services
- compiling of information, such as credit and employment histories on individuals and credit histories on businesses and providing the information to financial institutions,

retailers and others who have a need to evaluate the creditworthiness of these persons and businesses

### 8292 Packaging activities

This class includes:

- packaging activities on a fee or contract basis, whether or not these involve an automated process:
  - ◆ bottling of liquids, including beverages and food
  - ◆ packaging of solids (blister packaging, foil-covered etc.)
  - ◆ security packaging of pharmaceutical preparations
  - ◆ labeling, stamping and imprinting
  - ◆ parcel-packing and gift-wrapping

*This class excludes:*

- *manufacture of soft drinks and production of mineral water, see 1104*
- *packaging activities incidental to transport, see 5229*

### 8299 Other business support service activities n.e.c.

This class includes:

- providing verbatim reporting and stenotype recording of live legal proceedings and transcribing subsequent recorded materials, such as:
  - ◆ court reporting or stenotype recording services
  - ◆ public stenography services
- real-time (i.e. simultaneous) closed captioning of live television performances of meetings, conferences
- address bar coding services
- bar code imprinting services
- fundraising organization services on a contract or fee basis
- mail presorting services
- repossession services
- parking meter coin collection services
- activities of independent auctioneers
- administration of loyalty programmes
- other support activities typically provided to businesses not elsewhere classified

*This class excludes:*

- *provision of document transcription services, see 8219*
- *providing film or tape captioning or subtitling services, see 5912*

## Section O Public administration and defence; compulsory social security

This section includes activities of a governmental nature, normally carried out by the public administration. This includes the enactment and judicial interpretation of laws and their pursuant regulation, as well as the administration of programmes based on them, legislative activities, taxation, national defence, public order and safety, immigration services, foreign affairs and the administration of government programmes. This section also includes compulsory social security activities.

The legal or institutional status is not, in itself, the determining factor for an activity to belong in this section, rather than the activity being of a nature specified in the previous paragraph. This means that activities classified elsewhere in ISIC do not fall under this section, even if carried out by public entities. For example, administration of the school system (i.e. regulations, checks, curricula) falls under this section, but teaching itself does not (see section P), and a prison or military hospital is classified to health (see section Q). Similarly, some activities described in this section may be carried out by non-government units.

#### **84 Public administration and defence; compulsory social security**

See section O.

#### **841 Administration of the State and the economic and social policy of the community**

This group includes general administration (e.g. executive, legislative, financial administration etc. at all levels of government) and supervision in the field of social and economic life.

##### **8411 General public administration activities**

This class includes:

- executive and legislative administration of central, regional and local bodies
- administration and supervision of fiscal affairs:
  - ◆ operation of taxation schemes
  - ◆ duty/tax collection on goods and tax violation investigation
  - ◆ customs administration
- budget implementation and management of public funds and public debt:
  - ◆ raising and receiving of moneys and control of their disbursement
- administration of overall (civil) R&D policy and associated funds
- administration and operation of overall economic and social planning and statistical services at the various levels of government

*This class excludes:*

- operation of government owned or occupied buildings, see 6810, 6820
- administration of R&D policies intended to increase personal well-being and of associated funds, see 8412
- administration of R&D policies intended to improve economic performance and competitiveness, see 8413
- administration of defence-related R&D policies and of associated funds, see 8422
- operation of government archives, see 9101

##### **8412 Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security**

This class includes:

- public administration of programmes aimed to increase personal well-being:
  - ◆ health
  - ◆ education
  - ◆ culture
  - ◆ sport

- ◆ recreation
- ◆ environment
- ◆ housing
- ◆ social services

—public administration of R&D policies and associated funds for these areas

This class also includes:

- sponsoring of recreational and cultural activities
- distribution of public grants to artists
- administration of potable water supply programmes
- administration of waste collection and disposal operations
- administration of environmental protection programmes
- administration of housing programmes

*This class excludes:*

- sewage, refuse disposal and remediation activities, see divisions 37, 38, 39*
- compulsory social security activities, see 8430*
- education activities, see division 85*
- human health-related activities, see division 86*
- activities of libraries and archives (private, public or government operated), see 9101*
- operation of museums and other cultural institutions, see 9102*
- sporting or other recreational activities, see division 93*

### **8413 Regulation of and contribution to more efficient operation of businesses**

This class includes:

- public administration and regulation, including subsidy allocation, for different economic sectors:
  - ◆ agriculture
  - ◆ land use
  - ◆ energy and mining resources
  - ◆ infrastructure
  - ◆ transport
  - ◆ communication
  - ◆ hotels and tourism
  - ◆ wholesale and retail trade
- administration of R&D policies and associated funds to improve economic performance
- administration of general labour affairs
- implementation of regional development policy measures, e.g. to reduce unemployment

*This class excludes:*

- research and experimental development activities, see division 72*

### **842 Provision of services to the community as a whole**

This group includes foreign affairs, defence and public order and safety activities.

**8421 Foreign affairs**

This class includes:

- administration and operation of the ministry of foreign affairs and diplomatic and consular missions stationed abroad or at offices of international organizations
- administration, operation and support for information and cultural services intended for distribution beyond national boundaries
- aid to foreign countries, whether or not routed through international organizations
- provision of military aid to foreign countries
- management of foreign trade, international financial and foreign technical affairs

*This class excludes:*

- *international disaster or conflict refugee services, see 8890*

**8422 Defence activities**

This class includes:

- administration, supervision and operation of military defence affairs and land, sea, air and space defence forces such as:
  - ♦ combat forces of army, navy and air force
  - ♦ engineering, transport, communications, intelligence, material, personnel and other non-combat forces and commands
  - ♦ reserve and auxiliary forces of the defence establishment
  - ♦ military logistics (provision of equipment, structures, supplies etc.)
  - ♦ health activities for military personnel in the field
- administration, operation and support of civil defence forces
- support for the working out of contingency plans and the carrying out of exercises in which civilian institutions and populations are involved
- administration of defence-related R&D policies and related funds

*This class excludes:*

- *research and experimental development activities, see division 72*
- *provision of military aid to foreign countries, see 8421*
- *activities of military tribunals, see 8423*
- *provision of supplies for domestic emergency use in case of peacetime disasters, see 8423*
- *educational activities of military schools, colleges and academies, see 8530*
- *activities of military hospitals, see 8610*

**8423 Public order and safety activities**

This class includes:

- administration and operation of regular and auxiliary police forces supported by public authorities and of port, border, coastguards and other special police forces, including traffic regulation, alien registration, maintenance of arrest records
- firefighting and fire prevention:
  - ♦ administration and operation of regular and auxiliary fire brigades in fire prevention, firefighting, rescue of persons and animals, assistance in civic disasters, floods, road accidents etc.
- administration and operation of administrative civil and criminal law courts, military tribunals and the judicial system, including legal representation and advice on behalf of the government or when provided by the government in cash or services

- rendering of judgements and interpretations of the law
- arbitration of civil actions
- prison administration and provision of correctional services, including rehabilitation services, regardless of whether their administration and operation is done by government units or by private units on a contract or fee basis
- provision of supplies for domestic emergency use in case of peacetime disasters

*This class excludes:*

- *forestry fire-protection and fire-fighting services, see 0240*
- *oil and gas field fire fighting, see 0910*
- *firefighting and fire-prevention services at airports provided by non-specialized units, see 5223*
- *advice and representation in civil, criminal and other cases, see 6910*
- *operation of police laboratories, see 7120*
- *administration and operation of military armed forces, see 8422*
- *activities of prison schools, see division 85*
- *activities of prison hospitals, see 8610*

### **843 Compulsory social security activities**

See class 8430.

### **8430 Compulsory social security activities**

This class includes:

- funding and administration of government-provided social security programmes:
  - ♦ sickness, work-accident and unemployment insurance
  - ♦ retirement pensions
  - ♦ programmes covering losses of income due to maternity, temporary disablement, widowhood etc.

*This class excludes:*

- *non-compulsory social security, see 6530*
- *provision of welfare services and social work (without accommodation), see 8810, 8890*

## **Section P Education**

This section includes education at any level or for any profession, oral or written as well as by radio and television or other means of communication. It includes education by the different institutions in the regular school system at its different levels as well as adult education, literacy programmes etc. Also included are military schools and academies, prison schools etc. at their respective levels. The section includes public as well as private education.

For each level of initial education, the classes include special education for physically or mentally handicapped pupils.

The breakdown of the categories in this section is based on the level of education offered as defined by the levels of ISCED 1997. The activities of educational institutions providing education at ISCED levels 0 and 1 are classified in group 851, those at ISCED levels 2 and 3 in group 852 and those at ISCED levels 4, 5 and 6 in group 853.

This section also includes instruction primarily concerned with sport and recreational activities such as bridge or golf and education support activities.

**85 Education**

See section P.

**851 Pre-primary and primary education**

See class 8510.

**8510 Pre-primary and primary education**

This class includes the provision of instruction designed primarily to introduce very young children to a school-type environment and instruction that gives students a sound basic education in reading, writing and mathematics along with an elementary understanding of other subjects such as history, geography, natural science, social science, art and music. Such education is generally provided for children, however the provision of literacy programmes within or outside the school system, which are similar in content to programmes in primary education but are intended for those considered too old to enter elementary schools, is also included. Also included is the provision of programmes at a similar level, suited to children with special needs education. Education can be provided in classrooms or through radio, television broadcast, Internet, correspondence or at home.

This class includes:

- pre-primary education
- primary education

This class also includes:

- special education for handicapped students at this level
- provision of literacy programmes for adults

*This class excludes:*

- adult education as defined in group 854
- child day-care activities, see 8890

**852 Secondary education**

This group includes the provision of general secondary and technical and vocational secondary education.

**8521 General secondary education**

This class includes provision of the type of education that lays the foundation for lifelong learning and human development and is capable of furthering education opportunities. Such units provide programmes that are usually on a more subject-oriented pattern using more specialized teachers, and more often employ several teachers conducting classes in their field of specialization. Education can be provided in classrooms or through radio, television broadcast, Internet, correspondence or at home.

Subject specialization at this level often begins to have some influence even on the educational experience of those pursuing a general programme. Such programmes are designated to qualify students either for technical and vocational education or for entrance to higher education without any special subject prerequisite.

This class includes:

- general school education in the first stage of the secondary level corresponding more or less to the period of compulsory school attendance
- general school education in the second stage of the secondary level giving, in principle, access to higher education



This class also includes:

- special education for handicapped students at this level

*This class excludes:*

- adult education as defined in group 854

## 8522 Technical and vocational secondary education

This class includes education typically emphasizing subject-matter specialization and instruction in both theoretical background and practical skills generally associated with present or prospective employment. The aim of a programme can vary from preparation for a general field of employment to a very specific job. Instruction may be provided in diverse settings, such as the unit's or client's training facilities, educational institutions, the workplace, or the home, and through correspondence, television, Internet, or other means.

This class includes:

- technical and vocational education below the level of higher education as defined in 853

This class also includes:

- instruction for tourist guides
- instruction for chefs, hoteliers and restaurateurs
- special education for handicapped students at this level
- cosmetology and barber schools
- computer repair training
- driving schools for occupational drivers e.g. of trucks, buses, coaches

*This class excludes:*

- technical and vocational education at post-secondary and university levels, see 8530
- adult education as defined in group 854
- performing art instruction for recreation, hobby and self-development purposes, see 8542
- automobile driving schools not intended for occupational drivers, see 8549
- job training forming part of social work activities without accommodation, see 8810, 8890

## 853 Higher education

See class 8530.

### 8530 Higher education

This class includes the provision of post-secondary non-tertiary and tertiary education, including granting of degrees at baccalaureate, graduate or post-graduate level. The requirement for admission is at least a high school diploma or equivalent general academic training. Education can be provided in classrooms or through radio, television broadcast, Internet or correspondence.

This class includes:

- post-secondary non-tertiary education
- first stage of tertiary education (not leading to an advanced research qualification)
- second stage of tertiary education (leading to an advanced research qualification)

This class also includes:

- performing arts schools providing higher education

*This class excludes:*

—adult education as defined in group 854

#### **854 Other education**

This group includes general continuing education and continuing vocational education and training for any profession. Instruction may be oral or written and may be provided in classrooms or by radio, television, Internet, correspondence or other means of communication. This group also includes the provision of instruction in athletic activities to groups or individuals, foreign language instruction, instruction in the arts, drama or music or other instruction or specialized training, not comparable to the education in groups 851–853.

*This group excludes:*

—provision of primary education, secondary education or higher education, see groups 851, 852, 853

#### **8541 Sports and recreation education**

This class includes the provision of instruction in athletic activities to groups or individuals, such as by camps and schools. Overnight and day sports instruction camps are also included. This class does not include activities of academic schools, colleges and universities. Instruction may be provided in diverse settings, such as the unit's or client's training facilities, educational institutions or by other means. Instruction provided in this class is formally organized.

This class includes:

- sports instruction (baseball, basketball, cricket, football, etc)
- camps, sports instruction
- cheerleading instruction
- gymnastics instruction
- riding instruction, academies or schools
- swimming instruction
- professional sports instructors, teachers, coaches
- martial arts instruction
- card game instruction (such as bridge)
- yoga instruction

*This class excludes:*

—cultural education, see 8542

#### **8542 Cultural education**

This class includes provision of instruction in the arts, drama and music. Units giving this type of instructions might be named "schools", "studios", "classes" etc. They provide formally organized instruction, mainly for hobby, recreational or self-development purposes, but such instruction does not lead to a professional diploma, baccalaureate or graduate degree.

This class includes:

- piano teachers and other music instruction
- art instruction
- dance instruction and dance studios
- drama schools (except academic)

- fine arts schools (except academic)
- performing arts schools (except academic)
- photography schools (except commercial)

#### **8549 Other education n.e.c.**

This class includes the provision of instruction and specialized training, generally for adults, not comparable to the general education in groups 851–853. This class does not include activities of academic schools, colleges, and universities. Instruction may be provided in diverse settings, such as the unit's or client's training facilities, educational institutions, the workplace, or the home, and through correspondence, radio, television, Internet, in classrooms or by other means. Such instruction does not lead to a high school diploma, baccalaureate or graduate degree.

This class includes:

- education that is not definable by level
- academic tutoring services
- college board preparation
- learning centres offering remedial courses
- professional examination review courses
- language instruction and conversational skills instruction
- speed reading instruction
- religious instruction

This class also includes:

- automobile driving schools
- flying schools
- lifeguard training
- survival training
- public speaking training
- computer training

*This class excludes:*

- *adult literacy programmes see 8510*
- *general secondary education, see 8521*
- *driving schools for occupational drivers, see 8522*
- *higher education, see 8530*
- *cultural education, see 8542*

#### **855 Educational support activities**

See class 8550.

#### **8550 Educational support activities**

This class includes:

- provision of non-instructional services that support educational processes or systems:
  - ♦ educational consulting
  - ♦ educational guidance counseling services
  - ♦ educational testing evaluation services
  - ♦ educational testing services
  - ♦ organization of student exchange programs

*This class excludes:*

—research and experimental development on social sciences and humanities, see 7220

## Section Q

### Human health and social work activities

This section includes the provision of health and social work activities. Activities include a wide range of activities, starting from health care provided by trained medical professionals in hospitals and other facilities, over residential care activities that still involve a degree of health care activities to social work activities without any involvement of health care professionals.

#### 86 Human health activities

This division includes activities of short- or long-term hospitals, general or specialty medical, surgical, psychiatric and substance abuse hospitals, sanatoria, preventoria, medical nursing homes, asylums, mental hospital institutions, rehabilitation centres, leprosaria and other human health institutions which have accommodation facilities and which engage in providing diagnostic and medical treatment to inpatients with any of a wide variety of medical conditions. It also includes medical consultation and treatment in the field of general and specialized medicine by general practitioners and medical specialists and surgeons. It includes dental practice activities of a general or specialized nature and orthodontic activities. Additionally, this division includes activities for human health not performed by hospitals or by practicing medical doctors but by paramedical practitioners legally recognized to treat patients.

#### 861 Hospital activities

See class 8610.

#### 8610 Hospital activities

This class includes:

—short- or long-term hospital activities, i.e. medical, diagnostic and treatment activities, of general hospitals (e.g. community and regional hospitals, hospitals of non-profit organizations, university hospitals, military-base and prison hospitals) and specialized hospitals (e.g. mental health and substance abuse hospitals, hospitals for infectious diseases, maternity hospitals, specialized sanatoriums)

The activities are chiefly directed to inpatients, are carried out under the direct supervision of medical doctors and include:

- ♦ services of medical and paramedical staff
- ♦ services of laboratory and technical facilities, including radiologic and anaesthesiologic services
- ♦ emergency room services
- ♦ provision of operating room services, pharmacy services, food and other hospital services
- ♦ services of family planning centres providing medical treatment such as sterilization and termination of pregnancy, with accommodation

*This class excludes:*

—laboratory testing and inspection of all types of materials and products, except medical, see 7120

—veterinary activities, see 7500

—health activities for military personnel in the field, see 8422

—dental practice activities of a general or specialized nature, e.g. dentistry, endodontic and pediatric dentistry; oral pathology, orthodontic activities, see 8620

—private consultants' services to inpatients, see 8620

—medical laboratory testing, see 8690

—ambulance transport activities, see 8690

## 862 Medical and dental practice activities

See class 8620.

## 8620 Medical and dental practice activities

This class includes:

—medical consultation and treatment in the field of general and specialized medicine by general practitioners and medical specialists and surgeons

—dental practice activities of a general or specialized nature, e.g. dentistry, endodontic and pediatric dentistry; oral pathology

—orthodontic activities

—family planning centres providing medical treatment, such as sterilization and termination of pregnancy, without accommodation

These activities can be carried out in private practice, group practices and in hospital out-patient clinics, and in clinics such as those attached to firms, schools, homes for the aged, labour organizations and fraternal organizations, as well as in patients' homes.

This class also includes:

—dental activities in operating rooms

—private consultants' services to inpatients

*This class excludes:*

—production of artificial teeth, denture and prosthetic appliances by dental laboratories, see 3250

—inpatient hospital activities, see 8610

—paramedical activities such as those of midwives, nurses and physiotherapists, see 8690

## 869 Other human health activities

See class 8690.

## 8690 Other human health activities

This class includes:

—activities for human health not performed by hospitals or by medical doctors or dentists:

- ♦ activities of nurses, midwives, physiotherapists or other paramedical practitioners in the field of optometry, hydrotherapy, medical massage, occupational therapy, speech therapy, chiropody, homeopathy, chiropractice, acupuncture etc.

These activities may be carried out in health clinics such as those attached to firms, schools, homes for the aged, labour organizations and fraternal organizations and in residential health facilities other than hospitals, as well as in own consulting rooms, patients' homes or elsewhere. These activities do not involve medical treatment.

This class also includes:

—activities of dental paramedical personnel such as dental therapists, school dental nurses and dental hygienists, who may work remote from, but are periodically supervised by, the dentist

—activities of medical laboratories such as:

- ◆ X-ray laboratories and other diagnostic imaging centres
- ◆ blood analysis laboratories
- activities of blood banks, sperm banks, transplant organ banks etc.
- ambulance transport of patients by any mode of transport including airplanes. These services are often provided during a medical emergency.

*This class excludes:*

- production of artificial teeth, denture and prosthetic appliances by dental laboratories, see 3250*
- transfer of patients, with neither equipment for lifesaving nor medical personnel, see divisions 49, 50, 51*
- non-medical laboratory testing, see 7120*
- testing activities in the field of food hygiene, see 7120*
- hospital activities, see 8610*
- medical and dental practice activities, see 8620*
- nursing care facilities, see 8710*

## **87 Residential care activities**

This division includes the provision of residential care combined with either nursing, supervisory or other types of care as required by the residents. Facilities are a significant part of the production process and the care provided is a mix of health and social services with the health services being largely some level of nursing services.

### **871 Residential nursing care facilities**

See class 8710.

### **8710 Residential nursing care facilities**

This class includes:

- activities of:
  - ◆ homes for the elderly with nursing care
  - ◆ convalescent homes
  - ◆ rest homes with nursing care
  - ◆ nursing care facilities
  - ◆ nursing homes

*This class excludes:*

- in-home services provided by health care professionals, see division 86*
- activities of homes for the elderly without or with minimal nursing care, see 8730*
- social work activities with accommodation, such as orphanages, children's boarding homes and hostels, temporary homeless shelters, see 8790*

### **872 Residential care activities for mental retardation, mental health and substance abuse**

See class 8720.

### **8720 Residential care activities for mental retardation, mental health and substance abuse**

This class includes the provision of residential care (but not licensed hospital care) to people with mental retardation, mental illness, or substance abuse problems. Facilities

provide room, board, protective supervision and counselling and some health care. It also includes provision of residential care and treatment for patients with mental health and substance abuse illnesses.

This class includes:

—activities of:

- ◆ facilities for treatment of alcoholism and drug addiction
- ◆ psychiatric convalescent homes
- ◆ residential group homes for the emotionally disturbed
- ◆ mental retardation facilities
- ◆ mental health halfway houses

*This class excludes:*

—*social work activities with accommodation, such as temporary homeless shelters, see 8790*

### **873 Residential care activities for the elderly and disabled**

See class 8730.

### **8730 Residential care activities for the elderly and disabled**

This class includes the provision of residential and personal care services for the elderly and disabled who are unable to fully care for themselves and/or who do not desire to live independently. The care typically includes room, board, supervision, and assistance in daily living, such as housekeeping services. In some instances these units provide skilled nursing care for residents in separate on-site facilities.

This class includes:

—activities of:

- ◆ assisted-living facilities
- ◆ continuing care retirement communities
- ◆ homes for the elderly with minimal nursing care
- ◆ rest homes without nursing care

*This class excludes:*

—*activities of homes for the elderly with nursing care, see 8710*

—*social work activities with accommodation where medical treatment or accommodation are not important elements, see 8790*

### **879 Other residential care activities**

See class 8790.

### **8790 Other residential care activities**

This class includes the provision of residential and personal care services for persons, except the elderly and disabled, who are unable to fully care for themselves or who do not desire to live independently.

This class includes:

—activities provided on a round-the-clock basis directed to provide social assistance to children and special categories of persons with some limits on ability for self-care, but where medical treatment or education are not important elements:

- ◆ orphanages
- ◆ children's boarding homes and hostels
- ◆ temporary homeless shelters
- ◆ institutions that take care of unmarried mothers and their children

The activities may be carried out by public or private organizations.

This class also includes:

— activities of:

- ◆ halfway group homes for persons with social or personal problems
- ◆ halfway homes for delinquents and offenders
- ◆ disciplinary camps

*This class excludes:*

- *funding and administration of compulsory social security programmes, see 8430*
- *activities of nursing care facilities, see 8710*
- *residential care activities for mental retardation, mental health and substance abuse, see 8720*
- *residential care activities for the elderly or disabled, see 8730*
- *adoption activities, see 8890*
- *short-term shelter activities for disaster victims, see 8890*

## **88 Social work activities without accommodation**

This division includes the provision of a variety of social assistance services directly to clients. The activities in this division do not include accommodation services, except on a temporary basis.

### **881 Social work activities without accommodation for the elderly and disabled**

See class 8810.

### **8810 Social work activities without accommodation for the elderly and disabled**

This class includes:

- social, counselling, welfare, referral and similar services which are aimed at the elderly and disabled in their homes or elsewhere and carried out by public or by private organizations, national or local self-help organizations and by specialists providing counselling services:
  - ◆ visiting of the elderly and disabled
  - ◆ day-care activities for the elderly or for handicapped adults
  - ◆ vocational rehabilitation and habilitation activities for disabled persons provided that the education component is limited

*This class excludes:*

- *funding and administration of compulsory social security programmes, see 8430*
- *activities similar to those described in this class, but including accommodation, see 8730*
- *day-care activities for handicapped children, see 8890*

### **889 Other social work activities without accommodation**

See class 8890.



**8890 Other social work activities without accommodation**

This class includes:

—social, counselling, welfare, refugee, referral and similar services which are delivered to individuals and families in their homes or elsewhere and carried out by public or by private organizations, disaster relief organizations and national or local self-help organizations and by specialists providing counselling services:

- ♦ welfare and guidance activities for children and adolescents
- ♦ adoption activities, activities for the prevention of cruelty to children and others
- ♦ household budget counselling, marriage and family guidance, credit and debt counselling services
- ♦ community and neighbourhood activities
- ♦ activities for disaster victims, refugees, immigrants etc., including temporary or extended shelter for them
- ♦ vocational rehabilitation and habilitation activities for unemployed persons provided that the education component is limited
- ♦ eligibility determination in connection with welfare aid, rent supplements or food stamps
- ♦ child day-care activities, including for handicapped children
- ♦ day facilities for the homeless and other socially weak groups
- ♦ charitable activities like fund-raising or other supporting activities aimed at social work

*This class excludes:*

- funding and administration of compulsory social security programmes, see 8430*
- activities similar to those described in this class, but including accommodation, see 8790*

## **Section R**

### **Arts, entertainment and recreation**

This section includes a wide range of activities to meet varied cultural, entertainment and recreational interests of the general public, including live performances, operation of museum sites, gambling, sports and recreation activities.

**90 Creative, arts and entertainment activities**

See class 9000.

**900 Creative, arts and entertainment activities**

See class 9000.

**9000 Creative, arts and entertainment activities**

This class includes the operation of facilities and provision of services to meet the cultural and entertainment interests of their customers. This includes the production and promotion of, and participation in, live performances, events or exhibits intended for public viewing; the provision of artistic, creative or technical skills for the production of artistic products and live performances.

This class includes:

- production of live theatrical presentations, concerts and opera or dance productions and other stage productions:

- ◆ activities of groups, circuses or companies, orchestras or bands
- ◆ activities of individual artists such as authors, actors, directors, musicians, lecturers or speakers, stage-set designers and builders etc.
- operation of concert and theatre halls and other arts facilities
- activities of sculptors, painters, cartoonists, engravers, etchers etc.
- activities of individual writers, for all subjects including fictional writing, technical writing etc.
- activities of independent journalists
- restoring of works of art such as paintings etc.

This class also includes:

- activities of producers or entrepreneurs of arts live events, with or without facilities

*This class excludes:*

- restoring of stained glass windows, see 2310
- manufacture of statues, other than artistic originals, see 2396
- restoring of organs and other historical musical instruments, see 3319
- restoring of historical sites and buildings, see 4100
- motion picture and video production, see 5911, 5912
- operation of cinemas, see 5914
- activities of personal theatrical or artistic agents or agencies, see 7490
- casting activities, see 7810
- activities of ticket agencies, see 7990
- operation of museums of all kinds, see 9102
- sports and amusement and recreation activities, see division 93
- restoring of furniture (except museum type restoration), see 9524

## **91 Libraries, archives, museums and other cultural activities**

This division includes activities of libraries and archives; the operation of museums of all kinds, botanical and zoological gardens; the operation of historical sites and nature reserves activities. It also includes the preservation and exhibition of objects, sites and natural wonders of historical, cultural or educational interest (e.g. world heritage sites, etc).

This division excludes sports, amusement and recreation activities, such as the operation of bathing beaches and recreation parks (see division 93).

## **910 Libraries, archives, museums and other cultural activities**

See division 91.

### **9101 Library and archives activities**

This class includes:

- documentation and information activities of libraries of all kinds, reading, listening and viewing rooms, public archives providing service to the general public or to a special clientele, such as students, scientists, staff, members as well as operation of government archives:
  - ◆ organization of a collection, whether specialized or not
  - ◆ cataloguing collections
  - ◆ lending and storage of books, maps, periodicals, films, records, tapes, works of art etc.
  - ◆ retrieval activities in order to comply with information requests etc.
- stock photo libraries and services

**9102 Museums activities and operation of historical sites and buildings**

This class includes:

- operation of museums of all kinds:
  - ◆ art museums, museums of jewellery, furniture, costumes, ceramics, silverware
  - ◆ natural history, science and technological museums, historical museums, including military museums
  - ◆ other specialized museums
  - ◆ open-air museums
- operation of historical sites and buildings

*This class excludes:*

- renovation and restoration of historical sites and buildings, see section F
- restoration of works of art and museum collection objects, see 9000
- activities of libraries and archives, see 9101

**9103 Botanical and zoological gardens and nature reserves activities**

This class includes:

- operation of botanical and zoological gardens, including children's zoos
- operation of nature reserves, including wildlife preservation, etc.

*This class excludes:*

- landscape and gardening services, see 8130
- operation of sport fishing and hunting preserves, see 9319

**92 Gambling and betting activities**

This division includes the operation of gambling facilities such as casinos, bingo halls and video gaming terminals and the provision of gambling services, such as lotteries and off-track betting.

**920 Gambling and betting activities**

See class 9200.

**9200 Gambling and betting activities**

This class includes:

- bookmaking and other betting operations
- off-track betting
- operation of casinos, including "floating casinos"
- sale of lottery tickets
- operation (exploitation) of coin-operated gambling machines
- operation of virtual gambling web sites

*This class excludes:*

- operation (exploitation) of coin-operated games, see 9329

**93 Sports activities and amusement and recreation activities**

This division includes the provision of recreational, amusement and sports activities (except museums activities, preservation of historical sites, botanical and zoological gardens and nature reserves activities; and gambling and betting activities).

Excluded from this division are dramatic arts, music and other arts and entertainment such as the production of live theatrical presentations, concerts and opera or dance productions and other stage productions, see division 90.

**931 Sports activities**

This group includes the operation of sports facilities; activities of sports teams or clubs primarily participating in live sports events before a paying audience; independent athletes engaged in participating in live sporting or racing events before a paying audience; owners of racing participants such as cars, dogs, horses, etc. primarily engaged in entering them in racing events or other spectator sports events; sports trainers providing specialized services to support participants in sports events or competitions; operators of arenas and stadiums; other activities of organizing, promoting or managing sports events, n.e.c.

**9311 Operation of sports facilities**

This class includes:

—operation of facilities for indoor or outdoor sports events (open, closed or covered, with or without spectator seating):

- ◆ football, hockey, cricket, baseball, jai-alai stadiums
- ◆ racetracks for auto, dog, horse races
- ◆ swimming pools and stadiums
- ◆ track and field stadiums
- ◆ winter sports arenas and stadiums
- ◆ ice-hockey arenas
- ◆ boxing arenas
- ◆ golf courses
- ◆ bowling lanes
- ◆ fitness centers

—organization and operation of outdoor or indoor sports events for professionals or amateurs by organizations with own facilities

This class includes managing and providing the staff to operate these facilities.

*This class excludes:*

- renting of recreation and sports equipment, see 7721
- operation of ski hills, see 9329
- park and beach activities, see 9329

**9312 Activities of sports clubs**

This class includes the activities of sports clubs, which, whether professional, semi-professional or amateur clubs, give their members the opportunity to engage in sporting activities.

This class includes:

—operation of sports clubs:

- ◆ football clubs
- ◆ bowling clubs
- ◆ swimming clubs
- ◆ golf clubs

- ◆ boxing clubs
- ◆ body-building clubs
- ◆ winter sports clubs
- ◆ chess clubs
- ◆ track and field clubs
- ◆ shooting clubs, etc.

*This class excludes:*

- *sports instruction by individual teachers, trainers, see 8541*
- *operation of sports facilities, see 9311*
- *organization and operation of outdoor or indoor sports events for professionals or amateurs by sports clubs with their own facilities, see 9311*

### **9319 Other sports activities**

This class includes:

- activities of producers or promoters of sports events, with or without facilities
- activities of individual own-account sportsmen and athletes, referees, judges, time-keepers etc.
- activities of sports leagues and regulating bodies
- activities related to promotion of sporting events
- activities of racing stables, kennels and garages
- operation of sport fishing and hunting preserves
- activities of mountain guides
- support activities for sport or recreational hunting and fishing

*This class excludes:*

- *breeding of racing horses, see 0142*
- *renting of sports equipment, see 7721*
- *activities of sport and game schools, see 8541*
- *activities of sports instructors, teachers, coaches, see 8541*
- *organization and operation of outdoor or indoor sports events for professionals or amateurs by sports clubs with/without own facilities, see 9311, 9312*
- *park and beach activities, see 9329*

### **932 Other amusement and recreation activities**

This group includes the activities of a wide range of units that operate facilities or provide services to meet the varied recreational interests of their patrons, including the operation of a variety of attractions, such as mechanical rides, water rides, games, shows, theme exhibits and picnic grounds.

*This group excludes:*

- *sports activities, see group 931*
- *dramatic arts, music and other arts and entertainment activities, see 9000*

### **9321 Activities of amusement parks and theme parks**

This class includes:

- activities of amusement parks or theme parks, including the operation of a variety of attractions, such as mechanical rides, water rides, games, shows, theme exhibits and picnic grounds

**9329 Other amusement and recreation activities n.e.c.**

This class includes:

- activities of recreation parks, beaches, including renting of facilities such as bath-houses, lockers, chairs etc.
- operation of recreational transport facilities, e.g. marinas
- operation of ski hills
- renting of leisure and pleasure equipment as an integral part of recreational facilities
- operation of fairs and shows of a recreational nature
- operation of discotheques and dance floors
- operation (exploitation) of coin-operated games
- other amusement and recreation activities (except amusement parks and theme parks) not elsewhere classified

This class also includes:

- activities of producers or entrepreneurs of live events other than arts or sports events, with or without facilities

*This class excludes:*

- fishing cruises, see 5011, 5021*
- provision of space and facilities for short stay by visitors in recreational parks and forests and campgrounds, see 5520*
- beverage serving activities of discotheques, see 5630*
- trailer parks, campgrounds, recreational camps, hunting and fishing camps, campsites and campgrounds, see 5520*
- separate renting of leisure and pleasure equipment, see 7721*
- operation (exploitation) of coin-operated gambling machines, see 9200*
- activities of amusement parks and theme parks, see 9321*

## Section S

### Other service activities

This section (as a residual category) includes the activities of membership organizations, the repair of computers and personal and household goods and a variety of personal service activities not covered elsewhere in the classification.

**94 Activities of membership organizations**

This division includes activities of organizations representing interests of special groups or promoting ideas to the general public. These organizations usually have a constituency of members, but their activities may involve and benefit non-members as well. The primary breakdown of this division is determined by the purpose that these organizations serve, namely interests of employers, self-employed individuals and the scientific community (group 941), interests of employees (group 942) or promotion of religious, political, cultural, educational or recreational ideas and activities (group 949).

**941 Activities of business, employers and professional membership organizations**

This group includes the activities of units that promote the interests of the members of business and employers organizations. In the case of professional membership organizations, it also includes the activities of promoting the professional interests of members of the profession.

**9411 Activities of business and employers membership organizations**

This class includes:

- activities of organizations whose members' interests centre on the development and prosperity of enterprises in a particular line of business or trade, including farming, or on the economic growth and climate of a particular geographical area or political subdivision without regard for the line of business.
- activities of federations of such associations
- activities of chambers of commerce, guilds and similar organizations
- dissemination of information, representation before government agencies, public relations and labour negotiations of business and employer organizations

*This class excludes:*

- activities of trade unions, see 9420

**9412 Activities of professional membership organizations**

This class includes:

- activities of organizations whose members' interests centre chiefly on a particular scientific discipline, professional practice or technical field, such as medical associations, legal associations, accounting associations, engineering associations, architects associations etc.
- activities of associations of specialists engaged in cultural activities, such as associations of writers, painters, performers of various kinds, journalists etc.
- dissemination of information, the establishment and supervision of standards of practice, representation before government agencies and public relations of professional organizations

This class also includes:

- activities of learned societies

*This class excludes:*

- education provided by these organizations, see division 85

**942 Activities of trade unions**

See class 9420.

**9420 Activities of trade unions**

This class includes:

- promoting of the interests of organized labor and union employees

This class also includes:

- activities of associations whose members are employees interested chiefly in the representation of their views concerning the salary and work situation, and in concerted action through organization
- activities of single plant unions, of unions composed of affiliated branches and of labour organizations composed of affiliated unions on the basis of trade, region, organizational structure or other criteria

*This class excludes:*

- education provided by such organizations, see division 85

**949 Activities of other membership organizations**

This group includes the activities of units (except business and employers organizations, professional organizations, trade unions) that promote the interests of their members.

**9491 Activities of religious organizations**

This class includes:

- activities of religious organizations or individuals providing services directly to worshippers in churches, mosques, temples, synagogues or other places
- activities of organizations providing monastery and convent services
- religious retreat activities

This class also includes:

- religious funeral service activities

*This class excludes:*

- education provided by such organizations, see division 85
- health activities by such organizations, see division 86
- social work activities by such organizations, see divisions 87 and 88

**9492 Activities of political organizations**

This class includes:

- activities of political organizations and auxiliary organizations such as young people's auxiliaries associated with a political party. These organizations chiefly engage in influencing decision-taking in public governing bodies by placing members of the party or those sympathetic to the party in political office and involve the dissemination of information, public relations, fund-raising etc.

**9499 Activities of other membership organizations n.e.c.**

This class includes:

- activities of organizations not directly affiliated to a political party furthering a public cause or issue by means of public education, political influence, fund-raising etc.:
  - ◆ citizens initiative or protest movements
  - ◆ environmental and ecological movements
  - ◆ organizations supporting community and educational facilities n.e.c.
  - ◆ organizations for the protection and betterment of special groups, e.g. ethnic and minority groups
  - ◆ associations for patriotic purposes, including war veterans' associations
- consumer associations
- automobile associations
- associations for the purpose of social acquaintanceship such as rotary clubs, lodges etc.
- associations of youth, young persons' associations, student associations, clubs and fraternities etc.
- associations for the pursuit of a cultural or recreational activity or hobby (other than sports or games), e.g. poetry, literature and book clubs, historical clubs, gardening clubs, film and photo clubs, music and art clubs, craft and collectors' clubs, social clubs, carnival clubs etc.



This class also includes:

—grant giving activities by membership organizations or others

*This class excludes:*

—*activities of professional artistic groups or organizations, see 9000*

—*activities of sports clubs, see 9312*

—*activities of professional membership associations, see 9412*

## 95 Repair of computers and personal and household goods

This division includes the repair and maintenance of computers peripheral equipment such as desktops, laptops, computer terminals, storage devices and printers. It also includes the repair of communications equipment such as fax machines, two-way radios and consumer electronics such as radios and TVs, home and garden equipment such as lawn-mowers and blowers, footwear and leather goods, furniture and home furnishings, clothing and clothing accessories, sporting goods, musical instruments, hobby articles and other personal and household goods.

Excluded from this division is the repair of medical and diagnostic imaging equipment, measuring and surveying instruments, laboratory instruments, radar and sonar equipment, see 3313.

### 951 Repair of computers and communication equipment

This group includes the repair and maintenance of computers and peripheral equipment and communications equipment.

#### 9511 Repair of computers and peripheral equipment

This class includes the repair of electronic equipment, such as computers and computing machinery and peripheral equipment.

This class includes:

—repair and maintenance of:

- ◆ desktop computers
- ◆ laptop computers
- ◆ magnetic disk drives, flash drives and other storage devices
- ◆ optical disk drives (CD-RW, CD-ROM, DVD-ROM, DVD-RW)
- ◆ printers
- ◆ monitors
- ◆ keyboards
- ◆ mice, joysticks and trackball accessories
- ◆ internal and external computer modems
- ◆ dedicated computer terminals
- ◆ computer servers
- ◆ scanners, including bar code scanners
- ◆ smart card readers
- ◆ virtual reality helmets
- ◆ computer projectors

This class also includes:

—repair and maintenance of:

- ◆ computer terminals like automatic teller machines (ATM's); point-of-sale (POS) terminals, not mechanically operated

- ◆ hand-held computers (PDA's)

*This class excludes:*

— *repair and maintenance of carrier equipment modems, see 9512*

### **9512 Repair of communication equipment**

This class includes:

— repair and maintenance of communications equipment such as:

- ◆ cordless telephones
- ◆ cellular phones
- ◆ carrier equipment modems
- ◆ fax machines
- ◆ communications transmission equipment (e.g. routers, bridges, modems)
- ◆ two-way radios
- ◆ commercial TV and video cameras

### **952 Repair of personal and household goods**

This group includes the repair and servicing of personal and household goods.

#### **9521 Repair of consumer electronics**

This class includes:

— repair and maintenance of consumer electronics:

- ◆ television, radio receivers
- ◆ video cassette recorders (VCR)
- ◆ CD players
- ◆ household-type video cameras

#### **9522 Repair of household appliances and home and garden equipment**

This class includes:

— repair and servicing of household appliances

- ◆ refrigerators, stoves, washing machines, clothes dryers, room air conditioners, etc.

— repair and servicing of home and garden equipment

- ◆ lawnmowers, edgers, snow- and leaf- blowers, trimmers, etc.

*This class excludes:*

— *repair of hand held power tools, see 3312*

— *repair of central air conditioning systems, see 4322*

#### **9523 Repair of footwear and leather goods**

This class includes:

— repair and maintenance of footwear:

- ◆ shoes, boots etc.

— fitting of heels

— repair and maintenance of leather goods:

- ◆ luggage and the like

**9524 Repair of furniture and home furnishings**

This class includes:

- reupholstering, refinishing, repairing and restoring of furniture and home furnishings including office furniture
- assembly of self-standing furniture

*This class excludes:*

- installation of fitted kitchens, shop fittings and the like, see 4330*

**9529 Repair of other personal and household goods**

This class includes:

- repair of bicycles
- repair and alteration of clothing
- repair and alteration of jewellery
- repair of watches, clocks and their parts such as watchcases and housings of all materials; movements, chronometers, etc.
- repair of sporting goods (except sporting guns)
- repair of books
- repair of musical instruments
- repair of toys and similar articles
- repair of other personal and household goods
- piano-tuning

*This class excludes:*

- industrial engraving of metals, see 2592*
- repair of sporting and recreational guns, see 3311*
- repair of hand held power tools, see 3312*
- repair of time clocks, time/date stamps, time locks and similar time recording devices, see 3313*

**96 Other personal service activities**

This division includes all service activities not mentioned elsewhere in the classification. Notably it includes types of services such as washing and (dry-)cleaning of textiles and fur products, hairdressing and other beauty treatment, funeral and related activities.

**960 Other personal service activities**

See division 96.

**9601 Washing and (dry-) cleaning of textile and fur products**

This class includes:

- laundering and dry-cleaning, pressing etc., of all kinds of clothing (including fur) and textiles, provided by mechanical equipment, by hand or by self-service coin-operated machines, whether for the general public or for industrial or commercial clients
- laundry collection and delivery
- carpet and rug shampooing and drapery and curtain cleaning, whether on clients' premises or not
- provision of linens, work uniforms and related items by laundries
- diaper supply services

This class also includes:

—repair and minor alteration of garments or other textile articles when done in connection with cleaning

*This class excludes:*

—*renting of clothing other than work uniforms, even if cleaning of these goods is an integral part of the activity, see 7730*

—*repair and alteration of clothing etc., as an independent activity, see 9529*

### **9602 Hairdressing and other beauty treatment**

This class includes:

—hair washing, trimming and cutting, setting, dyeing, tinting, waving, straightening and similar activities for men and women

—shaving and beard trimming

—facial massage, manicure and pedicure, make-up etc.

*This class excludes:*

—*manufacture of wigs, see 3290*

### **9603 Funeral and related activities**

This class includes:

—burial and incineration of human or animal corpses and related activities:

- ◆ preparing the dead for burial or cremation and embalming and morticians' services
- ◆ providing burial or cremation services
- ◆ rental of equipped space in funeral parlours

—rental or sale of graves

—maintenance of graves and mausoleums

*This class excludes:*

—*religious funeral service activities, see 9491*

### **9609 Other personal service activities n.e.c.**

This class includes:

—activities of Turkish baths, sauna and steam baths, solariums, reducing and slendering salons, massage salons etc.

—astrological and spiritualists' activities

—social activities such as escort services, dating services, services of marriage bureaux

—pet care services such as boarding, grooming, sitting and training pets

—genealogical organizations

—shoe shiners, porters, valet car parkers etc.

—concession operation of coin-operated personal service machines (photo booths, weighing machines, machines for checking blood pressure, coin-operated lockers etc.)

*This class excludes:*

—*veterinary activities, see 7500*

—*activities of fitness centers, see 9311*

## Section T

### Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use

#### 97 Activities of households as employers of domestic personnel

See class 9700.

#### 970 Activities of households as employers of domestic personnel

See class 9700.

#### 9700 Activities of households as employers of domestic personnel

This class includes:

— activities of households as employers of domestic personnel such as maids, cooks, waiters, valets, butlers, laundresses, gardeners, gatekeepers, stable-lads, chauffeurs, caretakers, governesses, babysitters, tutors, secretaries etc.

It allows the domestic personnel employed to state the activity of their employer in censuses or studies, even though the employer is an individual. The product produced by this activity is consumed by the employing household.

*This class excludes:*

— *provision of services such as cooking, gardening etc. by independent service providers (companies or individuals), see ISIC class according to type of service*

#### 98 Undifferentiated goods- and services-producing activities of private households for own use

This division includes the undifferentiated subsistence goods-producing and services-producing activities of households.

Households should be classified here only if it is impossible to identify a primary activity for the subsistence activities of the household. If the household engages in market activities, it should be classified according to the primary market activity carried out.

#### 981 Undifferentiated goods-producing activities of private households for own use

See class 9810.

#### 9810 Undifferentiated goods-producing activities of private households for own use

This class includes:

— undifferentiated subsistence goods-producing activities of households, i.e., the activities of households that are engaged in a variety of activities that produce goods for their own subsistence. These activities include hunting and gathering, farming, the production of shelter and clothing and other goods produced by the household for its own subsistence.

If households are also engaged in the production of marketed goods, they are classified to the appropriate goods-producing industry of ISIC.

If households are principally engaged in a specific goods-producing subsistence activity, they are classified to the appropriate goods-producing industry of ISIC.

**982 Undifferentiated service-producing activities of private households for own use**

See class 9820.

**9820 Undifferentiated service-producing activities of private households for own use**

This class includes:

— undifferentiated subsistence services-producing activities of households, i.e. the activities of households that are engaged in a variety of activities that produce services for their own subsistence. These activities include cooking, teaching, caring for household members and other services produced by the household for its own subsistence.

If households are also engaged in the production of multiple goods for subsistence purposes, they are classified to the undifferentiated goods-producing subsistence activities of households.

## **Section U**

### **Activities of extraterritorial organizations and bodies**

See class 9900.

**99 Activities of extraterritorial organizations and bodies**

See class 9900.

**990 Activities of extraterritorial organizations and bodies**

See class 9900.

**9900 Activities of extraterritorial organizations and bodies**

This class includes:

— activities of international organizations such as the United Nations and the specialized agencies of the United Nations system, regional bodies etc., the International Monetary Fund, the World Bank, the World Customs Organization, the Organisation for Economic Co-operation and Development, the Organization of Petroleum Exporting Countries, the European Communities, the European Free Trade Association etc.

This class also includes:

— activities of diplomatic and consular missions when being determined by the country of their location rather than by the country they represent

PART FOUR

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## **Alternative aggregations**





## Overview

199. Any statistical classification reflects compromises between a number of theoretical principles and practical considerations. Thus, not all needs for aggregated data will be equally well served by simple aggregation through the various levels within the existing structure of ISIC. To meet specialized needs for standardized aggregates that are formed in more complex ways, ISIC, Rev.4 is supplemented by several alternative aggregations. Each alternative aggregation is intended to serve the needs of a group of users who wish to present data that are classified according to ISIC in terms of standard tabulation categories that are essentially user-defined and internationally recognized.

200. Depending on the application, the analysis of different phenomena may require statistical data that cannot be fully described in terms of complete ISIC classes. This may be due to the level of aggregation that had to be applied to ISIC as an international standard or it may be due to the fact that the information sought is based on a concept that is different from that in ISIC. In this case, it may still be possible to give a definition in terms of an alternative aggregation using partial ISIC classes, while the actual data conversion would need to be supplemented by additional information.

201. This part of the publication includes the following four alternative aggregations that also demonstrate the different types of aggregations or extended structures that can be developed based on ISIC for specific purposes:

(a) The alternative aggregations for SNA data reporting represent an aggregation of the whole ISIC spectrum into a smaller number of categories that are suitable for analysis within the SNA framework. No additional concepts are introduced or defined here. This aggregate is made up of complete ISIC classes, which allows for a straightforward aggregation of data;

(b) The alternative aggregation for the information economy introduces new concepts (ICT sector and content and media sector) and provides a definition of these concepts in terms of complete ISIC classes;

(c) The alternative aggregation for data reporting on the informal sector represents an aggregation of activities into groupings that are more suitable for analysis of the informal sector. While complete ISIC classes are shown in this aggregation, it should be kept in mind that the concept of the informal sector implies that not all units classified in a given class listed in the aggregation belong to the informal sector. In particular, it is clear that this aggregation does not represent a definition of the informal sector;

(d) The alternative aggregation for data reporting on the non-profit institutions sector groups together activities that are important for analysis of the non-profit institutions sector. Similar to the previous aggregation, this does not represent a definition of the non-profit institutions sector. The aggregation then provides additional detail, beyond that available in ISIC, that may be of interest in analysing the non-profit institutions sector. This can serve as guidance for data producers and data users that are interested in more detailed data by providing a standardized approach.

202. Other alternative aggregations, using complete or partial ISIC classes, have been defined in other existing frameworks. In principle, the list of annexes is open-ended and the Statistical Commission may, in the future, request that additional annexes be prepared and issued to respond to evolving user needs. Any such new alternative aggregations will be made available on the Classifications website of the United Nations Statistics Division.

## A. Two alternative aggregations for SNA data reporting

203. ISIC, Rev.4 provides a top-level of 21 sections and a second level of 88 divisions. National accountants have identified a need for an additional standard ISIC aggregation above the section level of ISIC for summary data reporting by activity in SNA. Such a **high-level** aggregation of 10 categories has been agreed within the updating process of the SNA. In addition, an **intermediate-level** aggregation of 38 categories has been agreed that would be suitable for SNA data reporting from a wide range of countries. The structure of these two SNA/ISIC aggregations, which are, respectively, also denoted as A\*10 and A\*38, is set out below.

### 1. High-level SNA/ISIC aggregation

204. In developing any activity aggregation, various criteria are possible for grouping activities. For instance, there is a need of international comparability among a broad range of economies. There also is a general interest in distinguishing the various stages of production, from production of raw materials to processed goods, separately from the services producing activities. In addition, there is interest in distinguishing market production, non-market production and production for own final use. Splitting production into stages is followed in general terms but cannot be achieved completely within the ISIC framework. As for non-market production, this involves different activities in different countries and over time, which makes an alternative aggregation of ISIC activities for this purpose difficult to achieve. The high-level A\*10 aggregation, which is principally a grouping of ISIC, Rev.4 sections, is set out in table 4.1.

Table 4.1

#### High-level SNA/ISIC aggregation (A\*10)

	ISIC, Rev.4 sections	Description
1	A	Agriculture, forestry and fishing
2	B, C, D and E	Manufacturing, mining and quarrying and other industrial activities
2 a	C	<i>Of which: manufacturing</i>
3	F	Construction
4	G, H and I	Wholesale and retail trade, transportation and storage, accommodation and food service activities
5	J	Information and communication
6	K	Financial and insurance activities
7	L	Real estate activities <sup>a</sup>
8	M and N	Professional, scientific, technical, administrative and support service activities
9	O, P, and Q	Public administration and defence, education, human health and social work activities
10	R, S, T and U	Other service activities

<sup>a</sup> of which imputed rental services of owner-occupied dwellings.

205. For the purpose of productivity analysis, imputed rental services of owner-occupied dwellings is often excluded from statistics by economic activity. Owner-occupied housing services fall, however, within the production boundary of the SNA, and are therefore included in section L (Real estate activities) of the A\*10 and

A\*38 aggregations. Their values have to be imputed since these services are not for sale on the market. For this reason and because there is no corresponding labour input in the accounts, many analysts prefer to exclude imputed rental services when deriving productivity statistics.

206. Productivity analysts and others may wish to exclude non-market production from their statistics and focus on the corporate sector, which varies from one economy to another. It may also be possible to group those activities that are mostly, or at least partly, non-market activities, such as public administration, education, health and social welfare.

207. For the purpose of short-term economic analysis and the reporting of quarterly national accounts, it may be desirable to group together, to the extent possible, activities that have a similar business cycle.

208. There is a strong interest in the continuity of long time series for analytical purposes. With the previous version of ISIC (i.e., ISIC, Rev.3.1), a number of standard aggregations of ISIC were used for national accounts data reporting in SNA questionnaires. ISIC, Rev.4 includes some major changes from ISIC, Rev.3.1, with the priority given to increased international comparability and relevance. The scope for maintaining continuity is consequently limited but still exists in many parts of the classification.

## 2. Intermediate-level SNA/ISIC aggregation

209. A standard intermediate-level aggregation of 38 ISIC categories for internationally comparable SNA data reporting, was agreed in the SNA updating process. These categories represent an aggregation level between the 21 ISIC sections and the 88 ISIC divisions. The intermediate-level A\*38 aggregation is set out in table 4.2, showing its relationship to ISIC, Rev.4 divisions.

Table 4.2

### Intermediate SNA/ISIC aggregation (A\*38)

	A*38 code	Description	ISIC, Rev.4 code
1	A	Agriculture, forestry and fishing	01 to 03
2	B	Mining and quarrying	05 to 09
3	CA	Manufacture of food products, beverages and tobacco products	10 to 12
4	CB	Manufacture of textiles, wearing apparel, leather and related products	13 to 15
5	CC	Manufacture of wood and paper products; printing and reproduction of recorded media	16 to 18
6	CD	Manufacture of coke and refined petroleum products	19
7	CE	Manufacture of chemicals and chemical products	20
8	CF	Manufacture of basic pharmaceutical products and pharmaceutical preparations	21
9	CG	Manufacture of rubber and plastics products, and other non-metallic mineral products	22 + 23
10	CH	Manufacture of basic metals and fabricated metal products, except machinery and equipment	24 + 25
11	CI	Manufacture of computer, electronic and optical products	26
12	CJ	Manufacture of electrical equipment	27
13	CK	Manufacture of machinery and equipment n.e.c.	28
14	CL	Manufacture of transport equipment	29 + 30
15	CM	Other manufacturing; repair and installation of machinery and equipment	31 to 33

	A*38 code	Description	ISIC, Rev.4 code
16	D	Electricity, gas, steam and air conditioning supply	35
17	E	Water supply; sewerage, waste management and remediation	36 to 39
18	F	Construction	41 to 43
19	G	Wholesale and retail trade; repair of motor vehicles and motorcycles	45 to 47
20	H	Transportation and storage	49 to 53
21	I	Accommodation and food service activities	55 + 56
22	JA	Publishing, audiovisual and broadcasting activities	58 to 60
23	JB	Telecommunications	61
24	JC	IT and other information services	62 + 63
25	K	Financial and insurance activities	64 to 66
26	L	Real estate activities <sup>a</sup>	68
27	MA	Legal, accounting, management, architecture, engineering, technical testing and analysis activities	69 to 71
28	MB	Scientific research and development	72
29	MC	Other professional, scientific and technical activities	73 to 75
30	N	Administrative and support service activities	77 to 82
31	O	Public administration and defence; compulsory social security	84
32	P	Education	85
33	QA	Human health activities	86
34	QB	Residential care and social work activities	87 + 88
35	R	Arts, entertainment and recreation	90 to 93
36	S	Other service activities	94 to 96
37	T <sup>b</sup>	Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use	97 + 98 <sup>b</sup>
38	U <sup>c</sup>	Activities of extraterritorial organizations and bodies	99 <sup>c</sup>

<sup>a</sup> Of which imputed rental services of owner-occupied dwellings.

<sup>b</sup> The services producing activities of households in division 98 are outside the SNA production boundary.

<sup>c</sup> The activities of these institutions are not included in the activities reported by the countries in which they are located.

210. This aggregation takes into account the demand for preservation of continuity, albeit limited given the degree of change in ISIC, Rev.4.

211. This A\*38 aggregation for SNA data reporting breaks out in some detail what is in most relatively developed economies the largest ISIC, Rev.4 section, namely section C (Manufacturing). It also breaks out further some of the service activities, where they are seen as particularly important or different or of sufficient policy interest. ISIC, Rev.4 elaborates the classification of information- and communication-related activities and service activities in general and the A\*38 aggregation reflects this change in allocating 20 out of 38 categories for service activities. Nonetheless, it was considered important to maintain a reasonable level of disaggregation in manufacturing for three reasons:

(a) Data for manufacturing output, including volume data, remain more comparable internationally, more robust and more analytically usable than services output data;

(b) Data giving a good representation of primary and secondary industries will have a wider relevance and comparability among countries at different levels of development;

(c) A reasonable number of time series can be preserved despite the rather radical changes in ISIC, Rev.4.

212. The manufacturing section in ISIC, Rev.4 differs in its overall content from that in ISIC, Rev.3.1. Publishing has been moved from manufacturing to section J (Information and communication). Materials recovery / recycling has been moved from manufacturing to the environment-related section E, specifically to the division entitled “Waste management and remediation activities”. These changes are described in greater detail in part five of the present publication.

213. The divisions that include the manufacture of pharmaceuticals, computers and electronic equipment, and electrical equipment were considered to have a high policy interest from high-technology and information and communication technology (ICT) perspectives and are separately identified in this intermediate aggregation.

214. Section J (Information and communication) has been split because of the extremely high and continuing policy interest in this area worldwide. Telecommunications activities are, at the time of writing, one of the fastest growing activities in most countries and are likely to be a focus of attention for many years to come. The boundaries between telecommunications, broadcasting, Internet and IT services are likely to remain in a state of flux for some time and new technological developments are likely to continue; thus section J might become difficult to split in the future or might have to be split differently. The recommended split allows an approximate intermediate-level ICT grouping as well as better identification of information content activities.

215. Real estate activities are isolated in section L, which as explained above is potentially useful for productivity analysis, although the imputed rental services of owner-occupied dwellings component should ideally be split out.

216. Finally, human health activities are split out because of their size and the high policy interest in health activities, including a knowledge economy interest. Veterinary activities have been separated from human health activities and moved to section M (Professional, scientific and technical services).

## B. Alternative aggregation for the information economy

217. In recent years, there has been a growing demand for data related to the information economy, that is, information and communication technologies (ICT) and so-called “content”. While all activities related to the information economy have been described by, or been part of, ISIC classes in a number of ISIC divisions, the interpretation of classes belonging to the information economy and its boundaries have been subject to discussion. The Organisation for Economic Co-operation and Development (OECD) has taken a leading role in standardizing the definition of the ICT and “content” sectors. Previously used definitions have been reviewed by the Working Party on Indicators for the Information Society and new recommendations have been developed using the extended detail available in ISIC, Rev.4.<sup>29</sup> The tables set out below are consistent with the recommendations made by the Working Party.

<sup>29</sup> See *Information Economy – Sector Definitions based on the International Standard Industry Classification (ISIC 4)*, OECD document DSTI/ICCP/IIS(2006)2/FINAL.

### 1. ICT sector definition

218. The definition of this sector provides a statistical basis for the measurement, in an internationally comparable way, of that part of economic activity that is generated by the production of ICT goods and services.

219. The following general principle (definition) is used to identify ICT economic activities (industries):

“The production (goods and services) of a candidate industry must primarily be intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display”.

220. The activities (industries) in the ICT sector can be grouped into ICT manufacturing industries, ICT trade industries and ICT services industries. The ISIC, Rev.4 industries that comply with the above definition are provided in table 4.3.

Table 4.3  
ICT sector

<b>ICT manufacturing industries</b>	
2610	Manufacture of electronic components and boards
2620	Manufacture of computers and peripheral equipment
2630	Manufacture of communication equipment
2640	Manufacture of consumer electronics
2680	Manufacture of magnetic and optical media
<b>ICT trade industries</b>	
4651	Wholesale of computers, computer peripheral equipment and software
4652	Wholesale of electronic and telecommunications equipment and parts
<b>ICT services industries</b>	
5820	Software publishing
<b>61</b>	<b>Telecommunications</b>
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
<b>62</b>	<b>Computer programming, consultancy and related activities</b>
6201	Computer programming activities
6202	Computer consultancy and computer facilities management activities
6209	Other information technology and computer service activities
<b>631</b>	<b>Data processing, hosting and related activities; web portals</b>
6311	Data processing, hosting and related activities
6312	Web portals
<b>951</b>	<b>Repair of computers and communication equipment</b>
9511	Repair of computers and peripheral equipment
9512	Repair of communication equipment

## 2. Content and media sector definition

221. The following general principle (definition) is used for the identification of activities in the content and media sector:

“The production (goods and services) of a candidate industry must primarily be intended to inform, educate and/or entertain humans through mass communication media. These industries are engaged in the production, publishing and/or the distribution of content (information, cultural and entertainment products), where content corresponds to an organized message intended for human beings.”

222. The list of ISIC, Rev.4 industries that comply with this definition is provided in table 4.4.

Table 4.4

### Content and media sector

<b>581</b>	<b>Publishing of books, periodicals and other publishing activities</b>
5811	Book publishing
5812	Publishing of directories and mailing lists
5813	Publishing of newspapers, journals and periodicals
5819	Other publishing activities
<b>591</b>	<b>Motion picture, video and television programme activities</b>
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture, video and television programme distribution activities
5914	Motion picture projection activities
<b>592</b>	<b>Sound recording and music publishing activities</b>
<b>60</b>	<b>Programming and broadcasting activities</b>
6010	Radio broadcasting
6020	Television programming and broadcasting activities
<b>639</b>	<b>Other information service activities</b>
6391	News agency activities
6399	Other information service activities n.e.c.

## C. Alternative aggregation for data reporting on the informal sector

223. The household enterprises in the informal sector encompass a wide range of different activities. In order to describe the heterogeneity of the informal sector, analyse the differences between the various segments regarding their employment- and income-generating potential, constraints and other characteristics, and devise appropriate actions for them, policy makers and analysts need data that reveals the structure and composition of the informal sector. While kind of economic activity is not a criterion by which to define the informal sector, it is an important variable by

which to describe its characteristics. It is thus used as one of the standard variables for statistics on the informal sector. It is also often used as a variable for the stratification of the informal sector segment in drawing a representative sample.

224. Informal sector activities tend to be concentrated heavily in the following sections or some part thereof: A (Agriculture, forestry and fishing), C (Manufacturing), F (Construction), G (Wholesale and retail trade; repair of motor vehicles and motorcycles), H (Transportation and storage), I (Accommodation and food service activities), and S (Other service activities). Because of this, it is suggested that, for statistics on the informal sector, an alternative highest level of aggregation be introduced, with a smaller number of categories obtained by and large through the aggregation of the existing ISIC, Rev.4 sections.

225. Within the informal sector, manufacturing, repair services and trade are groups of activities that are numerically important. These groups of activities are undertaken in the informal sector of developing countries by different units, which differ significantly in terms of the characteristics of the persons engaged in them, including gender. Therefore, these groups of activities should not generally be grouped together at any level when presenting statistics on production units of the informal sector by economic activity. This aggregation presents these three activities separately. In addition, Manufacturing has been shown separately as a sub-item of category II due to its importance. Similarly, retail trade activities via stalls and markets, as well as door-to-door and other direct forms of retail sale, are identified separately as a sub-item of category IV due to their importance in the informal sector.

226. The repair and installation of machinery and equipment has been grouped in category II with other manufacturing activities because units engaged in these activities do not have the same logic of production of "repair and maintenance" that is included in ISIC division 95. The maintenance and repair of motor vehicles and motorcycles has been identified in category V. To avoid the splitting of an ISIC class code, the complete ISIC class 4540 (Sale, maintenance and repair of motorcycles and related parts and accessories) has been assigned to this repair category, taking into account the fact that for informal sector activities the sale activities of motorcycles will be small compared to the repair activities.

227. Since the definition of the informal sector does not make reference to specific types of activities, in principle all activities classified in ISIC could be carried out in the informal sector. In some cases, however, this is highly unlikely due to the nature of the activity. For instance, public administration activities (section O) are not carried out by informal sector units due to the nature of these activities. The same holds for activities of extraterritorial organizations and bodies (section U). For that reason, sections O and U have been excluded from this alternative aggregation.

228. Units classified in ISIC section T (Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use) are outside of the scope of the informal sector since a production unit in the informal sector must by definition produce at least some goods or services for sale or barter. Therefore, ISIC section T is not included in this alternative aggregation.

229. In general, an ISIC section has been included in this alternative aggregation if at least some of its components (divisions, groups or classes) cover informal sector activities. It is still possible that within such a section, divisions, groups or classes exist that do not cover informal sector activities.

230. For instance, insurance activities (ISIC division 65) are in principle not carried out by informal units. However, other activities in ISIC section K (Financial and insurance activities) are sometimes carried out by informal sector units. Since this



alternative aggregation is primarily based on the section level of ISIC, the complete section K, including division 65, has been included in the aggregate. Similar arguments apply for instance for class 6411 (Central banking), or group 942 (Activities of trade unions).

231. At the highest aggregate level, the alternative aggregate of ISIC, Rev.4 proposed for the informal sector consists of 11 categories, designated by the Roman numerals I to XI, as described in table 4.5.

Table 4.5

**Alternative ISIC aggregation for analysis and reporting on informal-sector statistics**

Category	Title	ISIC sections	ISIC divisions	ISIC groups	ISIC classes
I	Agriculture, forestry and fishing	A	01–03	011–032	0111–0322
II	Mining and quarrying, manufacturing, electricity, gas and water supply, waste management	B, C, D, E	05–39	051–390	0510–3900
II a	<i>of which: Manufacturing</i>	C	10–33	101–332	1010–3320
III	Construction	F	41–43	410–439	4100–4390
IV	Wholesale and retail trade	G*	45,* 46, 47	451, 453, 461–479	4510, 4530, 4610–4799
IV a	<i>of which: Retail trade not in stores<sup>a</sup></i>	G*	47*	478, 479*	4781–4789, 4799
V	Repair of motor vehicles and motorcycles; repair of computers and personal and household goods	G,* S*	45,* 95	452, 454, 951–952	4520, 4540, 9511–9529
VI	Transportation and storage	H	49–53	491–532	4911–5320
VII	Accommodation and food service activities	I	55–56	551–563	5510–5630
VII a	<i>of which: Restaurants, mobile food service activities and event catering</i>	I*	56*	561, 562*	5610, 5621
VIII	Professional, scientific and technical activities; administrative and support service activities; arts, entertainment and recreation	M, N, R	69–82, 90–93	691–829, 900–932	6910–8299, 9000–9329
IX	Education; human health and social work activities	P, Q	85–88	851–889	8510–8890
X	Other personal service activities	S*	96	960	9601–9609
XI	Other activities	J, K, L, S*	58–68, 94	581–682, 941–949	5811–6820, 9411–9499

\* Denotes a split of a section, division or group.

<sup>a</sup> Not including retail trade via mail order houses or via Internet.

232. This alternative aggregation is intended only as a tool for a standardized way of presenting data on informal sector activities. It does not intend to define the informal sector through ISIC.

## D. Alternative aggregation for data reporting on the non-profit institutions sector

233. The *Handbook on Non-Profit Institutions in the System of National Accounts*<sup>30</sup> is the product of a major initiative undertaken by the United Nations Statistics Division in cooperation with the Johns Hopkins Center for Civil Society Studies, to aid national statistics agencies in portraying nonprofit institutions, philanthropy and volunteering more explicitly in national economic statistics. The *Handbook* defines the non-profit institutions sector as follows.

“Thus, for the purpose of the satellite account on non-profit institutions, we define the non-profit sector as consisting of (a) organizations; that (b) are not-for-profit and, by law or custom, do not distribute any surplus they may generate to those who own or control them; (c) are institutionally separate from government; (d) are self-governing; and (e) are non-compulsory.”<sup>31</sup>

234. Because non-profit institution status is determined by legal, structural and operational characteristics rather than by production or revenue characteristics, the NPI sector cannot be defined as an aggregate over a particular set of ISIC classes. Even though non-profit institutions are concentrated in such service activities as education, human health and social work, in principle non-profit institutions may be found anywhere in the ISIC structure. Furthermore, not all units in a particular ISIC class will necessarily be non-profit institutions even though the majority may be.

235. To disaggregate the sector along activity lines, the *Handbook* recommends a special classification, the International Classification of Non-Profit Organizations (ICNPO), which has been and continues to be used in a number of statistical programmes and analytical studies of the NPI sector. Most countries implementing the *Handbook* have used ICNPO to report the results in their satellite accounts. In addition, several other national statistical programmes also have employed ICNPO. Examples include the Canada Survey of Giving, Volunteering and Participating,<sup>32</sup> the *National Survey of Nonprofit and Voluntary Organizations*,<sup>33</sup> and Italian censuses of non-profit institutions<sup>34</sup> and social cooperatives,<sup>35</sup> all of which use ICNPO to classify their data.

236. ICNPO was developed and incorporated into the *Handbook* because ISIC, Rev.3 had too little detail on membership organizations, social work without accommodation and other areas in which non-profit institutions have been found to be active.<sup>36</sup> Although ISIC, Rev.4 represents a considerable improvement over ISIC, Rev.3 in the ease with which it can be mapped into ICNPO, the level of detail recommended for two ISIC groups is still insufficient to capture all the major differences among the types of non-profit institutions identified in previous research on this sector and to avoid one-to-many relationships between ISIC classes and ICNPO subgroups. The two groups are ISIC groups 889 (Other social work activities without accommodation) and 949 (Activities of other membership organizations).

237. The North American Industry Classification System (NAICS) provides more detailed categories in these two areas. Tables 4.6 and 4.7 present NAICS-inspired alternative structures for ISIC, Rev.4 groups 889 and 949, respectively; the proposed new classes are shown in bold. Annexes D.1 and D.2 provide the language needed for describing the additional subcategories of groups 889 and 949. Essentially, these descriptions pick up the language for the various sub-classes that can be identified in classes 8890 and 9499 in the present ISIC, Rev.4 structure and break them out as separate classes that can be mapped to ICNPO on a one-to-one basis.

<sup>30</sup> Statistical Papers, Series F, No. 91 (United Nations publication, Sales No. E.03.XVII.9).

<sup>31</sup> *Ibid.*, para. 2.14.

<sup>32</sup> Statistics Canada (2006). *Caring Canadians, Involved Canadians: Highlights from the Canada Survey of Giving, Volunteering and Participating*. Catalogue no.71-542-XIE.

<sup>33</sup> Statistics Canada (2005). *Cornerstones of Community: Highlights of the National Survey of Nonprofit and Voluntary Organizations*. Catalogue no. 61-533-XIE. Revised edition.

<sup>34</sup> Istat (2001). *Istituzioni nonprofit in Italia*.

<sup>35</sup> Istat (2006). *Le cooperative sociali in Italia*.

<sup>36</sup> Statistical Papers, Series F, No. 91, para. 3.10.

Table 4.6

**Alternative structure for ISIC, Rev.4 group 889 (Other social work activities without accommodation)**

Section	Division	Group	Class	Description
Q				Human health and social work activities
	86			Human health activities
		861	8610	Hospital activities
			8620	Medical and dental practice activities
		869	8690	Other human health activities
	87			Residential care activities
		871	8710	Residential nursing care facilities
		872	8720	Residential care activities for mental retardation, mental health and substance abuse
		873	8730	Residential care activities for the elderly and disabled
		879	8790	Other residential care activities
	88			Social work activities without accommodation
		881	8810	Social work activities without accommodation for the elderly and disabled
		889		Other social work activities without accommodation
			8891	<i>Child and youth service activities</i>
			8892	<i>Other individual and family service activities</i>
			8893	<i>Community food and housing service activities</i>
			8894	<i>Temporary shelters</i>
			8895	<i>Emergency and relief activities</i>
			8896	<i>Vocational rehabilitation and habilitation activities</i>
			8897	<i>Child day care service activities</i>
			8898	<i>Charitable or other supporting activities aimed at social work</i>
			8899	<i>Other social work activities without accommodation n.e.c.</i>

Table 4.7

**Alternative structure for ISIC, Rev.4 group 949 (Activities of other membership organizations)**

Section	Division	Group	Class	Description
S				Other service activities
	94			Activities of business, employers and professional membership organizations
		941	9411	Activities of business and employers membership organizations
			9412	Activities of professional membership organizations
		942	9420	Activities of trade unions
		949		Activities of other membership organizations
			9491	Activities of religious organizations
			9492	Activities of political organizations
			9493	<i>Grantmaking and giving activities</i>
			9494	<i>Activities of human rights organizations</i>
			9495	<i>Activities of environmental, conservation and wildlife organizations</i>
			9496	<i>Activities of other social advocacy organizations</i>
			9497	<i>Activities of cultural or recreational associations (other than sports or games)</i>
			9498	<i>Activities of other civic and social organizations</i>
			9499	<i>Activities of other membership organizations n.e.c.</i>

## Annex D.1

### Descriptions of alternative classes in ISIC, Rev.4 group 889

#### **8891 Child and youth service activities**

This class includes:

- welfare and guidance activities for children and adolescents
- adoption activities, activities for the prevention of cruelty to children and others

#### **8892 Other individual and family service activities**

This class includes:

- household budget counselling, marriage and family guidance, credit and debt counselling services
- eligibility determination in connection with welfare aid, rent supplements or food stamps

#### **8893 Community food and housing service activities**

This class includes:

- activities related to the collection, preparation, and delivery of food for the needy, such as food banks, soup kitchens, and meal delivery programs
- activities relating to the provision of transitional housing for low-income individuals and families
- activities relating to the volunteer construction or repair of low-cost housing, in partnership with the homeowner who may assist in the work

#### **8894 Temporary shelters**

This class includes:

- activities related to the provision of short-term emergency shelter for victims of domestic violence, sexual assault, or child abuse
- activities related to the provision of temporary residential shelter for homeless individuals or families, runaway youth, and patients and families caught in medical crises

#### **8895 Emergency and relief activities**

This class includes:

- activities for disaster victims, refugees, immigrants etc., including temporary or extended shelter for them

#### **8896 Vocational rehabilitation and habilitation activities**

This class includes:

- vocational rehabilitation and habilitation activities for unemployed persons provided that the education component is limited

#### **8897 Child day care service activities**

This class includes:

- activities providing day care of infants or children

**8898 Charitable or other supporting activities aimed at social work**

This class includes:

- charitable activities like fund-raising or other supporting activities aimed at social work

**8899 Other social work activities without accommodation n.e.c.**

This class includes:

- other social, counselling, welfare, refugee, referral and similar services which are delivered to individuals and families in their homes or elsewhere and carried out by government offices or by private organizations, disaster relief organizations and national or local self-help organizations and by specialists providing counselling services:
- community and neighbourhood activities other than food and housing activities
- day facilities for the homeless and other socially weak groups

*This class excludes:*

- funding and administration of compulsory social security programmes, see 8430*
- activities similar to those described in this class, but including accommodation, see 8790*
- child and youth service activities, see 8891*
- other individual and family service activities, see 8892*
- community food and housing service activities, see 8893*
- temporary shelters, see 8894*
- emergency and relief activities, see 8895*
- vocational rehabilitation and habilitation activities, see 8896*
- child day care service activities, see 8897*
- charitable or other supporting activities aimed at social work, see 8898*

**Annex D.2****Descriptions of alternative classes in ISIC, Rev.4 group 949****9493 Grantmaking and giving activities**

This class includes:

- grant giving activities by membership organizations or others

**9494 Activities of human rights organizations**

This class includes:

- activities of organizations not directly affiliated to a political party furthering a public cause or issue by means of public education, political influence, fund-raising etc., such as citizens initiative or protest movements and organizations for the protection and betterment of special groups, e.g. ethnic and minority groups

**9495 Activities of environmental, conservation and wildlife organizations**

This class includes:

- activities of organizations not directly affiliated to a political party furthering a public cause or issue by means of public education, political influence, fund-raising etc., such as environmental and ecological movements

**9496 Activities of other social advocacy organizations**

This class includes:

- activities of organizations not directly affiliated to a political party furthering a public cause or issue by means of public education, political influence, fund-raising etc., such as organizations supporting community and educational facilities n.e.c. and associations for patriotic purposes, including war veterans' associations

*This class excludes:*

- activities of human rights organizations, see 9494
- activities of environmental, conservation and wildlife organizations, see 9495

**9497 Activities of cultural and recreational associations (other than sports or games)**

This class includes:

- associations for the pursuit of a cultural or recreational activity or hobby (other than sports or games), e.g. poetry, literature and book clubs, historical clubs, gardening clubs, film and photo clubs, music and art clubs, craft and collectors' clubs, social clubs, carnival clubs etc.

*This class excludes:*

- activities of sports clubs, see 9312
- creative, arts and entertainment activities, see 9000

**9498 Activities of other civic and social organizations**

This class includes:

- consumer associations
- automobile associations
- associations for the purpose of social acquaintanceship such as rotary clubs, lodges etc.
- associations of youth, young persons' associations, student associations, clubs and fraternities etc.

*This class excludes:*

- activities of sports clubs, see 9312
- cultural and recreational associations, see 9497

**9499 Activities of other membership organizations n.e.c.**

This class includes:

- activities of membership organizations n.e.c.

*This class excludes:*

- activities of sports clubs, see 9312
- activities of professional associations, see 9412
- grantmaking and giving activities, see 9493
- activities of human rights organizations, see 9494
- activities of environmental, conservation and wildlife organizations, see 9495
- activities of other social advocacy organizations, see 9496
- activities of cultural or recreational associations, see 9497
- activities of other civic and social organizations, see 9498

PART FIVE

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## **Changes in ISIC, Rev.4**





## I. Methodological changes

238. Although the structure of ISIC, Rev.4 is considerably different from its predecessor, the methodological aspects underpinning the scope, development and application of the classification remain largely unchanged. Some of the perceived changes are actually clarifications of the concepts or rules already used in previous versions of ISIC.

239. The scope of ISIC has been slightly enlarged through the explicit inclusion in section K (Finance and insurance activities) of classes 6420 (Activities of holding companies) and 6430 (Trusts, funds and similar financial entities), reflecting the recognition of the activities of these units as productive activities within the system of national accounts. It should be noted however, that for practical purposes, reflecting the need to classify such units in countries' business registers, these units have already been classified in the section covering financial activities in previous versions of ISIC even if they have not been explicitly recognized.

240. The criteria for delineating categories within ISIC remain the same, although the weights with which these criteria have been applied have changed (for more details, see part one, sect. II.B above).

241. In the rules for the application of the classification, only one explicit change has been made. In the case of multiple activities, the use of value added as the determining criterion is now universally applied to all cases; in other words, the exception for the treatment of vertically integrated activities has been eliminated.

242. Other general application rules, such as the use of the top-down-method to determine the principal activity of a unit, remain unchanged.

243. It should be noted, however, that the application rules provided in ISIC, Rev.4 are more explicit than those provided in previous versions of the classification in two cases: the use of the top-down method for wholesale and retail sale activities, and the rules for the treatment of outsourcing of activities. ISIC, Rev.4 aims to clarify the rules in these two cases in more detail, while maintaining the original intent. Given the lack of detail of these descriptions in previous versions of ISIC, however, it is possible that some interpretations of these rules in the past may have been inconsistent with the current text.

## II. Structural changes

244. The fourth revision of ISIC has responded to a large number of requests from countries that have ultimately changed the overall structure and detail of the classification in very substantial ways. New concepts at the highest level of the classification have been introduced and new detail has been created to reflect different forms of production and newly emerging industries. At the same time, efforts have been made to maintain the structure of the classification in all areas that do not explicitly require change based on new concepts.

245. The detailed changes to ISIC, Rev.4 are too numerous to be listed here in their entirety. The reason for most of these changes, however, can be roughly divided into three categories: (a) the introduction of new concepts at higher levels (e.g., "information and communication" or "waste management and remediation activities"); (b) necessary changes to regroup activities that are residuals of the previous type of changes; and (c) smaller adjustments and clarifications of concepts at lower levels, typically driven by efforts to enhance comparability.

246. The forthcoming Companion Guide to ISIC and CPC provides a more detailed account and rationalization of these changes. Meanwhile, the most prominent changes to ISIC are set out below.

247. The ISIC, Rev.3.1 sections for agriculture and fishing have been combined and the detail under this new ISIC, Rev.4 section A (Agriculture, forestry and fishing) has been substantially increased. This is a response to continuing requests for more detail in this area, mostly due to the fact that agriculture is an important part of the economic structure in many countries.

248. New divisions in manufacturing, representing important new industries, have been created, such as divisions 21 (Manufacture of pharmaceuticals, medicinal chemical and botanical products) and 26 (Manufacture of computer, electronic and optical products). The scope of the latter differs from division 30 (Manufacture of office, accounting and computing machinery) in ISIC, Rev.3.1, making it a better tool for statistics on high-technology products. Other new divisions, such as divisions 11 (Manufacture of beverages) and 31 (Manufacture of furniture), have resulted from splitting existing divisions and thus elevating their components, which previously existed at the group level, to the division level.

249. Most of the remaining divisions in section C (Manufacturing) remain unchanged, except ISIC 3.1 divisions 22 (Publishing, printing and reproduction of recorded media) and 37 (Recycling) many or all portions of which have been moved to other sections in ISIC, Rev.4 (see also below).

250. The repair and installation of machinery and equipment, which was formerly classified under the manufacturing of the corresponding type of equipment, is now separately identified in division 33 (Repair and installation of machinery and equipment). All specialized repair activities are now separately classifiable in ISIC, although no high-level aggregate for "Repair" has been created.

251. A new section E (Water supply; sewerage, waste management and remediation activities) has been created, which includes the "sanitation" activities of ISIC, Rev.3.1 division 90, the water collection and distribution activities of ISIC, Rev.3.1 division 41 and materials recovery activities, which largely correspond to ISIC, Rev.3.1 division 37. This section now groups activities of a common policy interest but is also based on the actual organization of these activities in a large number of countries. The detail of these activities has been substantially increased.

252. The concept of "specialized construction activities" (also known as "special trades") has been introduced in ISIC, Rev.4, replacing the division structure of the previous version, which was based largely on the stage of the construction process.

253. The repair of household goods has been removed from section G (Wholesale and retail trade; repair of motor vehicles and motorcycles). However, the anomaly of classifying trade and repair activities of motor vehicles and motorcycles in division 45 (corresponding to division 50 in ISIC, Rev.3.1) has been retained for comparability and continuity reasons.

254. The detail in section I (Accommodation and food service activities) has been increased to reflect the different nature and specialization of activities carried out.

255. A new section J (Information and communication) has been created, combining the activities of the production and distribution of information and cultural products; the provision of the means to transmit or distribute these products, data or communications; information technology activities; the processing of data and other information service activities. The main components of this section are publish-

ing activities (division 58), including software publishing; motion picture and sound recording activities (division 59); radio and TV broadcasting and programming activities (division 60); telecommunications activities (division 61); information technology activities (division 62); and other information service activities (division 63). These activities had been included in ISIC, Rev.3.1 sections D (Manufacturing), I (Transport, storage and communications), K (Real estate, renting and business activities) and O (Other community, social and personal service activities), therefore strongly impacting comparability with the previous ISIC version. However, this new treatment of information and communication activities provides a more consistent approach that is based on the character of the activities carried out.

256. In section K (Finance and insurance activities), two classes have been introduced that go beyond the traditional scope of ISIC in covering economic production; classes 6420 (Activities of holding companies) and 6430 (Trusts, funds and similar financial entities).

257. The ISIC, Rev.3.1 section entitled “Real estate, renting and business activities” has been split up into three sections in ISIC, Rev.4. Real estate is now represented as a stand-alone section (section L) due to its size and importance in the System of National Accounts. The remaining activities have been separated into a section M (Professional, scientific and technical activities), covering activities that require a high degree of training and make specialized knowledge and skills available to users; and a section N (Administrative and support service activities), covering activities that support general business operations and do not focus on the transfer of specialized knowledge. Computer and related activities (ISIC, Rev.3.1 division 72) are no longer included in this section. Computer repair activities have been grouped with repair of household goods in section S, while software publishing and IT activities have been grouped in the new section J.

258. The scope of education (section P) has been changed to explicitly include specialized sports, cultural and other education, and also to include specialized support services.

259. More detail has been created under section Q (Human health and social work activities), resulting in the creation of three divisions instead of one, as in the previous version of ISIC. In addition, the focus has been narrowed to include only “human health” activities, providing a better tool for measuring this important part of the economy. As a result, veterinary activities have been removed from this section and placed as a division in section M (Professional, scientific and technical activities).

260. Substantial components of ISIC, Rev.3.1 section O (Other community, social and personal service activities) have been moved to ISIC, Rev.4 sections E (Water supply; sewerage, waste management and remediation activities) and J (Information and communication), as described above. The remaining activities have been regrouped into new sections R (Arts, entertainment and recreation) and S (Other service activities). As a result, such activities as creative arts, library activities and gambling activities have been raised to the division level. The repair of computers and personal and household goods (ISIC, Rev. 3.1 classes 5260 and 7250) is now included in this new section S.