UNITED NATIONS Economic and Social Commission for Western Asia



Questionnaire Design

Workshop on Industrial Statistics 10-13 November 2008, Rabat – Morocco



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Introduction (1)



Evolution:

Since the 1950s, the UN has published international recommendations for industrial statistics of which the first was issued in 1953 (UN 1953) and subsequently revised in 1960 (UN 1960), 1968 (UN 1968a) and 1983 (UN 1983). Last update is 2008

Applicability of the questionnaire

Universally applicable to all countries

- for regular, annual, and infra-annual surveys
- choice of data items may be made according to purpose

Introduction (2)



- Besides the policy makers, researchers and business community, there are mainly three groups of official statisticians who are expected to use the survey results:
 - Statisticians in the M/o industry
 - Labour statisticians
 - National Accountants
 - Environment related
 - Social security
 - Informal economy statistics

Introduction (3)



- Establishment ('most appropriate for collection of production and employment data' according to 1993 SNA), including ancillary units.
- Coverage
- Establishments with main economic activity falling within the scope of "Industrial sector", viz.
- Mining and quarrying (ISIC Rev. 4 Section B)
- Manufacturing (ISIC Rev. 4 Section C)
- Electricity etc. (Section D)
- Water collection, treatment etc. and sewage (Section E)



Identification particulars of the establishment: [including those required for estimation / grossing up, according to the sample design. For example,

- Reference period for production and employment data collection: year / quarter/ month.
- Duration of operating period during the survey reference period: (in months)
- Whether in the list frame:
- Whether surveyed or casualty or 'zero case'.]
- Particulars for field work administration.

Main Part: Demography



Characteristics of the Establishment (p. 55)

- Period of operation (item 1.3)
- Type of economic organisation
- Type of establishment: single-establishment enterprise, an establishment of an multi-establishment enterprise
- Legal status / ownership: may include data items relating to ownership of national and non-nationals in the paid-up capital - Cooperative and limited partnership- public- Non—profit institution .
- Type of Unite; Principal producing unit / Ancillary unit
- Size-measure like paid-up capital
 Kind of main activity (ISIC code with textual description)

Number of statistical units

Single or multi-establishment enterprises

Employment (1)



Number of Persons Employed (table p.56)

Reference period (day, week, month, etc.)

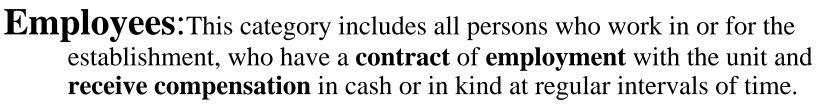
Include

Exclude

- Working proprietors,
- unpaid family workers
- Active business partners
- Persons on short-term leave
- Persons on special paid leave
- Persons on strike
- Part-time workers on payroll
- Seasonal workers on payroll
- Outworkers on the payroll

Directors of incorporated enterprises Contract workers, paid through contractors Persons on indefinite leave persons on military leave persons on pension outworkers paid by subcontractors

Employment (2)



Exclude: Working proprietors and unpaid workers

Employees are classified as:

- **a. Production Workers:** who are directly engaged in the production or related activities of the establishment, including any clerical or working supervisory personnel whose function is to record or expedite any step in the production process. Regardless the degree of labour qualification / full-time or part-time
- **b.** And other employees: This category includes administrative, technical and clerical personnel such as salaried managers and directors, laboratory and research workers, clerks, typists, bookkeepers, administrative supervisors, sales persons and the like.

Employment (3)

Employees engaged in own-account capital formation of which separately: Intellectual property

- Employees engaged in research and development:

"Research and experimental development comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications" Frascati Manual (OECD 2002b)

Exclude:

- personnel employed on education and training,

- personnel employed on other scientific and technological activities (e.g. information services, testing and standardization, feasibility studies, etc.),

- personnel employed on other industrial activities (e.g. industrial innovations n.e.c.),

personnel employed on administration and other indirect supporting activities.

- Mineral exploration and software and databases development

Employment (4)

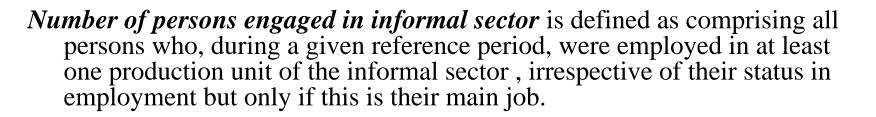
Leased employment

Leasing companies operate in a co-employment relationship with client businesses and are specialized in providing wide range of human resource services. This item comprises the total number of persons supplied by employment agencies or similar organizations to the industrial establishments.

The following are **<u>excluded</u>** from the leased employment:

- (a) Temporary staffing obtained from a staffing service
- (b) Contractors, subcontractors or independent contractors,
- (c) Purchased or managed services, such as janitorial, guard, or landscape services,
- (d) Professional or technical services purchased from another firm, such as software consulting, computer programming, engineering, or accounting services.

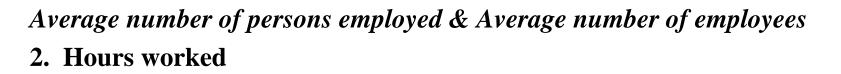
Employment (5)



Exclude:

- persons exclusively engaged in the production of goods or services for own final consumption or own fixed capital formation;
- persons engaged in agricultural activities, as these activities are being excluded from the scope of informal sector for practical reasons;
- self-employed persons engaged in rendering the following professional or technical services doctors, lawyers, accountants, architects, engineers, etc. if they do not fulfil the requirements for the informal sector enterprises;
- paid domestic workers.

Employment (6)



Number of hours worked by employees is defined as the total number of hours actually spent on activities by them that contribute to the production of goods and services during the reference period.

Include

- Productive hours
- Hours spent on ancillary activities
- Unproductive hours spent in the course of work
- Short periods of rest

Exclude

- Hours paid for but not worked
- Meal breaks longer than 30 min
- Time spent on commuter travel between employment and home



Compensation of Employees is defined as the total remuneration, in cash or in kind, payable by the establishment to an employee in return for work done by the latter during the reference period. (*exclude any taxes payable by the employer on the wage and salary bill i.e. payroll tax*)

Compensation of employees has two main components:

(a) wages and salaries payable in cash or in kind ; and

(b) social insurance contributions payable by employers

Wages and salaries *include*:

- (a) Wages or salaries payable at regular weekly, monthly or other intervals,
- (b) Supplementary allowances payable regularly,
- (c) Wages or salaries payable to employees away from work for short periods
- (d) Ad-hoc bonuses (e) Commissions, gratuities and tips received by employees

Compensation of Employees (2)

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Wages and salaries <u>exclude</u>:

- the reimbursement by employers of expenditures made by employees in order to enable them to take up their jobs or to carry out their work. For example:
 - (a) The reimbursement of travel, removal or related expenses made by employees when they take up new jobs or are required by their employers to move their homes to different parts of the country or to another country;
 - (b) The reimbursement of expenditures by employees on tools, equipment, special clothing to enable them to carry out their work.

Include in CE:

- Social insurance benefits paid by employers in the form of:

- (a) children's, spouse's, family, education or other allowances in respect of dependants;
- (b) payments made at full, or reduced, wage or salary rates to workers absent from work because of illness, accidental injury, maternity leave, etc.; and
- (c) Severance payments to workers or their survivors who lose their jobs because of redundancy, incapacity, accidental death, etc.

Compensation of Employees (3)



Wages and salaries in kind <u>Include</u>

- Meals and drinks;
- Housing services;
- Uniforms or other forms of clothing
- The services of vehicles;
- Goods and services produced as
- outputs from the employer's own processes
- Transportation to and from work;
- Child-care for the children of employees



- *Stock Options* are a form of income in kind that results from the practice of an employer giving an employee the option to buy stocks (shares) at some future date at a certain price and under some specific conditions.
- Elements of labour cost that are not regarded as employee income are not included in the **concept of compensation of employees**. As a cost to the employer, they are included in the **intermediate consumption** (item 9.1) of the establishment. Following are included in this category:
- Tools or equipment used exclusively, or mainly, at work;
- Transportation and hotel services provided while the employee is travelling on business;
- Changing facilities, washrooms, showers, baths, etc. necessitated by the nature of the work;
- First aid facilities, required because of the nature of the work.

Compensation of Employees (5)



- Breakdown of wages and salaries of employees
 - It is recommended that wages and salaries data for these categories of employees, namely,
- (a) research and development (item 3.1.1.1),
- (b) mineral exploration and evaluation (item 3.1.1.2),
- (c) software and databases development (item 3.1.1.3), and
- (d) production of entertainment, literary and artistic originals (item 3.1.1.4),
- (e) Employees engaged in own account fixed asset formation and major construction

reported separately.

- Remuneration of outworkers on the pay-roll
- Payments to directors of incorporated enterprises for their attending meetings
- Social insurance contributions payable by employers (<u>a Part of Compensation of employees</u>)

Purchases of Goods & Services



- Purchases of goods and services include the value of all goods and services purchased during the reference period*
- Goods and services that can be either resold with or without further transformation, completely used up in the production process or stocked

* Excludes consumption of fixed assets

Purchases of Goods & Services (2)

What is included?

- The data should cover the materials that enter directly into the goods produced, which include:
 - all raw materials
 - pre-fabricated parts (intermediate products)
 - components that are physically incorporated into the products of the establishment
 - materials used for the own-account fixed assets formation and major repair by the unit
 - raw materials and supplies used in contracting out some work to other establishments
 - industrial /non-industrial services and work carried out by third parties

Purchases of Goods & Services (3) Valuation

The valuation of goods purchased should be in purchasers' prices, which

includes:

- purchase price
- cost of insurance
- value of packaging materials
- all taxes and duties

but excludes:

- the deductible value-added tax (VAT)
- discounts or rebates returned
- value of packaging materials returned to the suppliers

Cost of raw materials & supplies except gas, fuels and electricity



This item accounts for all goods delivered to the control of the establishment in the reference period and owned by the establishment.

Includes:

- Purchases or receipts of raw materials and supplies from other enterprises
- Value of raw materials and supplies delivered by other establishments of the same enterprise

- Cost of materials for own-account fixed assets formation or major repair (Including materials for the construction of employee-occupied dwellings/staff facilities/major repair of all establishment-owned or rented buildings, except housing accommodation).

Cost of raw materials & supplies (2)

Cost of materials for own-account fixed assets formation

The cost of materials for own-account fixed assets formation should separately consist of:

- (a) research and development
- (b) mineral exploration and evaluation
- (c) software and databases development

(d) production of entertainment, literary and artistic originals

(e) fixed asset formation and major construction

Cost of gas, fuels & electricity

includes:

- all purchased gas, fuels and electricity purchased to be used as fuel
- gasoline and other fuels for vehicles
- Fuels and electricity used for heating and lighting

but excludes:

- Energy products purchased as a raw material or for resale without transformation
- Fuels and electricity used for heating and lighting for employeeoccupied dwellings owned or operated by the establishment
- Fuels produced and consumed in the same establishment

*Fuels that enter the product or are used for other energy production should be included under materials

Cost of water supply and sewage

- This includes the cost of :
 - all water purchased by the establishment for business purposes during the reference period
 - sewerage services purchased by the establishment during the reference period
- It is important to collect a name of someone that can be contacted for additional information on:
 - the physical use of water
 - wastewater treatment and discharges

Cost of services purchased



(excluding rentals)

This accounts for all industrial or non-industrial services payable by the establishment during the reference period, categorized as:

- Industrial:
- Repair & maintenance work
- Contract & commission work

- Non-industrial:
- Communication services
- Transport services
- Advertising & promotion
- Financial services
- Other services

I. Industrial services purchased



1. Repair & maintenance work

includes:

- Payments for installation of goods sold by the establ. on installed basis
- Service on goods sold

but excludes:

- Amounts paid for the installation and major repairs of capital goods
- Repair and maintenance costs of employee-occupied dwellings

2. Contract and commission work includes: <u>but</u>

- Work done on materials owned by the establishment
- Specialized work performed on products made by the

establishment

 Payments made through subcont. to non-payroll outworkers

but excludes:

- Sales commissions

II. Non-industrial services purchased

- 1. Purchase of communication services: purchase of postal and telecom services
- 2. Transport services:

includes:

- hired transport only

but excludes:

- transport carried out by the unit itself

3. Advertising and promotional services includes:

- advertising through television, newspapers and other media

- promotional payments and payments for market research activities and public relation activities carried out by a third party

4. Financial services

includes:

but excludes:

- Interest payments

- fees and charges directly payable for financial intermediation services

- outlays for purposes of financing the acquisition of fixed assets

but excludes:

- Market research undertaken by the unit itself

II. Non-industrial services purchased (2)

5. Other services:

includes:

- Legal services
- Accounting and bookkeeping
- Managing and consulting
- Entertainment, travelling and subsistence
- Contributions to business and professional associations
- newspaper and periodical subscriptions
- Costs of meetings of the governing bodies and shareholders
- Patent and licence fees

but excludes:

- dividends and interest paid
- fines and the like paid
- outright purchases of patents and licences
- land and other capital goods
- donations
- bad debts
- depreciation

In the case of multi-establishment enterprises, data on non-industrial services used by establishments should be collected and cross-referenced with the data on enterprises that own them, best done by data collectors.

Purchase of Goods and services for resale



Value of goods and services for resale without transformation

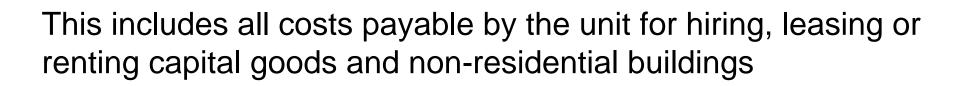
includes:

- sorting
- grading and assembling
- mixing, bottling & packing
- breaking bulk & repacking

but excludes:

- returns, discounts, rebates, and other allowances received
- goods and services which are sold to third parties on a commission basis
- The goods should be valued at purchaser's prices
- Transfers from other establishments of the same trade enterprise should be valued as though purchased
- Value should be adjusted for changes in inventories of goods for resale.

Rental payments



includes:

- Rental payments for machinery and equipments
- Rental payments for

dwellings and structures

but excludes:

- Financial leasing payments



Non-life insurance premiums



This item includes non-life insurance premiums payable by the unit during the reference period on the unit property against:

- damages due to fire
- natural calamities
- losses
- etc.

Quantity of Production



Data on quantity of goods and services purchased are useful and may be collected through industrial surveys:

<u>Materials:</u>

- Quantity of individually important materials and supplies to provide supplementary detail in infrequent and annual inquiries.
 <u>Energy</u>:
- **Quantity of individual fuels and gas purchased** to calculate energy consumption.
 - Quantities of electricity purchased, generated, and sold
 - Total energy consumed

Water:

- Quantities of water purchased, abstracted for own use, and sold
- Total water used (in cubic meters)
- Quantity of wastewater treated on site prior to discharge
- Quantity of wastewater discharged without treatment

Value of shipments/sales/turnover



This value comprises the amount invoiced by the est. corresponding to market sales of goods or services valued equivalent to SNA valuation at basic prices, i.e.

includes:

- invoiced charges for:
- Transport
- Packaging Etc.

but excludes:

- Value added tax (VAT)
 Deductible taxes directly linked to sales
 All duties and taxes on products
 Price rebates, discounts and allowances
 Value of returned packaging

The term 'turnover' is used to denote revenues of producer units instead of the interchangeably used terms in economic statistics and business accounting such as shipments, sales, receipts, turnover etc.

- The value of turnover of goods and services consists of:
 - 1) Value of turnover including transfers to other est. of same enterprise
 - 2) Other revenues
 - 3) Own-account fixed assets

Value of shipments/sales/turnover (2)



- the value of shipments, including transfers during the inquiry period to other establishments of the same enterprise, of:

- all goods made by the est., whether in the reference or in previous periods
- goods produced by other organizations from materials supplied by the est.

 all shipments of principal products, secondary products, by products, water supply, sewerage, waste management and remediation activities arising from the production process; and all sales of electricity, gas and steam, whether purchased or produced by the establishment

- progress payments receivable for contracts with a long-term production cycle

- The value of this category comprises the value of:
 - 1) Shipments/sales/turnover of goods produced by the est.
 - 2) Shipments/sales/turnover of all goods/services for resale
 - 3) Industrial work done or industrial services rendered to others

Value of shipments/sales/turnover (3)



2. Other revenues

- This covers revenue receivable by the unit from activities other than the sale of goods or the rendering of services.
- The value of this category comprises the value of:
- 1) Revenue from the rental or lease of machinery and equipment
- 2) Revenue from the rental or lease of buildings
- 3) Other revenues n.e.c., including:
 - Revenue from the operation of cafeterias, hostels, camps and others
 - Receipts for transport services other than delivery of own products
 - Revenue from sales of scrap
 - Receipts for storage of goods, warehousing and the like
 - Commissions from the arrangement of financing
 - Receipts for the right to use patents, trademarks, copyrights, etc.
 - Dealers' margins and other transfer costs in respect of transactions involving second-hand goods and scrap, land, intangible assets, etc.

Value of shipments/sales/turnover (4)



3. Value of own-account fixed assets

includes:

- the cost of all fixed assets, such as buildings and structures, machinery and equipment, etc. that are:

- manufactured or built by the est. for its own use during the ref. period
- having a service life of more than one year
- the costs of extensions, alterations, improvements and major repairs
- fixed assets produced for rental or lease
- The own-account fixed assets should be recorded at the time the work is put in place and the assets become part of the fixed capital formation of the establishment. The valuation, in principle, should be at the basic prices of the same assets sold in the market.

Value of individually important products

- The turnover of est. may be broken down by products for both goods and services in terms of Central Product Classification (CPC, Ver.2), obtaining:
 - Total value of the products
 - Quantity of individually important products
- These data are particularly useful if the intermediate products in question are final products of other est. or are widely used as purchased materials.
- To measure production, it may be desirable to obtain the quantity and value of individually important stocks of the products at the beginning and end of the inquiry period.
- It is desirable to include the important industrial products identified by the UNSD which forms the basis for the data collection on the industrial commodity production statistics.

Inventories (1)



This comprises the value of all inventories owned by the parent enterprise and held by, or under the control of, the establishment, either at the establishment or elsewhere.

includes:

- Inventories held:
 - at ancillary units
 - in bonded stores or public warehouses
 - on consignment
 - in transit
 - overseas
- Materials being manufactured, processed or assembled on commission by others

• Changes in inventories =

value of inventories at the end – value at the beginning of the reference period.

Inventories is categorized into:

- 1) Materials, fuels and other supplies
- 2) Work-in-progress
- 3) Finished goods
- 4) Goods purchased for resale

but excludes:

Materials owned by others but held by the establishment for processing

Inventories (2)



Valuation of inventories

- Over the long term, prices tend to rise, which means the choice of accounting method can significantly affect valuation.
- In order to estimate properly the changes in inventories, it is recommended that the <u>method of valuation should be</u> <u>requested on survey forms</u>.
- 4 common methods of inventory valuation:
 - FIFO: items considered sold as per acquisition order (first-in-first-out)
 - LIFO: items considered sold as per latest acquisition (last-in-first-out)
 - Average cost: weighted average of all similar items available
 - Specific item cost: each item identified separately (tracking inventory)

Inventories (3)

1. Materials, fuels and other supplies

include:

- Value of all materials, components and the like that enter into the product, fuels, and repair and maintenance, office and other consumable supplies, including:

- The value of any inventories of materials and supplies for use in own-account fixed asset work
- separate value of inventories of fuels (if possible)
- The value:

The prices should:

- include any duties and taxes payable by the purchaser
- exclude deductible value-added tax, any rebates and discounts given by the seller.

*Alternatively, the book values might be requested.

Inventories (4)

2. Work-in-progress

- The value of output produced that is not yet sufficiently processed to be in a state in which it is normally supplied by an establishment to other enterprises or to other establishments of the same enterprise.
- **Includes:** all work-in-progress for the account of others, irrespective of the arrangements for financing the work.

• Excludes:

progress payments received on that part of the work-in-progress on long-term contracts (payments to be treated as shipments)
work-in-progress for own-account production of fixed assets for countries that capitalize own-account fixed assets in their business accounts

*In cases that countries do not capitalize own-account fixed assets in their business accounts, industrial statisticians must ask for these additional information.

• The value:

If possible, an imputed valuation in terms of equivalent market basic prices should be adopted, including an imputed margin for overhead costs and profits, as well as the cost of materials consumed and labour used.

*Alternatively, the book values might be requested.

Inventories (5)

3. Finished goods

include:

- All goods produced by an establishment as output that the producing establishment does not intend to process further

- Finished goods held by another establishment that were processed by that establishment from materials owned by the respondent establishment

- Finished goods held elsewhere – at ancillary units, in bonded or public warehouses, on consignment, in transit, and so on

exclude:

- Finished goods held by the respondent establishment that were made from materials owned by others

Inventories (6)

4. Goods purchased for resale

include:

- All goods purchased by an establishment for the purpose of reselling them in the same condition as received to their customers

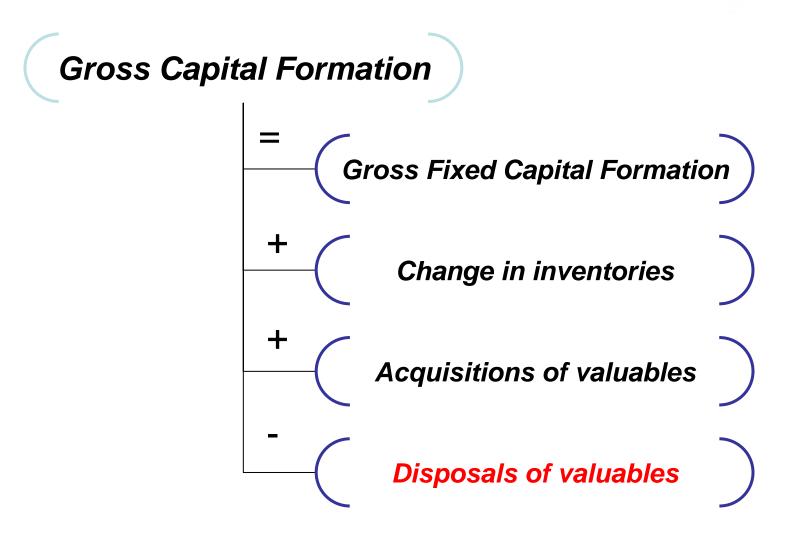
- Stocks of goods to be resold without processing or transformation and which were not expressly purchased for that purpose

The value:

- Although the goods have not been processed internally, they should be valued in the same manner as the finished products manufactured by the establishment, that is, in basic prices

Gross Capital Formation





Gross Fixed Capital Formation (1)



GFCF= Total (Acquisitions – Disposals) of fixed assets + certain specified expenditure on services that adds to the value of non-produced assets.

includes:

- All durable goods expected to have a productive life of more than one year and intended for use by the est.
- Major additions, alterations and improvements to existing fixed assets that extend their normal economic life or raise their productivity (Capital repair)
- New fixed assets
- Additions and improvements to existing fixed assets made by the est.'s own labour for its own use

but excludes:

- Transactions in respect of financial claims and intangible assets (such as rights to mineral deposits, copyrights and the like)
- Expenditures for current repair and maintenance

*Transactions for acquisitions and disposals are treated seperately.

Gross Fixed Capital Formation (2)



Valuation of fixed assets

- Fixed assets acquired from others should be valued at <u>purchasers'</u> <u>prices</u>, excluding any indirect outlays associated with purposes of financing the acquisition of fixed assets.
- Fixed assets acquired through barter are valued at their estimated basic prices plus any taxes payable and costs of ownership transfer.
- Fixed assets produced on own account may be valued at explicit cost, including any imputations that may be required in respect of the employed own-account labour (if valuation is not possible as barter).
- Fixed assets produced by one establishment, of a multi-establishment enterprise, for the use of another establishment of the same enterprise should be valued as though purchased from outside the enterprise.
- Disposal of fixed assets should be valued at the actual amounts realized rather than at book values.

*Only disposal should be deducted, not decreases in inventories of fixed assets owing to other cause

Gross Fixed Capital Formation (3)



Time of recording

 The general principle for the time of recording of acquisitions less disposals of fixed assets is when the ownership of the fixed assets is transferred to the unit that intends to use them in production.

Two exceptions:

Treated as work-in-progress

- incomplete construction projects
- immature animals and plantations
- The acquisition of fixed assets should, in principle, be recorded at the moment the est. assumes economic ownership of the items in question.

- In the case of hire-purchase arrangements, it is desirable to consider the time of possession as the moment at which the buyer acquires economic ownership even though legal title passes at a much later date.

• The expenditure in the case of construction work = total value of work completed during the inquiry period - amount of any progress payments made against the work prior to the inquiry period + all progress payments made during the inquiry period against work not yet finished by the end of the period.

*For construction work, progress payments should be included in expenditure on fixed assets while for other fixed assets they should be recorded as a financial claim from advance payments.

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Types of fixed assets

- Dwellings
- Other buildings and structures
 - Non-residential buildings
 - Other structures
 - Land improvements
- Machinery and equipment
 - Transport equipment
 - ICT equipment
 - Other machinery and equipment
- Intellectual property products
 - Research and development*
 - Mineral exploration and evaluation
 - Computer software and database
 - Entertainment, literary and artistic originals
 - Other
- Weapons Systems*
- Cultivated biological resources*
- Costs of ownership transfer on non-produced assets*
- * SNA 2008 updated recommendation



Intellectual property products

- Intellectual property products are the result of research, development, investigation or innovation leading to knowledge that the developer can market or use to their own benefit in production because use of the knowledge is restricted by means of legal or other protection.
- The actual questionnaire should distinguish between what business regards as their investment (e.g. actual acquisition) and the data that are needed for assessing own-account development of intellectual property products that are not capitalized by industries (e.g. imputation).
- Each component of intellectual property product should be divided into two components:
 - Those that are investments procured from other enterprises
 - Those that are developed on own-account or for own use (approximated by cost of production).



Research and development (R&D)

- R&D accounts for the value of expenditures on creative work undertaken on a systematic basis in order to devise new applications. (SNA 2008 recom.)
- By convention, output of own-account R&D production by enterprises is valued at the sum of costs, <u>including the cost of unsuccessful R&D</u>.
- **Value:** Output of own-account R&D = material and service costs
 - + compensation of employees paid to R&D personnel
 - + other taxes less subsidies on production
 - + depreciation of capital goods used in R&D

*The enterprise may not treat R&D as capital, but for statistical purpose, the data is requested separately as sum of costs.



Mineral exploration and evaluation

- It consists of the value of expenditures on exploration for petroleum and natural gas and for non-petroleum deposits and subsequent evaluation of the discoveries made.
- These expenditures include:
 - pre-licence, licence and acquisition costs
 - appraisal costs
 - costs of actual test drilling and boring
 - costs of aerial and other surveys
 - transportation and other costs incurred to encountered in making the tests
 - Re-evaluations that may take place after commercial exploitation
 - The expenditures incurred on exploration within a given accounting period, (whether undertaken on own account or not)

*These last are treated as capital expenditures included in the enterprise's gross fixed capital formation irrespective of the fact whether the exploration results in success or not.

Types of fixed assets



Computer software and database

- **Computer software** consists of computer programs, program descriptions and supporting materials for both systems and applications software.
- GFCF for computer software includes:
 - Initial development and subsequent extensions of software
 - Acquisition of copies that are classified as assets
 - Long-term license-to-use
 - cost of developing purchased software to be applied for internal own use
- **Database** consists of files of data organised in such a way as to permit resource-effective access and use of the data.
- <u>Sum-of-Costs approach for database:</u>
 <u>Includes the cost of:</u>
 - Preparing data in the appropriate format
 - Staff time estimated
 - Capital services of assets used
 - Long-term license-to-use
 - database development for own use

but excludes the cost of:

- The DBMS used
- Acquiring or producing the data initially



Entertainment, literary and artistic originals

- Entertainment, literary and artistic originals consist of:
 - original films
 - sound recordings
 - on which - manuscripts
 - tapes
 - etc.

- drama performances
 radio/TV programming
 musical performances
 sporting events
 literary/artistic output
- Such works are frequently developed on own-account and estimated by a sum-of-costs approach.

Types of fixed assets

Weapons Systems

- Weapons systems include vehicles and other equipment such as:
 - warships
 - submarines
 - military aircraft and tanks
 - missile carriers and launchers, etc.

Cultivated biological resources

 Cultivated biological resources cover animal resources yielding repeat products and tree, crop and plant resources yielding repeat products and hence this type of assets is not much relevant when considering industrial statistics data.

Costs of ownership transfer on non-produced assets

• The costs of ownership transfer on non-produced assets represent produced assets but their value can not be integrated with the value of another produced asset. An exception is the case of land where costs of ownership transfer are treated as by convention as land improvement.

Taxes and Subsidies

It is recommended that only "other taxes and subsidies on production" be collected as these payments or receipts affect the behaviour of producers and are recorded in their business accounts.

*Refer to the specific names and descriptions of taxes as they exist in national fiscal systems

Other taxes on production:

- Taxes that the producing units are liable to pay as a result of engaging in production (motor road vehicle taxes, duties and registration fees, business licences, payroll taxes, taxes on non-life insurance on assets, levies on the use of fixed assets).
- also include official fees and charges

*The design of statistical questionnaires and subsequent data compilation should clearly indicate the type of taxes that have been reported as it might not be possible to collect data about all these taxes at establishment level (could be available at enterprise level).

Taxes and Subsidies (2)



Subsidies

Subsidies received:

Payments that government units make to resident producing units on the basis of their production activities or the quantities or values of the goods or services they produce, sell or import.

Subsidies on products:

Payments per unit of a good or service produced, either as a specific amount of money or as a specified percentage of the price per unit.

Other subsidies on production:

Payments, other than subsidies on products, which resident enterprises may receive as a consequence of engaging in production (e.g., subsidies on payroll or workforce, or subsidies to reduce pollution).



Environmental protection groups together all actions and activities that are aimed at the prevention, reduction and elimination of pollution as well as any other degradation of the environment. This includes measures taken in order to restore the environment after it has been degraded due to the

pressures from human activities.

Environmental protection expenditure consists of the total expenditures (current and capital) of an industry whose primary purpose is for the protection of the environment; that is the prevention, reduction and elimination of pollution as well as any other degradation of the environment.