



مَعْد التَّخْطِيط القومى

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Classification of Industries
in Social Countries

by

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Planning must be served by statistics. The former has to formulate its specific requirements with respect to the definitions of concepts used in the planning process and with respect to the data collecting and processing. Since planning is mainly concerned with quantities or physical magnitudes in the field of production, the classification of industries and their respective products as well plays an eminent role. It must be set up in such a way that the production targets can be

- (i) easily aggregated and broken down in specific targets or smaller units of the national production and that they can be properly
- (ii) related to other economic and technological factors.

The present note is a brief discussion of the industrial (and agricultural) classification of those countries which are member-states of the council of Mutual Economic Assistance (CMEA).¹⁾ This classification has been elaborated jointly during the last years and will be introduced all over the CMEA - area in the forthcoming period thus replacing the various national classifications to the extent the latter differ from the new international classification. It needs not be stressed that countries which embarked upon a policy of international coordination and specialization of their production (cf. Memo. No. 253) must have adequate tools to do so. One of these instruments is the "General Classification of Industrial and Agricultural Products".

1. Classification of Industrial Branches

This branch classification is the basis for the mentioned general classification of products. It consists of 16 branches , each

1) Albania, Bulgaria, Czechoslovakia, German Democratic Republic, Hungary, Mongolia, Poland, Rumania, Soviet Union.

being characterized by a set of homogeneous products which are the typical result of specific technological processes.

The 16 branches are the following :

- 111 Electricity and thermal energy
- 112 Coal, Oil, Combustible slate, Peat and their derivatives
- 121 Ferrous metallurgy
- 122 Non-ferrous metallurgy
- 130 Machine construction and metal processing
- 140 Chemical, rubber and asbestos industries
- 151 Construction material, industries
- 152 Wood and Wood-processing industries
- 153 Cellulose and paper industries
- 154 Glass, Ceramics and Porcelain industries
- 161 Textile industry
- 162 Garment industry
- 163 Leather, fur and footwear industries
- 164 Printing (polygraphic industry)
- 170 Foodstuff industry
- 190 Others

2. Classification of Products

The entire classification is based on a grouping of products by branches for which the respective products are typical. This basic principle is clearly different from that underlying the International Standard Industrial Classification (ISIC) where we have kinds of activity and not products.

This grouping of products makes it possible to classify all enterprises and even occupations accordingly. Thus, we arrive at a common basic principle for classifying all important economic categories in the same way.

Apparently, this seems to be a prerequisite for comprehensive national planning.

Consequently, all industrial enterprises (which are not distinguished from the concept of establishment) in the socialist economies had been attached to one of these branches according to the character of their production (or, at least, that part of it which is prevailing).

The General Classification which we are discussing is being used in various fields of planning where the commodity as such is important, namely: production, supply and trade. International coordination by means of commodity balances as well as international comparative studies in this field need not anymore difficult re-arrangements of the various national classifications. It is here of productive importance to note that this international classification had been standardized over seven digits (the ISIC has three).

The CMEA-Classification covers the following products:¹⁾

- (i) all products which are being produced by the member-countries
- (ii) all products which are being imported by these states
- (iii) all products which go to the scrap for being processed another time in one way or the other (this so, because they can be regarded as raw materials).

Excluded are:

- (i) all products that are immobile (buildings) with the exception of such which had been assembled of standardized, pre-fabricated elements,
- (ii) Services of a productive nature;
- (iii) repairs and assembling (installing) activities.

1) This classification comprises also the agricultural products. This problem, however, will be dropped in this note.

All respective products which are typical for one of the mentioned 16 industrial branches form a section with the same code number as the branch itself (e.g. ferrous metallurgy = 121, products of ferrous metallurgy = 121). Consequently, there are sixteen branches and sixteen sections of commodities. Each of these branches, however, represents an aggregation of enterprises (productive units) with a technology common to all of them or with the same raw material being processed by the respective enterprises or even with a production that actually is being used for the same purpose. Moreover, there are cases of a combination of these classifications.

Since each of the mentioned characteristic aspects plays a different role in the various branches (commodity sections) it had been found appropriate to adopt an accordingly differentiated approach. Thus, there are sections where the technology comes first; e.g. chemical products (140). In other sections the first aspect of classification is the purpose for which the products are being used (151 = construction materials). Finally, in some cases the raw materials which are being processed are the first item (152 wood-processing industries). Whichever the sequence of the three main aspects in the various sections is, inside each one the adopted order, of course, is strictly adhered to.

In addition, within the commodity sections some other principles for classification have been used, if possible. Amongst them are e.g.: capital and consumer goods (e.g. products of plastics for productive uses = 145 70 00 and for consumption = 145 80 00)¹⁾; differentiation according to the used raw material (sulphuric acid can be obtained from gypsum and several other materials); differentiation of machines whether they are for production of means of production or of consumer goods.

1) This principle, naturally, is not relevant for such groups the products of which can be clearly used for either production (iron ore) or consumption (shoes).

In the first stages of processing the raw materials used play an even greater role whereas in later stages the final use of the product will be more important. This is why there is no generally accepted order of these additional criteria over all industries.

3. The Code

The code of the classification is as follows: The first digit indicates the sector of the national economy ; e.g.

1. Industry (and: Industrial products)
2. Agriculture (and: agricultural products)

The second and third digit cover the industrial (or agricultural) branches, and the related products (= section) as well;

e.g. 152 00 00 Wood and wood-processing industries (and products of these industries).

As can be seen the classification of sectors and branches on the one hand and of products on the other ^{are} identical over the first three digits. After that there are different ways for classifying the products (physical units) and ^{the} branches or enterprises (administrative or institutional units).

The following example is included to give a clear idea about the principles and some details of the CMEA-classification.

111 Electric + thermal energy

111 10 00 Electricity

11 00 Electricity from thermal power stations

11 10 Electricity from hard coal and its derivatives

11 - hard coal

12 - hard coal bricks

13 - hard coal coke

- 11 20 Electricity from soft (brown) coal and its derivatives
 - 21 - soft coal
 - 22 - soft coal bricks
 - 23 - dry coal
 - 24 - soft coal coke
 - 27 - lignite
- 11 30 Electricity from liquid fuels
 - 31 - diesel fuel
 - 32 - benzin
- 11 40 Electricity from gas
 - 41 - artificial gases
 - 42 - natural gas
- 11 60 Electricity from atomic energy
- 11 90 Electricity from other fuels
- 12 00 Electricity from hydro-power stations (with 3 types of such stations)
- 19 00 Electricity not classified elsewhere
- 111 20 00 Thermal Energy
 - 21 00 Thermal energy from thermal and industrial power stations
 - 21 10 Steam
 - 21 20 Hot and warm water
 - 22 00 Thermal energy from thermal and similar stations
 - 22 10 Steam
 - 22 20 Hot + warm water.

In this example we have:

Sector 1 = industry

Branch (1) 11 = power generation and thermal energy (this is the grouping of the respective enterprises).

Section (1) 11 = electric + thermal energy (this is the grouping of the respective products).

- Groups (1) 11 10 = electricity
 (1) 11 20 thermal energy

For every item of the CMEA-classification it is indicated which unit (or units) of measurement have to be used.

4. Classification of Metal-processing and Chemical Industries

Metal-processing and chemical industries are vital branches to a national economy. They have been chosen, therefore, for our discussion of the CMEA-classification. What follows is the amplification of the section 130 = Products of machine-construction and metal-processing and section 140 = Products of chemical, rubber and asbestos industries.

130 Products of Machine-construction and Metal-processing

131 00 00 Machines & equipment for heavy industries, machine-construction, metal-processing and for construction.

- 10 00 Energetic equipment
- 20 00 Machines & equipment for mining & fuel industries
- 30 00 dto. for metallurgy
- 40 00 Metal-processing machines
- 50 00 Forging & pressing equipment for processing of metals and plastics
- 60 00 Special machines & equipment for processing of metals & plastics
- 70 00 Chemical equipment
- 80 00 Machines & equipment for construction materials, ceramics & construction.
- 90 00 Parts & spare parts (for 131 00 00)

132 00 00 Machines & Equipment for Wood-processing, Cellulose-
and Paper, Printing, Glass, Light and Foodstuff Indust-
ries

- 10 00 dto. for wood and wood-processing
- 20 00 dto. for cellulose & paper
- 30 00 dto. for glass
- 40 00 dto. for textile
- 50 00 dto. for garment
- 60 00 dto. for leather, shoes, fur
- 70 00 dto. for printing
- 80 00 dto. for foodstuffs
- 90 00 parts & spare parts (for 132 00 00)

133 00 00 Machines & Equipment for Agriculture, Trade and General
Purposes

- 10 00 tractors & agricultural machines
- 20 00 equipment for trade & supply
- 30 00 lifting & transportation equipment (except for mining)
- 40 00 refrigerating and air-conditioning apparatus (except household-
ones and -refrigerating waggons)
- 50 00 packing machines
- 60 00 metal constructions
- 70 00 pumps, compressors
- 80 00 others (for water cleaning etc, laundries, textile cleaning
etc.)
- 90 00 parts & spare parts for 133 00 00.

134 00 00 Means of Transportation

- 10 00 Railroad Vehicles
- 20 00 cars, trucks, busses, lorries
- 30 00 motorcycles, bicycles
- 40 00 ships
- 50 00 others
- 90 00 parts & spare parts for 134 00 00 (except electrical equip-
ment)

135 00 00 Supplementing Instruments

- 10 00 Roll-and ball bearings
- 20 00 reducers, gears
- 30 00 hydraulics & pneumatics
- 40 00 bolts, nuts, springs etc.
- 50 00 tools and fixture
- 60 00 armatures
- 70 00 others
- 90 00 parts & spare parts for 135 00 00

136 00 00 Electrical Machines & Products

- 10 00 electrical machines
- 20 00 transformers etc.
- 30 00 communication apparatus
- 40 00 cables & wires
- 50 00 products for electrical installation
- 60 00 rectifier apparatus for heavy current
- 70 00 electrical ovens
- 80 00 others
- 90 00 parts & spare parts for 136 00 00

137 00 00 Radio Communication and Vacuum Techniques X-Ray Equipment

- 10 00 products of line-communication techniques
- 20 00 radio-transmitting, receiving equipment
- 30 00 electro-acoustic apparatus
- 40 00 X-ray instruments
- 50 00 lamps
- 60 00 electronic valves
- 70 00 semi-conductors
- 80 00 elements for light current engineering
- 90 00 parts & spare parts for 137 00 00

138 00 00 Instruments for Automation, Products for Computation,
Techniques, Precision-made Instruments, Optical Products

- 10 00 instrumentation for automation of production processes
- 20 00 means for computation and organizational techniques
- 30 00 instruments for measurement and control of electrical
and magnetic parameters
- 40 00 devices for tele-control and tele-automation
- 50 00 optical instruments
- 60 00 time-mechanical measuring instruments
- 70 00 instruments for physical analyses
- 80 00 medical instruments & equipment
- 90 00 parts & spare parts for 138 00 00

139 00 00 Metal and Electrotechnical Products for General Purposes

- 10 00 electrotechnical machines for households
- 20 00 lighting fixture
- 30 00 metal products for households
- 40 00 cooling & heating instruments (except electrical ones)
- 50 00 equipment for central-heating systems
- 60 00 instruments, tools for household and productive uses
- 70 00 other metal products (which are partly made of plastics)
- 90 00 parts & spare parts for 139 00 00

140 Products of Chemical, Rubber and Asbestos Industries

(In our present note we shall not give the sub-divisions of section 140 because they are mainly based on the various chemicals so that these details of the classification offer no specific new economic aspects)

141 00 00 Potassium (croude), Potassium Products, Basic Mined
Materials for Chemical Industry

142 00 00 Anorganics (basic materials)

143 00 00 Organics (basic materials)

144 00 00 Pharmazeuticals

145 00 00 Plastics, Elastics, Products of both

146 00 00 Rubber and Asbestos Products

147 00 00 Chemical Fibres

148 00 00 Washing Powder, Soap, Costmetics

149 00 00 Other chemical and chemotechnical products
(paints, varnishes, lacquers, insecticides, explosives,
fotochemicals, technical fats and oils etc.)

