HUNGARIAN CENTRAL STATISTICAL OFFICE

# FEOR-93 HUNGARIAN STANDARD CLASSIFICATION OF OCCUPATIONS

(ACCORDING TO THE MODIFICATIONS IN FORCE FROM 1<sup>st</sup> JANUARY, 1997)

**BUDAPEST**, 1999

# **HUNGARIAN CENTRAL STATISTICAL OFFICE, 1999**

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# MAIN PRINCIPLES OF APPLICATION OF THE HUNGARIAN STANDARD CLASSIFICATION OF OCCUPATIONS (HSCO-93)

(according to the modifications in force from 1<sup>st</sup> January, 1997)

### **Objectives and characteristics of the application of HSCO-93**

The economic and social transition in Hungary required the modernisation of multipurpose statistical classifications and nomenclatures. Revision of the Hungarian Standard Classification of Occupations (HSCO) which was used in its earlier form from 1975 belongs to this group, too.

The principles and the structure of the modernised system of classification of occupations (further on: HSCO) is in line with the system of the current international occupational classification, ISCO–88 (Rev. 3.). One of the main aims of ISCO is to serve as a model for the development of national occupational classifications. It does not mean, however, that ISCO–88 could replace national classifications of occupations, since national classifications of individual countries should reflect the structure of the national labour market.

The modernised system, HSCO–93 – following professional inter-departmental coordination, testing, and after the transition period of 1993 – came into force on  $1^{st}$  January, 1994.

Modifications and completion resulting from the revision and carried out in 1996 did not concern the principles and structure of the new classification system and did not brake up major groups and sub-major groups which are important in respect of statistical evaluation and international comparability. The number of classified occupations changed in a small degree. According to the modifications in force the revised system contains 632 occupations.

The main characteristics of the system are as follows:

- HSCO-93 complies with the classification system of ISCO-88. HSCO-93 adopted major groups of the current international classification (ISCO-88) without any remarkable modification. Sub-major groups (second digit) are developed also in a way in certain cases by reduction that groups of ISCO-88 could be formed of them. (Correspondence tables between ISCO-88 and HSCO-93 can be elaborated in deeper detail but in these cases we have to reckon with methodological problems.) But at further levels of aggregation it was possible and it was necessary to take into consideration particular characteristics and demands of the Hungarian national economy. Moreover, it seemed to be reasonable to assert the claim to continuity and comparability to the previous nomenclature. Thus, it is not surprising that there are details in the Hungarian classification which deviate from the recommendations of the ISCO-88 to a certain extent and these deviations mostly mean more detailed breaking down. Greater specification is glaring in particular on the fourth level which contains the itemised list of occupations;
- it is a four-digit, decimal system;
- it takes into consideration that the circle of users in a market economy is much greater and more differentiated than it was in the preceding social system, and for

that reason it forms "the common denominator", it tries to satisfy all of the requirements at least on a minimal level;

• the system of HSCO–93 is open, that is to say it provides opportunity for users to complete the codes with further divisions at the fifth and sixth digit in accordance with their own requirements.

Within the four-digit decimal system the first digit stands for major group of occupations, the second one for sub-major group, the third one for minor group and the fourth one for the occupation itself. (In the table modified data are marked by bold, italics numbers.) Classifications of HSCO–93 are presented below:

	Major groups	Sub-major groups	Minor groups	Unit groups
serial number	name		number	
1.	Legislators, senior government officials, leaders of interest groups and managers of firms	4	11	64
2.	Professionals	7	24	112
3.	Technicians and associate professionals	8	24	123
4.	Office and management (customer service) clerks	2	6	20
5.	Service workers	3	13	62
6.	Skilled agricultural and forestry workers	4	7	30
7.	Craft and related trades workers	6	23	120
8.	Plant and machine operators and assemblers, vehicle drivers	3	17	76
9.	Elementary occupations	2	8	23
0.	Armed forces	3	3	3
	Total	42	136	632

#### Design and structure of HSCO–93

HSCO–93 is an **open** occupational nomenclature, it can be completed by users. Due to this principle users have the opportunity to make their own registering system more perfect and more clearly arranged. Besides the four digits, the way of application of possible further digits are determined by the given demands and conditions of users. (In these cases factors like size, scope of activity, type of registering system of the organisation and especially the computerised registering system already working or being under development play important roles obviously.)

Since occupations of HSCO–93 at the fourth digit are basically "collective" occupations (most of them consist of more than one occupation), it is obvious that these occupations can be detailed further on by users according to their own interests and aims. For this purpose they can use the publication entitled "Content description of the occupations of HSCO–93", too, in which description of more than 4000 jobs can be found. An alphabetical list also helps users to find a certain sphere of activity. Considering that individual occupations can be divided into even more than ten duties (because of their

complex character) it is practical to set apart two digits for the specification of duties (e. g. the fifth and sixth digits).

Further digits can be used for marking the level of skill and duty of the person pursuing a given occupation. Though HSCO–93 provides direction regarding that e.g. occupations of major groups 5–8 require skilled or semi-skilled qualification and occupations of major group 9 can be executed without any qualification, it does not prescribe exact qualification level by individual occupations. For that reason users can indicate the skill level belonging to a given occupation (skilled, semi-skilled or unskilled job) at further digits of occupations. Further specifications are also possible regarding the complexity of the set of tasks. Besides, in case of managerial occupations of major group 1 – especially in case of managers of small organisational units and product line managers – the size of the organisational unit and other main characteristics of the occupation can be indicated, too.

Moreover, users have opportunity – using further digits – to give the level, branch, specialisation of education, skill, qualification acquired through courses, knowledge of foreign languages, and so on.

#### **Principles of classification**

Occupation and content of the activity should be considered **irrespective of ownership and status in employment** (employee, employer, own-account worker, member of co-operative). In respect of classification it is indifferent whether a person pursuing a profitable activity works as an employee, a member of co-operative, a member of partnership or a self-employed one. However, an owner (employer), a co-partner, a member of partnership can be classified into the occupational system only if they participate in the work as well. In the course of classification industrial and organisational classifications were not necessary to be taken into account in general, but in certain cases it seemed to be practical to follow the logical structure of System of Standard Industrial Classification of Activities. Thus, in modernised HSCO there can be found occupations in case of which we should take into consideration the activity and type of organisation of employer.

In accordance with the above mentioned, one of the most important principle of HSCO–93 is that **the content of the activity actually pursued** is considered first of all when defining an occupation. Besides, the level of skill and knowledge required to pursue a given occupation is also an important criterion of classification. Thus, using the required level of qualification – belonging to occupations included in the system – as subsidiary information is unavoidable. It means basically the level of skill (the ability to execute the tasks and duties of a given job) and not the certificate or diploma acquired through formal education.

Nevertheless, in case of major groups 2–9 HSCO–93 applies the criterion of education. But it should not be regarded as an exclusive criterion of classification and handled irrespective of content elements. Accordingly, it can be stated only in general and as a guiding principle that according to the current approach major group 2 contains occupations requiring mostly university or college degree. In major group 3 skills which can be acquired in secondary schools providing technical knowledge are characteristic mostly, but activities requiring higher education also can be classed in this group. In major group 4 qualifications of secondary schools providing no specialised skills and that of

technical schools (e. g. shorthand typing) are typical. In major groups 5-8 people using their physical skills can be classified. The level of required knowledge, depending on the type of activity, can be quite different, from complex skilled works to semi-skilled works. Major group 9 contains those occupations which can be carried out without any qualification, with – and partly without – primary school degree. Occupations of major group 1 – in contrast to other major groups – are mostly independent of the level of education.

In the course of classification of occupations qualification is considered as an auxiliary criterion in general. On the other hand we found it necessary to analyse the **degree of independence in decision making**. This consideration becomes especially important in cases where it is difficult to make a mechanical distinction between occupations on the basis of educational criteria. As to HSCO–93, problems of classification can emerge especially in case of major groups 2, 3, 7 and 8, which can be solved by analysing the degree of possibility of decision making and the degree of responsibility.

It should be noted, that in line with international recommendations, HSCO–93 does not make distinction between intellectual and manual activities. Nevertheless, we can say that major groups 1–4 include mostly intellectual, while major groups 5–9 include mostly manual occupations, and it is possible to distinguish between these two kinds of activities in major group 0, too. (If the user has further needs, it is possible to classify manual and non-manual activities in an other way at further digits.)

# Main considerations of classification of occupations in individual major groups

#### Major group 1 Legislators, senior government officials, leaders of interest groups and managers of firms

In HSCO–93 managerial occupations belong to one major group and the system does not set apart separate digits in other major groups for managerial category. According to the conception of HSCO–93 managerial activity is not a duty but it forms a particular circle of occupations, thus it deserves a separate major group in the standard system of occupations. (The international classification system of occupations follows this solution, too.) A further characteristic of managerial occupations is, as mentioned earlier, that the level of education should not be applied even as a recommendation, considering that managerial tasks in principal can be executed by different qualifications (except those cases, of course, which require specific qualifications by statute).

#### Major group 2 Professionals

Major group 2 covers occupations whose main tasks require higher level of education. Since it is becoming increasingly common that research and its application do not separate from each other sharply, HSCO–93 does not make distinction in general between occupations of research type and those of application type in case of occupations of technical, health, natural or social science.

An important viewpoint of the classification in HSCO–93 is that it classifies people working in public administration and interest groups according to the professional field of their real activity.

#### Major group 3 Technicians and associate professionals

In major group 3 occupations not requiring university or college degree are included. Practically the occupations belonging to this major group help and complete activities classed in the second major group and they require lower than university level qualification in general. Thus major group 3 shows a more heterogeneous picture concerning educational level than other major groups. Therefore, it is of special importance that occupations of this major group are determined by type of the duty, degree of independence in work, and possibility or lack of decision making, besides the level of qualification.

#### Major group 4 Office and management (customer service) clerks

This major group includes those clerical and office management occupations which usually require secondary or technical school qualification. Mainly those classic administrative occupations belong to this group which are related with registering, administration of funds, or routine information.

#### Major group 5 Service workers

This major group contains basically physical occupations relating to material and non-material services. These occupations require skills (professional qualifications acquired through formal education or practice) and experiences appropriate to the content of the job pursued.

#### Major group 6 Skilled agricultural and forestry workers

Agricultural and forestry occupations are included in one major group in HSCO-93.

#### Major group 7 Craft and related trades workers

This major group includes occupations requiring craft and related trades knowledge and experience. The characteristics of these occupations are: knowledge of materials and tools used and instruments applied in the course of working process, knowledge of individual stages of the production process and attributes of the production or service, experience of intended using and the possibility to choose materials, tools and operation.

#### Major group 8 Plant and machine operators and assemblers, vehicle drivers

This major group contains occupations whose main tasks require knowledge and experience necessary to operate often automated machines or to drive vehicles. Occupations belonging to this major group require different levels of education and experience depending on type of the job carried out. (Thus, both skilled and semi-skilled workers can be classified in this group.)

#### Major group 9 Elementary occupations

Major group 9 includes occupations whose tasks do not require any qualification and people in this group perform simple and routine tasks in some cases requiring considerable physical effort and generally accompanied with limited personal initiative and decision making.

#### Major group 0 Armed forces

This major group includes regular and contractual members of armed forces (Hungarian Army, Frontier Guards), civil national security services, police force organs (police, civil defence, customs and finance guards, penal authorities, state fire-service or professional fire-services of local governments) who pursue their activity in order to carry out the tasks of a given armed organ according to their duty and cannot be classed among other major groups.

# HUNGARIAN STANDARD CLASSIFICATION OF OCCUPATIONS

Numbers marked with \* are not in use anymore according to the modifications in force from 1<sup>st</sup> January, 1997.

## 1 LEGISLATORS, SENIOR GOVERNMENT OFFICIALS, LEADERS OF SPECIAL-INTEREST ORGANISATIONS AND MANAGERS OF FIRMS

# 11 LEGISLATORS, SENIOR GOVERNMENT OFFICIALS, SENIOR OFFICIALS OF NATION-WIDE SPECIAL-INTEREST ORGANISATIONS

- 111 Legislators, ministers, political under-secretaries1110 Legislators, ministers, political under-secretaries
- 112 Senior officials of nation-wide public administration and jurisdiction
  - 1121 Upper-level leaders of public administration and jurisdiction
  - 1122 Medium-level leaders of public administration and jurisdiction
- 113 Senior officials of nation-wide special-interest and other organisations
  - 1131 Senior officials of political party organisations
  - 1132 Senior officials of economic and professional-interest organisations
  - 1133 Senior officials of humanitarian, welfare and other organisations
  - 1134 Nation-wide religious leaders

# 12 SENIOR OFFICIALS OF REGIONAL AND LOCAL SELF-GOVERNMENT, PUBLIC ADMINISTRATION, JURISDICTION AND SPECIAL-INTEREST ORGANISATIONS

- 121 Senior officials of local self-government
  - 1211 Elected senior officials of local self-government
  - 1212 Appointed upper-level leaders of local self-government
  - 1213 Appointed medium-level leaders of local self-government
- 122 Senior officials of regional public administration and jurisdiction
  - 1221 Upper-level leaders of regional public administration and jurisdiction
  - 1222 Medium-level leaders of regional public administration and jurisdiction
- 123 Senior officials of regional special interest and other organisations
  - 1231 Senior officials of regional political-party organisations
  - 1232 Senior officials of regional economic and professional-interest organisations
  - 1233 Senior officials of regional humanitarian, welfare and other organisations
  - 1234 Regional religious leaders

#### 13 MANAGERS OF BUSINESSES AND BUDGETARY INSTITUTIONS

- 131 General managers of business organisations and budgetary institutions
  - 1311 General managers of business organisations (directors, executive managers)
  - 1312 General managers of budgetary institutions

- 132-133 Department managers of business organisations and budgetary institutions
  - 1321 Department managers in agriculture and forestry
  - 1322 Department managers in manufacturing
  - 1323 Department managers in construction
  - 1324 Department managers in wholesale and retail trade
  - 1325 Department managers of restaurants and hotels
  - 1326 Department managers in transport, forwarding and storage
  - 1327 Department managers in communications and postal services
  - 1328 Department managers in water supply and communal services
  - 1331 Department managers in business services
  - 1332 Department managers in personal care and cleaning services
  - 1333 Department managers in health care and welfare services
  - 1334 Department managers in education
  - 1335 Department managers in cultural services
  - 1339 Department managers in production and services n.e.c.
- 134 Managers of functional units in business organisations and budgetary institutions
  - 1341 Marketing managers
  - 1342 Accountancy and finance managers
  - 1343 Human resources (personnel) managers
  - 1344 Advertising and other public relations managers
  - 1345 Supply and distribution managers
  - 1346 Technical managers
  - 1347 Computing services managers
  - 1348 Research and development managers
  - 1349 Functional unit managers n.e.c.
- 135 Production supervisors of business organisations and budgetary institutions
  - 1351 Supervisors in agriculture and forestry
  - 1352 Supervisors in manufacturing
  - 1353 Supervisors in construction
  - 1354 Supervisors in wholesale and retail trade, restaurants and hotels
  - 1355 Supervisors in transport, forwarding and storage
  - 1356 Supervisors in communications and postal services
  - 1357 Supervisors in water supply and communal services
  - 1358 Supervisors in services
  - 1359 Production supervisors n.e.c.

#### 14 GENERAL MANAGERS OF SMALL ENTERPRISES AND BUDGETARY INSTITUTIONS

- 141-142 General managers of small business undertakings (directors, chairpersons, managing directors, managers)
  - 1411 General managers of small undertakings in agriculture and forestry
  - 1412 General managers of small undertakings in manufacturing
  - 1413 General managers of small undertakings in construction
  - 1414 General managers of small undertakings in wholesale and retail trade
  - 1415 General managers of small undertakings in restaurants and hotels
  - 1416 General managers of small undertakings in transport, forwarding and storage
  - 1417 General managers of small undertakings in communications
  - 1418 General managers of small undertakings in water supply and communal services
  - 1421 General managers of small undertakings in business services
  - 1422 General managers of small undertakings in personal care and cleaning services

- 1423 General managers of small undertakings in health care and welfare services
- 1424 General managers of small undertakings in educational services
- 1425 General managers of small undertakings in cultural services
- 1429 General managers of small undertakings n.e.c.

#### **2 PROFESSIONALS**

#### 21 ENGINEERING AND NATURAL SCIENCE PROFESSIONALS

- 211-212 Engineers, graduate engineers (engineering technologists)
  - 2111 Mining engineers
  - 2112 Surveyors and GIS (Geographical Information System) engineer
  - 2113 Food and beverage industry engineers
  - 2114 Wood and light industry engineers
  - 2115 Chemical engineers
  - 2116 Metallurgical engineers
  - 2117 Mechanical engineers
  - 2118 Electrical engineers
  - 2121 Light-current (electronic) and telecommunications engineers
  - 2122 Transport engineers
  - 2123 Architects
  - 2124 Civil engineers
  - 2125 Agricultural (horticultural) engineers
  - 2126 Forestry and nature reserve engineers
  - 2127 Environmental protection engineers
  - 2129 Engineers, graduate engineers n.e.c.
- 213 Computing and electronic data processing professionals
  - 2131 Computer science professionals (e.g. systems-analysts, operations-research analysts)
  - 2132 Electronic data processing organizers
  - 2133 Software developers
  - 2139 Other computing professionals with third-level qualification, n.e.c.
- 214 Natural science professionals
  - 2141 Physicists
  - 2142 Astronomers
  - 2143 Meteorologists
  - 2144 Chemists
  - 2145 Pharmacologists
  - 2146 Geologists, geophysicists
  - 2147 Mathematicians
  - 2148 Biologists, botanists, zoologists, ecologists
  - 2149 Natural science professionals n.e.c.
- 219 Engineering science professionals n.e.c.
  - 2190 Engineering science professionals n.e.c.

#### 22 HEALTH PROFESSIONALS

- 221 Physicians, pharmacists
  - 2211 General practitioners
  - 2212 Specialized medical doctors
  - 2213 Dentists
  - 2214 Specialized dentists
  - 2215 Pharmacists
  - 2216 Specialized pharmacists
- 222 Human health related professionals
  - 2221 Public hygiene supervisors
  - 2222 Optometrists
  - 2223 Dieticians
  - 2224 Physiotherapist
  - 2225 Institution based nurses
  - 2226 Ambulance attendance
  - 2229 Human health related professionals n.e.c.
- 223 Professional nurses 2230 Professional nurses
- 224 Animal health professionals 2240 Veterinarians

#### 23 WELFARE AND LABOUR MARKET SERVICE PROFESSIONALS

- 231 Welfare politician 2310 Welfare politician
- 232 Welfare workers
  - 2321 Welfare workers
  - 2322 Specialized welfare workers (e.g. in mental hygiene, gerontology, rehabilitation counselling)
- 233 Occupations in employment and career counselling
  - 2331 Employment counsellors
  - 2332 Career counsellors

#### 24 TEACHING PROFESSIONALS

- 241 Third-level education teaching professionals
  - 2410 Third-level education teaching professionals (e.g. university or college professors, associate professors, assistant professors)
- 242 Secondary education teaching professionals
  - 2421 Secondary school teachers, instructors
  - 2422 Secondary level vocational training instructors
  - 2429 Secondary education teaching professionals n.e.c.

- 243 Primary, pre-primary and other education teaching professionals
  - 2431 Primary school teachers
  - 2432 Kindergarten teachers
  - 2439 Primary education teaching professionals n.e.c.
- 244 Special education teaching professionals
  - 2441 Teachers for the handicapped
  - 2442 Teachers for the physically disabled
  - 2443 Health educators
  - 2449 Special education teaching professionals n.e.c. (e.g. psycho-pedagogical teachers)
- 249 Other teaching professionals n.e.c.
  - 2491 Education specialists, school inspectors
  - 2499 Teaching professionals n.e.c. (e.g. welfare instructors, vocational training instructors in a company, irrespective of the educational level)

#### 25 BUSINESS, LEGAL AND SOCIAL SCIENCE PROFESSIONALS

- 251-252 Business professionals
  - 2511 Economists
  - 2512 Tax advisors, consultants
  - 2513 Financial and credit organizers
  - 2514 Auditors
  - 2515 Plant economists, management organizers
  - 2516 Statisticians
  - 2517 Trade organizers
  - 2518 Auditors
  - 2521 Market researcher, advertising and PR occupations
  - 2522 Commercial sales representatives
  - 2523 Personnel organizers
  - 2529 Business professionals n.e.c.
- 253 Legal professionals
  - 2531 Lawyers, legal advisors
  - 2532 Prosecutors
  - 2533 Judges
  - 2534 Notaries
  - 2535 Attorneys
  - 2536 Patent officer
- 254 Social science professionals
  - 2541 Philosophers
    - 2542 Political scientists
    - 2543 Historians, archaeologists
    - 2544 Ethnographers
    - 2545 Sociologists, demographers
    - 2546 Philologists, literary historians
    - 2547 Psychologists
    - 2549 Social science professionals n.e.c.

#### 26 CULTURAL, SPORT, ARTISTIC AND RELIGIOUS PROFESSIONALS

- 261 Cultural and sport professionals
  - 2611 Librarians
  - 2612 Archivists
  - 2613 Curators (restorers, taxidermists)
  - 2614 Cultural organizers
  - 2615 Book and newspaper editors
  - 2616 Journalists
  - 2617 Broadcasting editors (radio & TV)
  - 2618 Qualified coaches, sport organizers/coordinators
  - 2619 Cultural proffessionals n.e.c.

#### 262 Creative artists

- 2621 Writers (except journalists)
- 2622 Literary translators
- 2623 Sculptors, painters and related artists
- 2624 Industrial designers
- 2625 Composers
- 2626 Film, stage and related directors
- 2627 Cameramen, artistic photographers
- 2629 Creative artists n.e.c.
- 263 Performing artists
  - 2631 Actors, stage performing artists, puppet artists
  - 2632 Musicians, singers
  - 2633 Choreographers, dancers
  - 2639 Performing artists n.e.c.
- 264 Religious professionals 2640 Priests, religious professionals

#### 29 PROFESSIONALS N.E.C.

291 Professionals n.e.c. 2910 Professionals n.e.c.

#### **3 TECHNICIANS AND ASSOCIATE PROFESSIONALS**

#### 31 TECHNICIANS AND RELATED ASSOCIATE PROFESSIONALS

#### 311-312 Technicians

- 3111 Mining technicians
- 3112 Surveying and GIS (Geographical Information System) technicians
- 3113 Food and beverage industry technicians
- 3114 Wood and light industry technicians
- 3115 Chemical engineering technicians
- 3116 Metallurgical technicians

- 3117 Mechanical engineering technicians
- 3118 Power-current (electrical) engineering technicians
- 3121 Light-current (electronics) engineering technicians
- 3122 Transportation technicians
- 3123 Construction technicians
- 3124 Agricultural (horticultural) technicians
- 3125 Forestry and natural reserve technicians
- 3126 Environmental protection technicians
- 3129 Technicians n.e.c.
- 313 Computer associate professionals
  - 3131 Computer-network operators
  - 3132 Computer programmers
  - 3133 Database managers
  - 3139 Computer associate professionals n.e.c.
- 314 Programmers, dispatchers
  - 3141 Schedule programmers
  - 3142 Dispatchers

#### 315 Occupations in plant maintenance

- 3151 Energy planning occupations
- 3152 Industrial safety occupations prevention of industrial accidents
- 3153 Manufacturing equipment distribution occupations
- 3154 Plant maintenance and safety occupations
- 3155 Time-study, norm-estimating occupations
- 3159 Occupations in plant maintenance n.e.c.
- 316 Functional directing occupations in transportation, postal and communications services
  - 3161 Captains, shipmasters (sea and river)
  - 3162 Ships' deck officers, steersmen
  - 3163 Pilots, flight engineers
  - 3164 Air traffic controllers
  - 3165 Functional directing occupations in land transport
  - 3166 Functional directing occupations in postal and communications services
- 319 Other technical associate professionals n.e.c.
  - 3191 Technical innovation associate professionals
  - 3192 Quality, technological and safety inspectors
  - 3193 Material and product testers, qualified laboratory assistants
  - 3194 Draughtspersons
  - 3199 Technical associate professionals n.e.c.

#### 32 HEALTH ASSOCIATE PROFESSIONALS

- 321 Nurses
  - 3211 General nurses
  - 3212 Specialized nurses
- 322 Personal care workers
  - 3221 Personal care workers
  - 3222 Specialized personal care workers

- 323 Medical assistants
  - 3231 General medical assistants
  - 3232 Specialized medical assistants
  - 3233 Dental assistants
  - 3234 Pharmaceutical assistants
  - 3235 Specialized medicine supply assistants
  - 3239 Medical assistants n.e.c.
- 324 Occupations related to human health protection
  - 3241 Public health, epidemics inspectors
  - 3242 Midwives
  - 3243 \*
  - 3244 Dieticians
  - 3245 \*
  - 3246 \*
  - 3247 \*
  - 3248 Dental mechanic
- 325 Occupations related to animal health protection 3250 Veterinary assistants

#### 33 WELFARE AND LABOUR MARKET SERVICES OCCUPATIONS

- 331 Welfare associate professionals
  - 3311 Welfare assistants
  - 3312 Mental hygiene assistants
  - 3313 Welfare care workers
  - 3314 Professional foster-parents
  - 3315 Welfare and child protection official in charge
  - 3319 Welfare associate professionals n.e.c.
- 332 Labour market services occupations3320 Labour market services occupations

#### 34 TEACHING ASSOCIATE PROFESSIONALS

- 341 Teaching associate professionals
  - 3411 Teachers without third-level qualification
  - 3412 Child- and youth-care associate professionals
  - 3413 Pedagogical assistants
  - 3414 Health education assistants
  - 3415 Assistant for the education of the challanged/handicapped
  - 3419 Teaching associate professionals n.e.c.

#### 35 LEGAL, LIFE AND PROPERTY PROTECTION SERVICES ASSOCIATE PROFESSIONALS

351 Legal clerks

- 3511 Law clerks, court reporters
- 3512 Candidate lawyers
- 3513 Bailiffs
- 3519 Legal clerks n.e.c.
- 352 Life and property protection associate professionals
  - 3521 Fire prevention clerks
  - 3522 Customs and government excise officers
  - 3523 Factory protection officials
  - 3524 Civil defense occupations
  - 3525 Detectives, private detectives
  - 3529 Life and property protection associate professionals n.e.c.

#### 36 BUSINESS AND FINANCIAL INTERMEDIATION CLERKS

- 360-361 Business clerks
  - 3601 General secretaries
  - 3602 Administrative clerks
  - 3603 Personnel clerks
  - 3604 Wage and social security accounting clerks
  - 3605 Finance clerks
  - 3606 Accounting clerks
  - 3607 Statistical clerks
  - 3608 Planning clerks
  - 3611 Investment clerks
  - 3612 Post office and communications clerks
  - 3613 Real estate maintenance (caretaking) clerks
  - 3619 Business clerks n.e.c.
- 362 Trade and sales clerks
  - 3621 Trade clerks
  - 3622 Exhibition and advertising clerks
  - 3623 Materials control clerks, buyers
  - 3624 Stock and management clerks
  - 3625 \*
  - 3626 Agents (services, sales)
  - 3627 Valuers, auctioneers
  - 3629 Trade and sales clerks n.e.c.
- 363 Financial intermediation and insurance clerks
  - 3631 Bank financing clerks
  - 3632 Payment and deposit clerks
  - 3633 Cash and securities clerks
  - 3634 Insurance clerks
  - 3635 Brokers and dealers
  - 3639 Financial intermediation clerks n.e.c.
- 364 Tourist agency, catering trade and related clerks
  - 3641 Travel consultants and organisers, travel agency clerks
  - 3642 Guides
  - 3643 Hotel porters, receptionists
  - 3644 Hostesses

3649 Tourist agency clerks n.e.c.

#### 37 CULTURAL, SPORT, ARTISTIC AND RELIGIOUS ASSOCIATE PROFESSIONALS

- 371 Cultural and sport associate professionals
  - 3711 Library assistants
  - 3712 Archivist assistants
  - 3713 Cultural organizer assistants
  - 3714 Broadcasting (radio, TV) assistant editors
  - 3715 Book and newspaper assistant editors
  - 3716 Professional sportsman and sportswoman, sports assistants
  - 3717 Translators, interpreters
  - 3719 Cultural associate professionals n.e.c.
- 372 Artistic associate professionals
  - 3721 Supporting actors
  - 3722 Film, stage and related assistant directors
  - 3723 Folk musicians
  - 3724 Restaurant and night-club musicians
  - 3725 Circus artists
  - 3729 Artistic associate professionals n.e.c.
- 373 Religious associate professionals n.e.c.3730 Religious associate professionals n.e.c.

#### 39 CLERKS N.E.C.

391 Clerks n.e.c. 3910 Clerks n.e.c

#### **4 OFFICE AND MANAGEMENT (CUSTOMER SERVICES) CLERKS**

#### 41 OFFICE CLERKS

- 411 Analytic accounting clerks
  - 4111 Analytic bookkeeping clerks
  - 4112 Payroll clerks
  - 4119 Analytic accounting clerks n.e.c.

#### 412 Office filing clerks

- 4121 Stock clerks
- 4122 Financial, personnel clerks
- 4123 Library and archive stock clerks, other filing clerks
- 4129 Office filing clerks n.e.c.
- 419 Other office clerks

- 4191 Secretaries
- 4192 Stenographers, typists
- 4193 Office administrators, clerical writers
- 4194 Office photocopying machine operators
- 4199 Office clerks n.e.c.

#### 42 MANAGEMENT (CONSUMER SERVICES) CLERKS

- 421 Tellers, cashiers
  - 4211 Postal and bank tellers
  - 4212 Shop cashiers
  - 4213 Ticket clerks
  - 4219 Tellers, cashiers n.e.c.
- 422 Electronic data processing administrative occupations 4220 Electronic data processing administrative occupations
- 429 Other management (consumer services) clerks
  - 4291 Client information clerks
  - 4292 Telephone, telex and telefax operators
  - 4299 Other management (customer services) clerks n.e.c.

#### **5 SERVICES WORKERS**

#### 51 WHOLESALE AND RETAIL TRADE, HOTELS AND RESTAURANTS WORKERS

- 511 Wholesale and retail trade workers
  - 5111 Shopkeepers
  - 5112 Shop assistants
  - 5113 Market and stall salespersons, street vendors
  - 5114 Occupations in making up consignment of goods
  - 5115 Buyers/receivers, merchandises
  - 5116 Display and decoration designers, demonstrators (e.g. fashion models)
  - 5119 Wholesale and retail trade workers n.e.c.
- 512 Hotels and restaurants workers
  - 5121 Restaurant managers, restaurateurs
  - 5122 Confectioners
  - 5123 Waiters, restaurant salespersons
  - 5124 Cooks
  - 5125 Chambermaids
  - 5129 Hotels and restaurants workers n.e.c.

#### 52 TRANSPORT, POSTAL AND COMMUNICATIONS WORKERS

- 521 Transport workers
  - 5211 Conductors, sleeping-car conductors

- 5212 Ticket inspectors
- 5213 Travel stewards, air-hostesses
- 5214 Traffic dispatchers
- 5219 Transport workers n.e.c.
- 522 Occupations related to driving of vehicles
  - 5221 Train driver assistants
  - 5222 Railway brakers, shunters
  - 5223 Switchmen
  - 5224 Train receivers
  - 5229 Occupations related to driving of vehicles n.e.c.
- 523 Communications workers
  - 5231 Mail carriers
  - 5232 Travelling post office handlers
  - 5233 Postal truck driver helpers
  - 5234 Telecommunications workers
  - 5235 \*
  - 5239 Communications workers n.e.c.

#### 53 NON-MATERIAL SERVICE WORKERS

- 531 Personal services workers
  - 5311 Hairdressers, barbers
  - 5312 Cosmetologists
  - 5313 Manicurists, pedicurists
  - 5314 Masseurs
  - 5315 Housekeepers
  - 5316 Dry cleaners, dyers
  - 5319 Personal services workers n.e.c.
- 532 Health and educational services workers
  - 5320 Health and educational services workers (e.g. assistant nurses, ambulance men, hospital orderlies, nannies)
- 533 Welfare services workers
  - 5330 Welfare services workers (e.g. communal or home based personal care workers)
- 534 Cultural, sports and entertainment services workers
  - 5341 Photographers, photo and film developers
  - 5342 Light technicians and other motion picture workers
  - 5343 Scenery shifters
  - 5344 Cinema projectionists
  - 5349 Cultural, sports and entertainment services workers n.e.c.
- 535 Housing and communal services workers
  - 5351 Heating maintenance workers and chimney sweeps
  - 5352 Janitors, building concierges
  - 5353 Health exterminators
  - 5354 Funeral services workers
  - 5355 Public place inspectors
  - 5359 Housing and communal services workers n.e.c.

- 536 Protective services workers
  - 5361 Policemen
  - 5362 Fire-fighters
  - 5363 Penal enforcement warden
  - 5364 Natural reserve wardens
  - 5365 Bodyguards
  - 5366 Security guards
  - 5369 Protective services workers n.e.c.
- 537 Water treatment workers
  - 5371 Drainage and sanitation workers
  - 5372 Public bath attendants
  - 5373 Water supply workers
  - 5379 Water treatment workers n.e.c.
- 539 Other service workers
  - 5391 Debt collectors, electricity, gas and water supply meter readers
  - 5392 Rental services clerks
  - 5399 Service workers n.e.c.

#### 6 SKILLED AGRICULTURAL AND FORESTRY WORKERS

#### 61 SKILLED AGRICULTURAL WORKERS

- 611-612 Crop growing and gardening workers
  - 6111 Crop growers
  - 6112 Bio-gardeners
  - 6113 Vegetable growers
  - 6114 Fruit growers
  - 6115 Wine growers
  - 6116 Ornamental plant and flower gardeners
  - 6117 Tree nursery workers
  - 6118 Park and landscape workers
  - 6121 Medicinal herb growers
  - 6122 Reed- and poplar-farming workers
  - 6129 Crop growing and gardening workers n.e.c.
- 613 Animal husbandry workers
  - 6131 General livestock-farming workers
  - 6132 Cattle-farming workers
  - 6133 Pig-farming workers
  - 6134 Horse-farming workers
  - 6135 Sheep-farming workers
  - 6136 Poultry farming workers
  - 6137 Small animal breeders
  - 6139 Animal husbandry workers n.e.c.
- 614 General farming workers
  - 6140 General farming workers

#### 62 SKILLED FORESTRY AND GAME FARMING WORKERS

- 621 Forestry workers and loggers
  - 6211 Foresters, aid foresters
  - 6212 Forest tree nursery workers
  - 6213 Logging, lumbering (manual and machine operating) workers
  - 6219 Forestry workers and loggers n.e.c.
- 622 Game farming workers
  - 6221 Hunters, game raisers
  - 6229 Game farming workers n.e.c.

#### **63 SKILLED FISHERY WORKERS**

- 631 Fishery workers
  - 6311 Fishermen, fish farmers
  - 6319 Fishery workers n.e.c.

#### 64 PLANT PROTECTION, PLANT HEALTH PROTECTION AND SOIL CONSERVATION WORKERS

- 641 Plant protection, plant health protection and soil conservation workers
  - 6411 Plant protection, plant health protection workers
  - 6412 Soil conservation and amelioration workers

#### 7 CRAFT AND RELATED TRADES WORKERS

#### 71 EXTRACTION WORKERS

- 711 Solid minerals extraction workers
  - 7111 Deep-drilling workers
  - 7112 Blasters
  - 7113 Miners, aid miners
  - 7114 Trammers
  - 7115 Quarry workers, stone cutters
  - 7119 Solid minerals extraction workers n.e.c.
- 712 Crude oil and natural gas extraction workers
  - 7121 Crude oil extraction workers
  - 7129 Crude oil and natural gas extraction workers n.e.c., research drilling workers

#### 72 FOOD PROCESSING AND RELATED TRADES WORKERS

- 721 Food processing workers
  - 7211 Meat, fish and poultry processing workers
  - 7212 Food preservers, fruit and vegetable processing workers

- 7213 Vegetable oil manufacturers
- 7214 Milk processing workers
- 7215 Milling industry workers
- 7216 Bakers, pastry industry workers
- 7217 Sugar industry workers
- 7218 Sweets industry products manufacturers
- 7219 Food processing workers n.e.c.
- 722 Beverage manufacturers
  - 7221 Alcohol, alcoholic drinks manufacturers
  - 7222 Wine and champagne producers
  - 7223 Brewery workers
  - 7224 Soft drinks, mineral and soda water manufacturers
- 723 Tobacco preparers and tobacco products manufacturers7230 Tobacco preparers and tobacco products manufacturers

#### 73 LIGHT INDUSTRY WORKERS

- 731 Textile industry workers
  - 7311 Fibre preparers
  - 7312 Spinners
  - 7313 Weavers
  - 7314 Knitters
  - 7315 Dyers, textile printing, finishing workers
  - 7319 Textile industry workers n.e.c.
- 732 Dressmakers, pelt dressers, furriers
  - 7321 Tailors, dressmakers, needlewomen, model makers
  - 7322 Tailor's cutters (in manufacture of garments)
  - 7323 Hatters, milliners, cap makers (except knitters)
  - 7324 Pelt dressers, fur dyers
  - 7325 Furriers
  - 7329 Dress making and fur processing workers n.e.c.
- 733 Tanners, leather goods makers and shoemakers
  - 7331 Tanners, leather dressers
  - 7332 Saddlers, leather belt makers
  - 7333 Fancy leather goods and luggage makers
  - 7334 Leather glove makers
  - 7335 Shoemakers and repairers
  - 7336 Leather dressmakers and repairers
  - 7339 Leather industry workers n.e.c.
- 734 Wood industry workers
  - 7341 Cabinet-makers
  - 7342 Building joiners
  - 7343 Upholsterers
  - 7344 Wood pattern makers
  - 7345 Coopers, wheelwrights
  - 7346 Wood turners
  - 7349 Wood industry workers n.e.c.

- 735 Printing and recorded media (audio and video) reproduction workers
  - 7351 Typesetters, typographical editors
  - 7352 Printers
  - 7353 Relief printing, photogravure, planography preparatory workers
  - 7354 Bookbinders
  - 7355 Recorded media (audio, video, computer data carrier) reproduction workers
  - 7356 Photocopying workers
  - 7359 Printing workers n.e.c.

#### 74 STEEL AND METAL TRADES WORKERS

- 741 Metallurgy workers
  - 7411 Metallurgical raw material preparers
  - 7412 Iron, steel and non-ferrous metal smelters
  - 7413 \*
  - 7414 Sheet metal workers
  - 7415 Metal casting workers
  - 7419 Metallurgy workers n.e.c.
- 742 Metal processing, shaping and forming and surface treatment workers
  - 7421 Locksmiths
  - 7422 Tool and die makers
  - 7423 Forging-press workers
  - 7424 Industrial precious metal workers
  - 7425 Welders, flame cutters
  - 7426 Blacksmiths
  - 7429 Metal processing, shaping and forming and surface treatment workers n.e.c.
- 743 Repairmen, mechanics
  - 7431 Motor-vehicle mechanics, engine repairmen
  - 7432 Aircraft mechanics, repairmen
  - 7433 Agricultural equipment mechanics, repairmen
  - 7439 Mechanics, repairmen n.e.c.

#### 744 Precision instrument mechanics

- 7441 Mechanical instrument mechanics
- 7442 Precision instrument mechanics
- 7443 Electronic instrument mechanics
- 7444 Radio-, TV- and computer-mechanics
- 7445 Electrical equipment mechanics
- 7446 Opticians
- 7449 Electrical equipment and precision instrument mechanics n.e.c.
- 749 Steel and metal trades workers n.e.c.7490 Steel and metal trades workers n.e.c.

# 75 HANDICRAFT, MISCELLANEOUS INDUSTRY AND WAREHOUSE WORKERS, LABORATORY ASSISTANTS

#### 751 Handicraft industry workers

- 7511 Animal hair and feather processing workers
- 7512 Reed and poplar processing workers
- 7513 Broom and brush makers
- 7514 Toy, fancy-goods, and sporting-goods makers and repairers
- 7515 Embroiders, lace-makers
- 7519 Handicraft industry workers n.e.c.

#### 752 Miscellaneous industry workers

- 7521 Sign painters
- 7522 Jewellers, engravers, precious stone grinders
- 7523 Potters, ceramists
- 7524 Glass-makers
- 7525 Tire and rubber products repairers
- 7526 Musical instrument makers, repairers
- 7527 Concrete building block makers
- 7529 Miscellaneous industry workers n.e.c.
- 753 Warehouse workers 7530 Stock clerks, warehousemen
- 754 Laboratory assistants (without qualification)7540 Laboratory assistants (without qualification)

#### **76 CONSTRUCTION WORKERS**

- 761 Building frame workers
  - 7611 Bricklayers, masons
  - 7612 Carpenters, scaffolders
  - 7613 Reinforced concrete frame assemblers
  - 7614 Building block assemblers
  - 7619 Building frame workers n.e.c.

#### 762 Building-assembling workers

- 7621 Plumbers and pipe-network fitters
- 7622 Air-conditioning and ventilation mechanics
- 7623 Elevator repairers
- 7624 Building electricians
- 7629 Building-assembling workers n.e.c.
- 763 Building finishers and related trades workers
  - 7631 Insulation workers
  - 7632 Roofers
  - 7633 Building tinsmiths
  - 7634 Tilers, coverers
  - 7635 Painters
  - 7636 Building stone cutters, stonemasons, artificial stone setters
  - 7637 Stove makers
  - 7638 Glaziers
  - 7639 Building finishers and related trades workers n.e.c.
- 764 Civil engineering workers

- 7641 Road construction and paving workers, road maintenance workers
- 7642 Railroad construction and maintenance workers
- 7643 Bridge structure construction workers
- 7644 Pipeline setters
- 7645 Underwater construction workers
- 7649 Civil engineering workers n.e.c

## 8 PLANT AND MACHINE OPERATORS AND ASSEMBLERS, VEHICLE DRIVERS

#### 81 MANUFACTURING MACHINE OPERATORS

- 811 Food, beverage and tobacco products machine operators
  - 8111 Food products machine operators
  - 8112 Beverage products machine operators
  - 8113 Tobacco products machine operators
- 812 Light industry machine operators and production-line workers
  - 8121 Textile industry machine operators and production-line workers
  - 8122 Dressmaking machine operators and production-line workers
  - 8123 Leather tanning and processing machine operators and production-line workers
  - 8124 Shoemaking machine operators and production-line workers
  - 8125 Wood processing machine operators and production-line workers
  - 8126 Paper and pulp industry machine operators
  - 8127 Printing machine operators
  - 8129 Light industry machine operators and production-line workers n.e.c.
- 813 Basic chemicals and chemical products manufacturers and machine operators
  - 8131 Petroleum refinery and processing machine operators
  - 8132 Gas-making and processing machine operators
  - 8133 Basic chemicals and chemical products machine operators
  - 8134 Pharmaceutical products machine operators
  - 8135 Fertilizer and plant-protection products machine operators
  - 8136 Plastic processing machine operators
  - 8137 Rubber goods manufacturers, vulcanizers
- 814 Building materials industry machine operators
  - 8141 Ceramic products machine operators
  - 8142 Fine ceramics products machine operators
  - 8143 Glass and glass-products machine operators
  - 8144 Concrete building block machine operators
  - 8145 Lime and cement products machine operators
  - 8149 Building materials industry machine operators n.e.c.
- 819 Other processing machine operators, production-line workers
  - 8191 Metallurgical machine operators
  - 8192 Metal working machine operators
  - 8193 Production-line assemblers
  - 8199 Processing machine operators, production-line workers n.e.c.

#### 82 OTHER STATIONARY-PLANT OPERATORS

- 821 Mining-plant operators
  - 8211 Solid minerals extraction machine operators
  - 8219 Mining-plant operators n.e.c.

- 822 Power production and related plant operators
  - 8221 Power-production and transformation plant mechanics and operators
  - 8222 Coal- or oil-fired power-generating plant operators
  - 8223 Nuclear-fuelled power-generating plant operators
  - 8224 Hydroelectric power-generating station mechanics and machine operators
  - 8229 Power production and related plant operators n.e.c.
- 823 Water treatment plant operators
  - 8231 Water works machine operators
  - 8232 Sewage plant operators
  - 8233 Water pump operators
  - 8239 Water treatment plant operators n.e.c.
- 824 Packaging-machine operators 8240 Packaging-machine operators
- 829 Other non-manufacturing machine operators
  - 8291 Boiler operators (licensed boilermen)
  - 8292 Decontaminating machine and equipment operators
  - 8293 Agricultural machine operators, mechanics
  - 8299 Other non-manufacturing machine operators n.e.c.

#### 83 MOBILE-PLANT OPERATORS

- 831 Agricultural and forestry mobile-plant drivers and operators
  - 8311 Agricultural engine drivers and operators
  - 8312 Forestry plant operators
  - 8313 Plant protection machine operators
  - 8319 Agricultural and forestry mobile-plant drivers, operators n.e.c.
- 832 Construction machine operators
  - 8321 Earth moving equipment operators
  - 8322 Groundwork machine operators
  - 8323 Road, bridge and railroad building machine operators
  - 8324 Hydromechanical and floating plant operators
  - 8325 Well drilling machine operators
  - 8329 Construction machine operators n.e.c.
- 833 Public and municipal sanitation machine operators and drivers
  - 8331 Scavengery machine operators and drivers
  - 8332 Cesspool-pumping, sewage-collecting truck operators
- 834 Material conveying machine operators
  - 8341 Crane operators
  - 8342 Elevator and conveying machine operators
  - 8343 Lift-trolley operators
  - 8344 Loading/unloading machine operators
  - 8349 Material conveying machine operators n.e.c.
- 835 Vehicle drivers
  - 8351 Locomotive-engine and train drivers
  - 8352 Tram drivers

- 8353 Metro drivers
- 8354 Trolley-bus drivers
- 8355 Car drivers
- 8356 Heavy-truck and lorry drivers
- 8357 Bus drivers
- 8358 Animal-drawn vehicle drivers
- 8359 Vehicle drivers n.e.c.
- 836 Ships' deck crews and related workers
  - 8361 Bargemen
  - 8362 Boatswains, chief engineers
  - 8363 Sailors, engine operators
  - 8364 Small boat steermen
  - 8369 Ships' deck crews and related workers n.e.c.
- 839 Mobile-plant operators n.e.c.8390 Mobile-plant operators n.e.c.

#### **9 ELEMENTARY OCCUPATIONS**

#### 91 ELEMENTARY SERVICES OCCUPATIONS (WITHOUT AGRICULTURE)

- 911 Cleaners and related elementary occupations
  - 9111 House, flat and office cleaners
  - 9112 Vehicle, window and related cleaners
  - 9113 Domestic helpers
  - 9114 Kitchen helpers
  - 9115 Chambermaids
  - 9116 Hand launderers and pressers
  - 9117 Garbage collectors, street sweepers
  - 9118 Switches cleaners
  - 9119 Cleaners and related elementary occupations n.e.c.
- 912 Watchpersons and related elementary occupations
  - 9121 Doorkeepers, porters
  - 9122 Night-watchmen, establishment-watchmen
  - 9123 Cloakroom, swimming-pool and luggage-room attendants, ticket collectors
  - 9124 Office boys, office mail carriers
  - 9125 Luggage porters, deliverers
  - 9129 Watchpersons and related elementary occupations n.e.c.
- 913 Materials handlers
  - 9131 Manual materials handlers, hand packers
  - 9132 Transport, loading/unloading labourers
  - 9133 Driver's mates
- 914 Navvies, construction labourers
  - 9140 Navvies, construction labourers

- 915 Elementary services occupations 9150 Services elementary occupations
- 919 Labourers and helpers n.e.c.9190 Labourers and helpers n.e.c. (e.g. odd-job persons)

#### 92 AGRICULTURAL AND FORESTRY LABOURERS

- 921 Agricultural labourers 9210 Agricultural labourers (e.g. day-labourers, rangers)
- 922 Forestry, hunting, fishery labourers9220 Forestry, hunting, fishery labourers (e.g. fishing wardens)

#### **0 ARMED FORCES**

#### 01 OCCUPATIONS OF ARMED FORCES REQUIRING HIGHER (THIRD-LEVEL) QUALIFICATION

011 Occupations of armed forces requiring higher (third-level) qualification 0110 Occupations of armed forces requiring higher (third-level) qualification

#### 02 OCCUPATIONS OF ARMED FORCES REQUIRING SECONDARY-LEVEL QUALIFICATION

021 Occupations of armed forces requiring secondary-level qualification 0210 Occupations of armed forces requiring secondary-level qualification

#### 03 OCCUPATIONS OF ARMED FORCES NOT REQUIRING SECONDARY-LEVEL QUALIFICATION

Occupations of armed forces not requiring secondary-level qualification
Occupations of armed forces not requiring secondary-level qualification

## Notes

#### to the corresponding table between ISCO-88 and HSCO-93

In the course of elaboration of the original version of HSCO–93 the basic idea was to be in line with the system of ISCO–88 at the level of major groups, and that groups (second digit) should be comparable directly with groups of ISCO–88 by means of reduction. On the other hand, minor groups and occupations forming the third and fourth digits, respectively, serve the demands of native users first of all.

Consequently, comparison of the third digit, namely of minor groups of ISCO–88 and the system of HSCO–93 was possible only with the help of a correspondance table. This three-digit deep clue could connect the system of HSCO–93 to individual minor groups of ISCO–88 only in a way that it specified minor groups and – if necessary – occupations in HSCO–93 similar in their contents. In case of certain minor groups comparison of the two systems at the three-digit level could be realized only with the help of employing HSCO-93 in its whole depth. The clue table elaborated this way and refined by repeated revisions makes comparison of sufficient correctness possible.

The system of HSCO–93 has been revised in the meantime. The revised system came into force on 1<sup>st</sup> January, 1997. The modification did not influence principles and basic structure of the system. Nevertheless, certain parts changed, which entailed the partial correction of the "clue" table. In case of major groups 1, 6 and 0 there were no changes at all, and even in case of other major groups changes were not significant.

## CORRESPONDENCE TABLE BETWEEN ISCO-88 AND HSCO-93

(according to the major, sub-major and minor group levels of ISCO-88)

	ISCO-88			HSCO-93
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
1				
	11			
		111		111, 112, 121, 122
		114		113, 123
	12			
		121		131
		122		132–133, 135
		123		134
	13	131		141–142
			l	

	ISCO-88			HSCO-93
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
2	21	211		2141, 2142, 2143, 2144, 2146
		212 213		2147, 2516 213
	22	214		2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2121, 2122, 2123, 2124, 2129, 2190
	22	221		2125, 2126, 2127, 2145, 2148, 2149
		222		221, 2221, 2229, 224
	23	223	3242,	223
	23	231		241
		232		242
		233		243
		234		244
	24	235		249
	24	241		2512,2513, 2514, 2515, 2517, 2518, 2521, 2522, 2523, 2529
		242		253
		243		2611, 2612, 2613, 2614
		244	3717,	231, 2321, 233, 2511, 254, 2322
		245		2615, 2616, 2617, 2618, 2619, 262, 263
		246		264
		247		
		249		291

	ISCO–88			HSCO–93	
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation	
;	3		<b>5 - 1</b>		
	31				
		311	314, 315,	3111, 3112, 3113, 3114, 3115, 3116, 3117, 3118, 3121, 3122, 3123, 3129, 3165, 3166, 3194, 3199	
		312		313	
		313	5341, 5342,		
		314		3161, 3162, 3163, 3164	
		315		3521, <i>3523, 3529</i> , 3191, 3192,	
	32			3193	
	-	321		3124, 3125, 3126	
		322	2222,2223	3232, 322, 3231, 3233, 3234,	
				3235, 3239, 3241, 3243, 3244,	
				3245, 3246, 3247, 3248, 3250	
		323		321	
	33				
		331		3411,	
		332		3412	
		333		3414	
		334		3413, 3419	
	34				
		341		3605, 3611, 3613, 3619, 362,	
				3631, 3633, 3634, 3641	
		342		3632, 3635, 3639, 332	
		343		3601, 3602, 3603, 3604, 3606,	
				3607, 3608, 351, 391	
		344		3522	
		345		3522 3524, 3525	
		346		331	
		040			
		347	5343.	372, 3711, 3712, 3713, 3714,	
				3715, 3716, 3719	
		348		373	

	ISCO-88			HSCO-93
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
4	41			
		411		4191, 4192, 422
		412		411, 4121, 4122, 4129
		413	3612, 753,	
		414	5231, 5232, 5233	4123, 4193,
		419		4194, 4199
	42			
		421	5391,	421, 4291, 4299
		422	3643, 3649	4292
5				
	51	511	3642, 3644	521,
		512		5121, 5123, 5124, 5125, 5129
		513		532, 533
		514		5352, 5353, 5354, 5355, 5359, 5311, 5312, 5313, 5314, 5315, 5316, 5319, 5344, 5399
		516		536, 537
	52			
		521		5116
		522		5111, 5112, 5113, 5114, 5115, 5119

	ISCO-88			HSCO-93
Major groups	Sub-major	Minor groups	Other major	Three- or four-digit code of the
	groups		group	occupation
6				
	61			
		611		611–612, 641
		612		613
		012		015
		613		614
		614		621
		-		
		615		632 621
		615		622, 631

ISCO–88			HSCO–93
Major groups Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
7			
71	711		711, 712, 7636
			, , , , , , , , , , , , , , , , , , , ,
	712		7342, 761, 7641, 7642, 7643, 7644, 7649, 7527
	713		7621, 7624, 7629, 7631, 7632, 7633, 7634 7637, 7638, 7639
	714	5351,	7635
72	721		7645, 741, 7425
	721		7623
	722		7421, 7422, 7423, 7426, 7429
	723		743
	724	5234, 5235, 5239,	7622, 7443, 7444, 7445, 7449
	729		749
73			
	731		7424, 7441, 7442, 7526, 7522
	732		7521, 7523, 7524, 7446
	733		7329, 7332, 7339, 7344, 7345,
			7346, 7349, 7511, 7514
			7519, 7525, 7529
	734		7315, 7351, 7352, 7353, 7354,
74			7355, 7356, 7359
,-	741	5122,	721, 722, 723
	742		7341, 7512, 7513
	743		7311, 7312, 7313, 7314, 7319,
			7321, 7322, 7323
			7334, 7336, 7343, 7515
	744		7324, 7325, 7331, 7333, 7335

	ISCO-88			HSCO–93
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
8				· ·
	81	811		821
		812		8191, 8192
		813 814		8141, 8142, 8143 
		815	754,	8131, 8132,
		816 817		822, 8291, <i>8292</i> 
	82	821		8144, 8145, 8149
		822		8133, 8134, 8135
		823		8136, 8137
		824		8125
		825		8126, 8127
		826		8121, 8122, 8123, 8124
		827		811
		828		8193, 8199
	00	829		8129, 823, 824, 8293, 8299
	83	831	522,	8351
		832		8352, 8353, 8354, 8355, 8356, 8357, 8359
		833		831,832, 833, 834, 839
		834		836

ISCO–88				HSCO–93
Major groups	Sub-major groups	Minor groups	Other major group	Three- or four-digit code of the occupation
9				
	91	911		
		912		
		913		9111, 9113, 9114, 9115, 9116
		914		9112, 9119, 9122, 9129
		915		9121, 9123, 9124, 9125, 915
	92			9117
		921		921, 922
	93			
		931		914
		932		9131, <i>919</i>
		933	8358,	9118, 9132, 9133