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**Establishment of Community-Wide
Occupational Statistics**

***ISCO 88 (COM)
A Guide for Users***

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Introduction

This document describes the European Union variant of the new International Standard Classification of Occupations (ISCO-88), referred to as ISCO 88 (COM). The new International Classification of Occupations replaces the previous version, known as ISCO-68. The following sections discuss the conceptual framework for the International Classification of Occupations¹ and detail the main differences between ISCO-88 and ISCO 88 (COM) that have arisen as a consequence of the harmonisation of national occupational classifications across the European Union.

ISCO 88 (COM) represents the culmination of a series of lengthy and detailed investigations in the twelve countries of the EU, combining the knowledge of experts in occupational classification in each country with practical considerations for coding occupational information collected by census and survey techniques and addressing the requirement for an EU-wide standard. It should not be regarded as a different classification from ISCO-88, but rather it is the result of a coordinated effort by National Statistical Institutes to implement ISCO-88 for census and survey coding purposes.

The Conceptual Framework of ISCO-88

ISCO-88 organises occupations in an hierarchical framework. At the lowest level is the unit of classification - a job - which is defined as a set of tasks or duties designed to be executed by one person. Jobs are grouped into occupations according to the degree of similarity in their constituent tasks and duties. Thus, for example, the following jobs are grouped together in ISCO-88 to form the occupation unit group *3472 Radio, television and other announcers*: News announcer; radio announcer; television announcer; compare; disc jockey; media interviewer; newscaster. Although each job may be distinct in term of the output required from the person who executes the constituent tasks, the jobs are sufficiently similar in terms of the abilities required as inputs into these tasks for them to be regarded as a single occupational unit for statistical purposes.

Skill levels and skill specialisations

For the purpose of aggregating occupations into broadly similar categories at different levels in the hierarchy, ISCO-88 introduces the concept of skill, defined as the *skill level* - the degree of complexity of constituent tasks and *skill specialisation* - essentially the field of knowledge required for competent performance of the constituent tasks.

Only a few broad 'skill level' categories can usefully be identified for cross-national comparisons. ISCO-88 uses four skill levels to define the broad structure of the classification at its most aggregate level, the *major groups*. These four skill levels are partly operationalised in terms of the International Standard Classification of Education (ISCED) and partly in terms of the job-related formal training which may be used to develop the skill level of persons who will carry out such jobs. The four skill levels are reproduced from the *International Classification of Occupation; 1988* (ILO, 1990) in the box opposite.

¹ For a more detailed discussion, see ILO, 1990, pp2-3.

ISCO-88 Skill Levels and ISCED Categories

ISCO Skill Level	ISCED Categories
First skill level	ISCED category 1, comprising primary education which generally begins at ages 5-7 years and lasts about 5 years.
Second skill level	ISCED categories 2 and 3, comprising the first and second stages of secondary education. The first stage begins at the age of 11 or 12 and lasts about three years, while the second stage begins at the age of 14 or 15 and also lasts about three years. A period of on-the-job training or experience may be necessary, sometimes formalised in apprenticeships. This period may supplement the formal training or may replace it partly or, in some cases, wholly.
Third skill level	ISCED category 5 (category 4 has been deliberately left without content) comprising education which begins at the age of 17 or 18, last about four year, and leads to an award not equivalent to a first university degree.
Fourth skill level	ISCED categories 6 and 7, comprising education which begins at the age of 17 or 18, lasts about three, four or more year, and lead to a university or postgraduate university degree or the equivalent.

Source: ILO (1990) pp2-3

Skill levels, formal education, training and experience

The use of ISCED to define skill levels does not mean that skills can only be obtained by formal education or training. Most skills may, and often are, acquired through experience and through informal training, although formal training plays a larger role in some countries than in others and a larger role at the higher skill levels than at the lower. For the purpose of the ISCO classification system, the decisive factor for determining how an occupation should be classified is the nature of the skills that are required to carry out the tasks and duties of the corresponding jobs - not the way these skills are acquired.

'Skill specialisation' is related to subject matter areas, production processes, equipment used, materials worked with, products and services produced, etc. Therefore words describing subject matter, production processes, etc. have to be used as labels for the core sets of skills with which occupations are concerned.

Classification Structure

ISCO-88 defines four levels of aggregation, consisting of:

- 10 major groups
- 28 sub-major groups (subdivisions of major groups)
- 116 minor groups (subdivisions of sub-major groups)
- 390 unit groups (subdivisions of minor groups)

Many users of the 1968 ISCO found that its top aggregation level of nine groups meant that the differences within each group were too large for the groups to be useful for description and analysis. However, the next level of aggregation, with 83 groups, represented too much detail for many types of analysis, as well as for international reporting of occupational distributions, especially if the data are obtained through sample surveys. ISCO-88 therefore includes the 'sub-major groups' as a new level in the aggregation system - between the major and minor groups.

Unit groups in most cases will consist of a number of detailed *occupations*. For example, as a separate occupation *nuclear physicist* belongs to ISCO-88 unit group 2111 *Physicists and astronomers*, which belongs to minor group 211 *Physicists, chemists and related professionals*, which is part of sub-major group 21 *Physical, mathematical and engineering science professionals* of the major group 2 *Professionals*. The major group structure of ISCO-88 is shown below in Table 1.

Table 1

ISCO-88 major groups and skill level

	Major group	ISCO skill level
1	Legislators, senior officials and managers	-
2	Professionals	4th
3	Technicians and associate professionals	3rd
4	Clerks	2nd
5	Service workers and shop and market sales workers	2nd
6	Skill agricultural and fishery workers	2nd
7	Craft and related workers	2nd
8	Plant and machine operators and assemblers	2nd
9	Elementary occupations	1st
0	Armed forces	-

Eight of the ten ISCO-88 major groups are delineated with reference to four broad skill levels. These four ISCO skill levels have been defined in terms of the educational levels and categories of the International Standard Classification of Education (ISCED). Five of the eight major groups, i.e. 4, 5, 6, 7 and 8 are considered to be at the same skill level and are distinguished by reference to broad skill specialisation groups. Skill level references are not made in the definitions of two major groups (*Legislators, senior officials and managers* and *Armed forces*), because other aspects of the type of work were considered more important as similarity criteria, i.e. policy making and management functions, and military duties, respectively. As a result there are significant skill level differences within each of these two major groups. However, the sub-major and minor groups of major group 1 have been designed to include occupations at similar skill levels.

Administrative and managerial occupations

All occupations which consist of jobs in which the workers have mainly legislative, administrative or managerial tasks and duties should be classified to major group 1 '*Legislators, senior officials and managers*'. In ISCO-68 they were partly classified to major group 2 (Administrative and Managerial Workers) and partly to other major groups.

'Working proprietors' are to be classified according to whether their tasks and duties are mainly similar to those of managers and supervisors or to those of other workers in the same area of work. This is because the status of 'working proprietor' is seen as related not to type of work performed but to 'status in employment' - corresponding to the 'self-employed' and 'employer' categories of the International Classification of Status in Employment (ISCE). One self-employed plumber may have

mainly managerial tasks but another may do mainly the same work as a salaried plumber, depending for example on the size of the firm. In the former case the job should be classified with managers and in the latter case with plumbers.

'Craft' occupations and 'operative' occupations

To cope with the issue of different skill requirements for jobs with similar purposes due to difference in technologies used, a distinction is made at the major group level between occupations that are essentially craft-oriented, and occupations that are essentially oriented towards the operation of tools, machinery and industrial plants.

Occupations which are craft oriented consist of skilled jobs directly involved in the *production* of goods where the tasks and duties require an understanding of and experience with the natural resources and raw materials used and how to achieve the desired techniques and practices, but they may also use more technologically advanced tools and machines, provided that this does not change the basic skills and understanding required. Modern machines and tools may be used to reduce the amount of physical effort and/or time required for specific tasks, or to increase the quality of the products. The tasks and duties of jobs in *occupations which are oriented towards the operation of tools, machinery and industrial plants* require an understanding of what to do with the machines to make them work properly, of how to identify malfunctioning and of what to do when something goes wrong. The skills required are oriented towards the machines and what they are doing rather than to the transformation process or its results. Occupations where the tasks and duties consist of assembling products from component parts according to strict rules and procedures are considered to belong to the same major group as the machine-oriented occupations. Jobs which only require low or elementary skills and little or no judgement are classified to occupations in major group 9.

Armed Forces

As in ISCO-68, jobs in the armed forces should be classified in a separate major group 0 '*Armed forces*', even if the jobs involve tasks and duties similar to those of civilian counterparts.

Apprentices and trainees

Both 'apprentices' and 'trainees' should be classified according to their actual tasks and duties as, if needed, these two groups may be separately identified through the 'status in employment' classification. ISCO-68 recommended that apprentices should be classified to the occupation for which they are being trained, but that trainees be classified according to their actual tasks and duties.

Classifying 'multiple' jobs

The problem of classifying jobs which have a broad range of tasks and duties should be handled by the application of some *priority rules*. i.e. some tasks and duties are given priority in determining the occupational category to which a job should be classified, such as:

- (a) in cases where the tasks and duties are associated with different stages of the process of producing and distributing goods and services, the tasks and duties related to the *production* stages should take priority over associated tasks and duties, such as those related to the sale and marketing of the same goods, their transportation or the management of the production process (unless either of these tasks and duties dominates). For example, the worker who bakes bread and pastries and then sells them should be classified as 'baker', not as 'sales assistant'; the worker who operates a particular type of machinery and also instructs new workers in how to operate the machine should be classified with the machine operators; the taxi driver who drives his/her own car and also keeps the accounts should be classified with motor-vehicle drivers; and
- (b) in cases where the tasks and duties performed require skills usually obtained through different levels of training and experience, jobs should be classified in accordance with those tasks and duties which require the highest level of skill. For example: there are a number of jobs whose tasks and duties most of the time require a set of relatively easily obtained skills, and where the workers are also expected to have skills which require more training or experience which

enables them to cope with unexpected and infrequent situations, for instance, to avoid accidents or injuries.

It is recognised that a certain amount of judgement and adjustment to national circumstances will be necessary in the choice and application of these priority rules.

Implementing ISCO-88 as a European Union Standard

Some of the countries within the European Union have recently developed a new or revised national occupational classification based on ISCO-88 (e.g. Denmark, Italy) or on the same basic structure (e.g. United Kingdom). Other countries, like France and Germany, have well established national occupational classifications which do not link directly with ISCO-88. Greece and Portugal have adopted ISCO 88 (COM) as their national classification, with minor local variations.

ISCO 88 (COM) represents the most detailed level of ISCO-88 which all community countries consider feasible to relate to their national classifications. Additionally, a number of practical problems arose in the development of a common statistical interpretation of ISCO-88. These problems are discussed below.

Managerial occupations

ISCO-88 makes a clear distinction between *Corporate managers* and *General managers*, in terms of the total number of managers required to manage an enterprise, organisation or an internal department. Where this total exceeds two, the manager is classified as a *Corporate manager*, otherwise as a *General manager*.

This raised operational problems, regarding the possibility of making this type of distinction on the basis of information normally available. It was decided to use the total number of employees within the administrative unit as proxy information, because this would be more commonly available (or more easy to collect) than information about the number of managers. Accordingly, managers working in organisations with fewer than 10 employees are classified as *General managers*. To highlight this difference between ISCO-88 and ISCO 88 (COM) the title of the occupational category has been changed to *Managers of small enterprises*.

Jobs in public administration

The most difficult area for the interpretation of ISCO-88 within a common cross-national application relates to the treatment of jobs in public administration. Difficulties stem from the use of bureaucratic titles/grading systems to denote rank, pay, seniority, qualification, and the need for a consistent relationship between such titles/grades and the structure of ISCO-88. These difficulties are compounded through factors such as the often non-homogeneous nature of public service occupational categories in national occupational classifications.

Additionally, National Statistical Institutes stated a clear preference for the inclusion within ISCO 88 (COM) of an administrative category for public service occupations within major group 2 (*Professionals*). Accordingly, the following schema, illustrated as Table 2, is proposed for the coding of jobs in public administration.

Table 2

**The Classification of Jobs in Public Administration
within ISCO 88 (COM)**

	Major Group		Relevant unit group
1.	Legislators, senior officials and managers	1110	Legislators and senior government officials
2.	Professionals	2470	Public service administrative professionals
3.	Technicians and associate professionals	3431	Administrative secretaries and related associate professionals
4.	Clerks	4190	Other office clerks

Notes: In classifying jobs in public administration, senior government officials who manage a government-controlled industrial, public utility, transport or other such business enterprise or organisation, should be classified within sub-major groups 12 (*Corporate Managers*) or 13 (*Managers, small enterprises*) as appropriate.

Category 2470 is a new minor group, designed explicitly for the classification of occupations in which the primary tasks consist of general administrative functions within the public service and for which national education and training requirements stipulate a university education or equivalent. Occupations classified to this category exclude the most senior general administrative grades within the public service (classified to minor group 111 *Legislators and senior government officials*).

Category 3431 consist of occupations which support professional and/or managerial staff in an administrative capacity. The range of tasks/responsibilities will be wider than those ascribed to jobs classified in unit group 4115 (*secretaries*). Included in this unit group should be associate professional occupations within the public service which are not specialist public service occupations (eg, customs, tax, social benefit, licensing officials - these would be allocated to minor group 344), but which consist primarily of administrative functions and for which the skills level is defined at the ISCO third level.

Agricultural occupations

The classification of agricultural occupations within ISCO-88 involves consideration of both the skill level of such occupations and the skill specialisation, usually defined in terms of the nature of the agricultural production. Skill levels determine the major group into which such occupations are classified. Within major group 1, two unit groups cover the corporate and general managers in the agricultural sector. Major group 2 has two unit groups for professional occupations which relate to the agricultural sector (*agronomists* and *veterinarians*). Major group 3 has two agriculturally-related unit groups for technical occupations. Major group 6 is designed exclusively for skilled market-oriented farmers and agricultural workers and subsistence agricultural occupations. Major group 8 contains a unit group for occupations which specify the operation of motorised equipment in farming and forestry. Major group 9 has a minor group specifically for agricultural, fishery and related labourers.

The problem stems not so much from the identification of skill level (though this is undoubtedly a problem with the low quality of occupational descriptions which typify this area of job classification) but with the identification of skill specialisations in Major group 6. For this reason, a simplification of the classification was agreed for this major group.

Most occupations in the agricultural sector will be classified to Major group 6, unless there is clear identification of managerial responsibilities as one of the main tasks within an agricultural occupation, in which case classification will be to Major group 1. Specific labouring occupations in this sector will be classified to Major group 9.

References

International Labour Office (1990). *ISCO-88: International Standard Classification of Occupations*. Geneva: ILO.

ISCO 88 (COM): Major, sub-major, minor and unit groups

Nomenclature for coding

Following the conventions of ISCO-88, a single numerical digit represents a major group, two digits represents a sub-major group, three digits represents a minor group and four digits represents a unit group. Where no distinction is made below the level of major, sub-major or minor group, a corresponding two, three or four-digit category can be achieved by the addition of trailing zeros.

Occupational categories which include the phrase 'not elsewhere classified' are reserved for specific occupations which are not classified to other specific categories within the classification. Categories which include the phrase 'nothing otherwise specified' are reserved for occupations which are insufficiently defined for specific classification purposes.

Where possible, the numbering system follows ISCO-88. Definitional notes are included to indicate those parts of the classification which differ in some significant way from ISCO-88.

MAJOR, SUB-MAJOR, MINOR AND UNIT GROUPS

MAJOR GROUP 1: LEGISLATORS, SENIOR OFFICIALS AND MANAGERS

11	Legislators and senior officials
111	Legislators and senior government officials
1110	Legislators and senior government officials
114	Senior officials of special-interest organisations ¹
1141	Senior officials of political party organisations
1142	Senior officials of employers', workers' and other economic-interest organisations
1143	Senior officials of humanitarian and other special-interest organisations

Definitional notes:

Senior government officials within minor group 111 (*Legislators and senior government officials*) should be restricted to public service officials who occupy the somewhat limited number of senior managerial positions within the public service at central, regional and local levels. Those managing government owned or controlled industrial enterprises, public utilities etc. should be classified to minor groups 121 (*Directors and chief executives*), 122 (*Production and operation managers*) or 123 (*Other managers*) as appropriate. Examples of occupational titles associated with minor group 111 are:

Permanent secretary
Assistant permanent secretary
Head of department
Director of ministry
Mayor
Senior administrator, intergovernmental agency
Diplomatic representative

1. When a distinction cannot be made between senior officials of special-interest organisations, in terms of the political, economic or humanitarian aims of the organisation concerned, classification should be made to a unit group 1140 (*Senior officials of special-interest organisations, nothing otherwise specified*).

12	Corporate managers ¹
121	Directors and chief executives ²
1210	Directors and chief executives
122	Production and operations managers ³
1221	Production and operations managers in agriculture, hunting, forestry and fishing
1222	Production and operations managers in manufacturing
1223	Production and operations managers in construction
1224	Production and operations managers in wholesale and retail trade
1225	Production and operations managers in restaurants and hotels
1226	Production and operations managers in transport, storage and communications
1227	Production and operations managers in business services enterprises
1228	Production and operations managers in personal care, cleaning and related services
1229	Production and operations managers not elsewhere classified
123	Other specialist managers ⁴
1231	Finance and administration managers
1232	Personnel and industrial relations managers
1233	Sales and marketing managers
1234	Advertising and public relations managers
1235	Supply and distribution managers
1236	Computing services managers
1237	Research and development managers
1239	Other specialist managers not elsewhere classified

Definitional notes:

1. It should be noted that, in cases where information is limited to 'manager - enterprise or organisation with 10 or more employees', classification should be made to a unit group 1200 (*Corporate managers, nothing otherwise specified*).
2. This group is intended to include persons who - as directors or chief executives - manage enterprises or organisations with 10 or more employees.
3. This group is intended to include persons who indicate a production and/or operational managerial specialism in enterprises or organisations with 10 or more employees. Additional information about industry branch may be used to allocate the occupation to unit groups 1221-1229. In the absence of additional information on industry branch, classification should be made to a unit group 1220 (*Production and operations managers, nothing otherwise specified*).
4. This group should be restricted to persons who indicate a non-production/non-operational managerial specialism in enterprises or organisations with 10 or more employees. Unit group 1239 (*Other specialist managers not elsewhere classified*) is reserved for managerial occupations in enterprises or organisations with 10 or more employees for which a non-production/non-operational specialism is indicated but is not covered in unit groups 1231-1237.

13	Managers of small enterprises ¹
131	Managers of small enterprises
1311	Managers of small enterprises in agriculture, hunting, forestry and fishing ²
1312	Managers of small enterprises in manufacturing
1313	Managers of small enterprises in construction
1314	Managers of small enterprises in wholesale and retail trade
1315	Managers of small enterprises of restaurants and hotels
1316	Managers of small enterprises in transport, storage and communications
1317	Managers of small enterprises of business services enterprises
1318	Managers of small enterprises in personal care, cleaning and related services
1319	Managers of small enterprises not elsewhere classified

Definitional notes:

This group is intended to include persons who manage small enterprises, or organisations with 0-9 employees, on their own behalf, or on behalf of the proprietor, and may have some non-managerial help. Non-managerial staff should be classified according to their specific tasks.

1. It should be noted that, in cases where information is limited to 'manager - enterprise or organisation with 0-9 employees', classification should be made to a unit group 1300 (*Managers of small enterprises, nothing otherwise specified*).
2. Unit group 1311 (*Managers of small enterprises in agriculture, hunting, forestry and fishing*) should be reserved for persons who indicate a managerial specialisation in agriculture, hunting, forestry and fishing activities, in organisations with with 0-9 employees. Persons describing themselves only as 'farmer', 'hunter', 'forester' or 'fisherman' would be classified to Major Group 6 (*Skilled Agricultural and Fishery Workers*).

MAJOR GROUP 2: PROFESSIONALS

21	Physical, mathematical and engineering science professionals
211	Physicists, chemists and related professionals
2111	Physicists and astronomers
2112	Meteorologists
2113	Chemists
2114	Geologists and geophysicists
212	Mathematicians, statisticians and related professionals
2121	Mathematicians and related professionals
2122	Statisticians ¹
213	Computing professionals ²
2131	Computer systems designers, analysts and programmers
2139	Computing professionals not elsewhere classified
214	Architects, engineers and related professionals
2141	Architects, town and traffic planners
2142	Civil engineers
2143	Electrical engineers
2144	Electronics and telecommunications engineers
2145	Mechanical engineers
2146	Chemical engineers
2147	Mining engineers, metallurgists and related professionals
2148	Cartographers and surveyors
2149	Architects, engineers and related professionals not elsewhere classified

Definitional notes:

This sub-major group includes occupations whose main tasks require a high level of professional knowledge and experience in the physical, mathematical and engineering sciences (ILO, 1990; p.47).

1. This category should include public service officials who state that their main professional activity is associated with statistical information processing and analysis or the direct supervision of others involved in such tasks.
2. If the job title does not permit a clear distinction, additional information on level of relevant qualifications, or description of tasks may be used to allocate occupations to either minor group 213 or minor group 312 (*Computer associate professionals*).

22	Life science and health professionals
221	Life science professionals
2211	Biologists, botanists, zoologists and related professionals,
2212	Pharmacologists, pathologists and related professionals
2213	Agronomists and related professionals
222	Health professionals (except nursing)
2221	Medical doctors
2222	Dentists
2223	Veterinarians
2224	Pharmacists
2229	Health professionals (except nursing) not elsewhere classified
223	Nursing and midwifery professionals
2230	Nursing and midwifery professionals

Definitional notes:

Life science and health professionals conduct research, improve or develop concepts, theories and operational methods, or apply scientific knowledge relating to fields such as biology, zoology, botany, ecology, physiology, biochemistry, microbiology, pharmacology, agronomy and medicine (ILO, 1990; p.59).

No explicit changes are proposed for this sub-major group. However, it should be noted that strict application of the principle that this sub-major group be restricted to ISCO skill level 4 (education commensurate with a university degree or equivalent) may require reference to information on qualification. This is particularly the case with minor group 223 (*Nursing and Midwifery professionals*), where particular nursing specialisms may require such high level qualifications.

23	Teaching professionals
231	College, university and higher education teaching professionals
2310	College, university and higher education teaching professionals
232	Secondary education teaching professionals
2320	Secondary education teaching professionals
233	Primary and pre-primary education teaching professionals
2331	Primary education teaching professionals
2332	Pre-primary education teaching professionals
234	Special education teaching professionals
2340	Special education teaching professionals
235	Other teaching professionals
2351	Education methods specialists
2352	School inspectors
2359	Other teaching professionals not elsewhere classified

Definitional notes:

Teaching professionals teach the theory and practice of one or more disciplines at different educational levels, conduct research and improve or develop concepts, theories and operational methods pertaining to their particular discipline, and prepare scholarly papers and books (ILO 1990; p.65).

Allocation of occupations to minor groups 233 (*Primary and pre-primary education teaching professionals*) and 234 (*Special education teaching professionals*) as opposed to minor groups 331 (*Primary education teaching associate professionals*), 332 (*Pre-primary education teaching associate professionals*) and 333 (*Special education teaching associate professionals*) is usually performed for the entire group rather than for any part of it (ie. primary teachers are allocated either to 233 or 331, depending upon national education and training requirements). Harmonisation of national education and training requirements will eventually remove such differences. Meanwhile, it is proposed that countries indicate clearly the basis for their allocation of primary, pre-primary or special education teaching occupations to minor groups 233/234 or 331/332/333.

Headteachers are classified to unit group 1229.

24	Other professionals
241	Business professionals
2411	Accountants
2412	Personnel and careers professionals
2419	Business professionals not elsewhere classified
242	Legal professionals
2421	Lawyers
2422	Judges
2429	Legal professionals not elsewhere classified
243	Archivists, librarians and related information professionals
2431	Archivists and curators
2432	Librarians and related information professionals
244	Social science and related professionals
2441	Economists ¹
2442	Sociologists, anthropologists and related professionals
2443	Philosophers, historians and political scientists
2444	Philologists, translators and interpreters
2445	Psychologists
2446	Social work professionals
245	Writers and creative or performing artists ²
2451	Authors, journalists and other writers
2452	Sculptors, painters and related artists
2453	Composers, musicians and singers
2454	Choreographers and dancers
2455	Film, stage and related actors and directors
246	Religious professionals
2460	Religious professionals
247	Public service administrative professionals ³
2470	Public service administrative professionals

Definitional notes:

Other professionals conduct research, improve or develop concepts, theories and operational methods, or apply knowledge relating to information dissemination and organisation of business, as well as to philosophy, law, psychology, politics, economics, history, religion, languages, sociology, other social sciences, arts and entertainment (ILO, 1990; p.72).

Depending upon the specific tasks and degree of responsibility, as well as on the national educational and training requirements, it may be appropriate to classify some of the occupations identified here into sub-major group 34 (*Other associate professionals*) (ILO, 1990; p.72).

1. This category should include public service officials who state that their main professional activity is associated with economic analysis or the supervision of others involved in such tasks.
2. This category is intended to include persons who require skills at the fourth ISCO skill level (university education or equivalent). Countries should indicate clearly the basis of their allocation of occupations to this minor group as opposed to minor group 347 (*Artistic, entertainment and sports associate professionals*).
3. This is a new minor group, designed explicitly for the classification of occupations in which the primary tasks consist of general administrative functions within the public service and for which national education and training requirements stipulate a university education or equivalent. Occupations classified to this category exclude the most senior general administrative grades within the public service (classified to minor group 111 *Legislators and senior government officials*).

MAJOR GROUP 3: TECHNICIANS AND ASSOCIATE PROFESSIONALS

31	Physical and engineering science associate professionals
311	Physical and engineering science technicians
3111	Chemical and physical science technicians
3112	Civil engineering technicians
3113	Electrical engineering technicians
3114	Electronics and telecommunications engineering technicians
3115	Mechanical engineering technicians
3116	Chemical engineering technicians
3117	Mining and metallurgical technicians
3118	Draughtspersons
3119	Physical and engineering science technicians not elsewhere classified
312	Computer associate professionals ^{1,2}
3121	Computer assistants
3122	Computer equipment operators
3123	Industrial robot controllers
313	Optical and electronic equipment operators
3131	Photographers and image and sound recording equipment operators
3132	Broadcasting and telecommunications equipment operators
3133	Medical equipment operators
3139	Optical and electronic equipment operators not elsewhere classified
314	Ship and aircraft controllers and technicians
3141	Ships' engineers
3142	Ships' deck officers and pilots
3143	Aircraft pilots and related associate professionals
3144	Air traffic controllers
3145	Air traffic safety technicians
315	Safety and quality inspectors
3151	Building and fire inspectors
3152	Safety, health and quality inspectors

Definitional notes:

Technicians and associate professionals perform mostly technical and related tasks connected with research and the application of scientific and artistic concepts and operational methods, and government or business regulations, and teach at certain educational levels. Most occupations in this group require skills at the third ISCO level (education which begins at the age of 17 or 18 years and leads to an award not equivalent to a first university degree) (ILO, 1990; p.3 & 85).

1. If the job title and associated information on activities does not permit a clear distinction, additional information on a level of relevant qualifications or description of tasks may be used to allocate occupations to either minor group 312 (*Computer associate professionals*) or minor group 213 (*computing professionals*).
2. Unit groups 3121, 3122 and 3123 may be merged and described as unit group 3120 (*Computer associate professionals, nothing otherwise specified*).

32	Life science and health associate professionals
321	Life science technicians and related associate professional
3211	Life science technicians
3212	Agronomy and forestry technicians
3213	Farming and forestry advisers
322	Health associate professionals (except nursing)
3221	Medical assistants
3222	Hygienists, health and environmental officers ¹
3223	Dieticians and nutritionists
3224	Optometrists and opticians
3225	Dental assistants
3226	Physiotherapists and related associate professionals
3227	Veterinary assistants
3228	Pharmaceutical assistants
3229	Health associate professionals (except nursing) not elsewhere classified
323	Nursing and midwifery associate professionals ²
3231	Nursing associate professionals
3232	Midwifery associate professionals

Definitional notes:

1. Change of name only.
2. See notes to minor group 223 (*Nursing and midwifery professionals*).

Note that ISCO-88 minor group 324 (*Traditional medicine practitioners and faith healers*) is not used. Such occupations (where separately identified in a national occupational classification) are classified to unit group 3229 (*Health associate professionals not elsewhere classified*).

33	Teaching associate professionals
331	Primary education teaching associate professionals
3310	Primary education teaching associate professionals
332	Pre-primary education teaching associate professionals
3320	Pre-primary education teaching associate professionals
333	Special education teaching associate professionals
3330	Special education teaching associate professionals
334	Other teaching associate professionals
3340	Other teaching associate professionals

Definitional notes:

See notes for sub-major group 23 (*Teaching professionals*).

34	Other associate professionals
341	Finance and sales associate professionals
3411	Securities and finance dealers and brokers
3412	Insurance representatives
3413	Estate agents
3414	Travel consultants and organisers
3415	Technical and commercial sales representatives
3416	Buyers
3417	Appraisers, valuers and auctioneers
3419	Finance and sales associate professionals not elsewhere classified
342	Business services agents and trade brokers
3421	Trade brokers
3422	Clearing and forwarding agents
3423	Employment agents and labour contractors
3429	Business services agents and trade brokers not elsewhere classified
343	Administrative associate professionals
3431	Administrative secretaries and related associate professionals ¹
3432	Legal and related business associate professionals
3433	Bookkeepers
3434	Statistical, mathematical and related associate professionals

Definitional notes:

Other associate professionals perform technical tasks connected with the practical application of knowledge relating to finance and sales, business enterprise administration, bookkeeping, legal, statistical and other services, government activities relating to customs, travel, tax, welfare, job placement, licensing, the police force, as well as with social work, entertainment, sport and religion (ILO, 1990; p.113).

1. This unit group consist of occupations which support professional and/or managerial staff in an administrative capacity. The range of tasks/responsibilities will be wider than those ascribed to jobs classified in unit group 4115 (*secretaries*). Included in this unit group should be associate professional occupations within the public service which are not specialist public service occupations (eg, customs, tax, social benefit, licensing officials - these would be allocated to minor group 344), but which consist primarily of administrative functions and for which the skills level is defined at the ISCO third level.

344	Customs, tax and related government associate professionals
3441	Customs and border inspectors
3442	Government tax and excise officials
3443	Government social benefits officials
3444	Government licensing officials
3449	Customs, tax and related government associate professionals not elsewhere classified ¹
345	Police inspectors and detectives
3450	Police inspectors and detectives
346	Social work associate professionals
3460	Social work associate professionals
347	Artistic, entertainment and sports associate professionals
3471	Decorators and commercial designers
3472	Radio, television and other announcers
3473	Street, night-club and related musicians, singers and dancers
3474	Clowns, magicians, acrobats and related associate professionals
3475	Athletes, sports persons and related associate professionals
348	Religious associate professionals
3480	Religious associate professionals

Definitional notes:

It should be noted that, depending on the specific tasks and degree of responsibility in executing them, as well as on the national educational and training requirements, it may be appropriate to classify some of the occupations that are identified here into sub-major group 24 (*Other professionals*). This is particularly relevant to the occupations classified into minor group 346, (*Social work associate professionals*) (ILO, 1990; p.113).

1. Unit group 3449 should be restricted to those occupations which are specific to the public service sector, and which have no direct parallel outside the public service. Examples of occupations classified to this category include:

Wage inspector
Weights and measures inspector

MAJOR GROUP 4: CLERKS

41	Office clerks ¹
411	Secretaries and keyboard-operating clerks
4111	Stenographers and typists
4112	Word-processor and related operators
4113	Data entry operators
4114	Calculating-machine operators
4115	Secretaries
412	Numerical clerks
4121	Accounting and book-keeping clerks
4122	Statistical and finance clerks
413	Material-recording and transport clerks
4131	Stock clerks
4132	Production clerks
4133	Transport clerks
414	Library, mail and related clerks
4141	Library and filing clerks
4142	Mail carriers and sorting clerks
4143	Coding, proof-reading and related clerks
4144	Scribes and related workers
419	Other office clerks ²
4190	Other office clerks

Definitional notes:

Clerks record, store, compute and retrieve information, perform a number of clerical duties especially in connection with money-handling operations, travel arrangements, request for information and appointments. Most occupations in this group require skills at the second ISCO level (an education level which begins at the age of 14 or 15 and lasts about three years) (ILO, 1990; p.131).

1. Occupations describing clerical tasks but failing to distinguish between office clerks and customer services clerks should be allocated to a unit group 4000 (*clerks, nothing otherwise specified*).
2. Where it is clear that the clerical duties involve office work, not customer service activities, yet classification to minor groups 411-414 is not possible, either because these involve a wide range of office activities or because specific information on the nature of these activities is not available, classification is to minor group 419 (*Other office clerks*).

42	Customer services clerks
421	Cashiers, tellers and related clerks
4211	Cashiers and ticket clerks
4212	Tellers and other counter clerks
4213	Bookmakers and croupiers
4214	Pawnbrokers and money-lenders
4215	Debt-collectors and related workers
422	Client information clerks
4221	Travel agency and related clerks
4222	Receptionists and information clerks
4223	Telephone switchboard operators

Definitional notes:

Customer services clerks deal directly with clients in connections with money-handling operations, travel arrangements, requests for information, appointments and by operating telephone switchboards (ILO, 1990; p.139).

Allocation of clerks between sub-major groups 41 (*Office clerks*) and 42 (*Customer services clerks*) will be performed with reference to job titles and/or job descriptions. Specific job titles/descriptions which indicate direct customer service interaction (eg. counter clerk, receptionist, telephonist) will result in classification within sub-major group 42 (*Customer services clerks*). In cases where information is less specific (eg. bank clerk), classification should be to sub-major group 41 (*Office clerks*).

MAJOR GROUP 5: SERVICE WORKERS AND SHOP AND MARKET SALES WORKERS

51	Personal and protective services workers	
	511	Travel attendants and related workers
	5111	Travel attendants and travel stewards
	5112	Transport conductors
	5113	Travel guides
	512	Housekeeping and restaurant services workers
	5121	Housekeepers and related workers
	5122	Cooks
	5123	Waiters, waitresses and bartenders
	513	Personal care and related workers ¹
	5131	Child-care workers
	5132	Institution-based personal care workers
	5133	Home-based personal care workers
	5139	Personal care and related workers not elsewhere classified
	514	Other personal services workers
	5141	Hairdressers, barbers, beauticians and related workers
	5142	Companions and valets
	5143	Undertakers and embalmers
	5149	Other personal services workers not elsewhere classified
		516
	Protective services workers	
	5161	Fire-fighters
	5162	Police officers
	5163	Prison guards
	5169	Protective services workers not elsewhere classified

Definitional notes:

Service workers and shop and market sales workers provide personal and protective services related to travel, housekeeping, personal care, or protection against fire, unlawful acts, or they pose as models for artistic creation and display, or demonstrate and sell goods in wholesale or retail shops and similar establishments, as at well as stalls and on markets. Most occupations in this major group require skills at the second ISCO level (ILO, 1990; p.143).

Minor group 515 (*Astrologers, fortune tellers and related workers*) in ISCO-88 is not separately identified; such occupations should be classified to unit group 5149 (*Other personal services workers not elsewhere classified*).

1. *Personal care and related workers* perform simple tasks to assist medical, nursing, midwifery and dental professionals or associate professionals in their duties. They may also attend to the personal needs and provide care for persons in need of such care. Where no distinction can be made between 'institution-based' care (unit group 5132) and 'home-based' care (unit group 5133), all such personal care workers should be allocated to unit group 5130 (*Personal care and related workers, nothing otherwise specified*).

52	Models, salespersons and demonstrators
521	Fashion and other models
5210	Fashion and other models
522	Shop, stall and market salespersons and demonstrators ¹
5220	Shop, stall and market salespersons and demonstrators

Definitional notes:

See definitional notes to major group 5 (*Service Workers and Shop and Market Sales Workers*)

1. No distinction is made between shop, stall and market salespersons.

MAJOR GROUP 6: SKILLED AGRICULTURAL AND FISHERY WORKERS

61	Skilled agricultural and fishery workers ¹
611	Market gardeners and crop growers
6111	Field crop and vegetable growers ²
6112	Gardeners, horticultural and nursery growers
612	Animal producers and related workers
6121	Dairy and livestock producers
6122	Poultry producers
6129	Animal producers and related workers not elsewhere classified
613	Crop and animal producers
6130	Crop and animal producers
614	Forestry and related workers
6141	Forestry workers and loggers
6142	Charcoal burners and related workers
615	Fishery workers, hunters and trappers
6151	Aquatic life cultivation workers
6152	Inland and coastal waters fishery workers
6153	Deep-sea fishery workers
6154	Hunters and trappers

Definitional notes:

Sub-major group 61 (*Skilled agricultural and fishery workers*) consists of those occupations which require skills at the second ISCO skill level (education which begins at the age of 14 or 15 and lasts about three years - a period of on-the-job training may be necessary, which may supplement or replace the formal education) (ILO, 1990; p.157 & 3).

Unit groups 6111 and 6112 within minor group 611 (*Market gardeners and crop growers*) and unit groups 6121 and 6122 within minor group 612 (*Animal producers and related workers*) are identified in terms of the main agricultural product. Unit group 6129 (Animal producers and related workers not elsewhere classified) is reserved for mixed animal producers, apiarists and sericulturists.

No skilled agricultural occupations within the European Community are classified to sub-major group 62 (*Subsistence agricultural and fishery workers*).

1. Where a main agricultural product associated with the skilled agricultural occupational cannot be identified, classification is to a minor group 610 (*Skilled agricultural and fishery workers, nothing otherwise specified*).
2. Includes tree and shrub crop growers.

MAJOR GROUP 7: CRAFT AND RELATED TRADES WORKERS¹

71	Extraction and building trades workers
711	Miners, shotfirers, stone cutters and carvers
7111	Miners and quarry workers
7112	Shotfirers and blasters
7113	Stone splitters, cutters and carvers
712	Building frame and related trades workers
7121	Builders
7122	Bricklayers and stonemasons
7123	Concrete placers, concrete finishers and related workers
7124	Carpenters and joiners
7129	Building frame and related trades workers not elsewhere classified
713	Building finishers and related trades workers
7131	Roofers
7132	Floor layers and tile setters
7133	Plasterers
7134	Insulation workers
7135	Glaziers
7136	Plumbers and pipe fitters
7137	Building and related electricians
7139	Building finishers and related trade workers not elsewhere classified
714	Painters, building structure cleaners and related trades workers
7141	Painters and related workers ²
7143	Building structure cleaners

Definitional notes:

Craft and related trades workers apply their specific knowledge and skills to produce or process goods. The tasks call for an understanding of all stages of the production process, the materials and tools used and the nature and purpose of the final product. Most occupations in this group require skills at the second ISCO level (ILO, 1990; p.173).

1. In the absence of sufficient information to ascertain the relevant trade, classification should be made to a unit group 7000 (*Craft and related trades workers, nothing otherwise specified*) or to a unit group 7100, 7200, 7300 or 7400 if a broad trade specialisation is given.
2. Unit group 7142 (*Varnishers and related painters*) is not separately identified from unit group 7141 (*Painters and related workers*).

72	Metal, machinery and related trades workers
721	Metal moulders, welders, sheet-metal workers, structural-metal preparers, and related trades workers
7211	Metal moulders and coremakers
7212	Welders and flame cutters
7213	Sheet-metal workers
7214	Structural-metal preparers and erectors
7215	Riggers and cable spicers
7216	Underwater workers
722	Blacksmiths, tool-makers and related trades workers
7221	Blacksmiths, hammer-smiths and forging-press workers
7222	Tool-makers and related workers
7223	Machine-tool setters and setter-operators
7224	Metal wheel-grinders, polishers and tool sharpeners
723	Machinery mechanics and fitters
7231	Motor vehicle mechanics and fitters
7232	Aircraft engine mechanics and fitters
7233	Agricultural- or industrial-machinery mechanics and fitters
724	Electrical and electronic equipment mechanics and fitters
7241	Electrical mechanics fitters and services
7242	Electronics mechanics, fitters and servicers ¹
7244	Telegraph and telephone installers and servicers
7245	Electrical line installers, repairers and cable jointers

Definitional notes:

See definitional notes for major group 7.

1. Note that unit group 7242 (*electronics mechanics fitters and servicers*) does not identify electronics fitters separately from electronics mechanics, fitters and servicers.

73	Precision, handicraft, craft printing and related trades workers
731	Precision workers in metal and related materials
7311	Precision-instrument makers and repairers
7312	Musical-instrument makers and tuners
7313	Jewellery and precious-metal workers
732	Potters, glass-makers and related trades workers
7321	Abrasive wheel formers, potters and related workers
7322	Glass-makers, cutters, grinders and finishers
7323	Glass engravers and etchers
7324	Glass, ceramics and related decorative painters
733	Handicraft workers in wood, textile, leather and related materials
7331	Handicraft workers in wood and related materials
7332	Handicraft workers in textile, leather and related materials
734	Craft printing and related trades workers
7341	Compositors, typesetters and related workers
7342	Stereotypers and electrotypers
7343	Printing engravers and etchers
7344	Photographic and related workers
7345	Bookbinders and related workers
7346	Silk-screen, block and craft textile printers

Definitional notes:

See definitional notes for major group 7.

74	Other craft and related trades workers
741	Food processing and related trades workers
7411	Butchers, fishmongers and related food preparers ¹
7412	Bakers, pastry-cooks and confectionery makers ¹
7413	Dairy-products workers
7414	Fruit, vegetable and related preservers
7415	Food and beverage tasters and graders
7416	Tobacco preparers and tobacco products makers
742	Wood treaters, cabinet-makers and related trades workers
7421	Wood treaters
7422	Cabinetmakers and related workers
7423	Woodworking machine setters and setter-operators
7424	Basketry weavers, brush makers and related workers
743	Textile, garment and related trades workers
7431	Fibre preparers
7432	Weavers, knitters and related workers
7433	Tailors, dressmakers and hatters
7434	Furriers and related workers
7435	Textile, leather and related pattern-makers and cutters
7436	Sewers, embroiderers and related workers
7437	Upholsterers and related workers
744	Pelt, leather and shoemaking trades workers
7441	Pelt dressers, tanners and fellmongers
7442	Shoe-makers and related workers

Definitional notes:

See definitional notes for major group 7.

1. Occupations classified to these unit groups may involve some managerial responsibilities, especially where a person works on their own account, with or without employees or family assistance. If, however, the main activity is described in terms of the relevant skilled trade, classification is to these categories.

No changes are proposed for the above unit groups.

MAJOR GROUP 8: PLANT AND MACHINE OPERATORS AND ASSEMBLERS

81	Stationary plant and related operators ¹
811	Mining and mineral-processing-plant operators
8111	Mining plant operators
8112	Mineral-ore and stone-processing-plant operators
8113	Well drillers and borers and related workers
812	Metal-processing plant operators
8121	Ore and metal furnace operators
8122	Metal melters, casters and rolling-mill operators
8123	Metal heat-treating-plant operators
8124	Metal drawers and extruders
813	Glass, ceramics and related plant operators
8131	Glass and ceramics kiln and related machine operators
8139	Glass, ceramics and related plant operators not elsewhere classified
814	Wood-processing- and papermaking-plant operators
8141	Wood-processing-plant operators
8142	Paper-pulp plant operators
8143	Papermaking-plant operators
815	Chemical-processing-plant operators
8151	Crushing-, grinding- and chemical-mixing-machinery operators
8152	Chemical-heat-treating-plant operators
8153	Chemical-filtering- and separating-equipment operators
8154	Chemical-still and reactor operators (except petroleum and natural gas)
8155	Petroleum- and natural-gas-refining-plant operators
8159	Chemical-processing-plant operators not elsewhere classified
816	Power-production and related plant operators
8161	Power-production plant operators
8162	Steam-engine and boiler operators
8163	Incinerator, water-treatment and related plant operators
817	Industrial robot operators
8170	Industrial robot operators

Definitional notes:

Plant and machine operators and assemblers operate and monitor industrial and agricultural machinery and equipment on the spot or by remote control, drive and operate trains, motor vehicles and mobile machinery and equipment, or assemble products from component parts according to strict specifications and procedures.

The work mainly calls for experience with, and an understanding of, industrial and agricultural machinery and equipment as well as an ability to cope with machine-paced operations and to adapt to technological innovations. Most occupations in the major group require skills at the second ISCO level (ILO, 1990; p.211).

1. 'Stationary plant' should be interpreted primarily as 'process plant'. Operative occupations classified to sub-major group 81 (*Stationary plant and related operators*) involve process control operations, usually to a strictly defined set of procedures.

Automated assembly line operators are not separately distinguished from assembling occupations in minor group 828 (*Assemblers*).

82	Machine operators and assemblers
821	Metal- and mineral-products machine operators
8211	Machine-tool operators
8212	Cement and other mineral products machine operators
822	Chemical-products machine operators
8221	Pharmaceutical-and toiletry-products machine operators
8222	Ammunition- and explosive-products machine operators
8223	Metal finishing-, plating- and coating-machine operators
8224	Photographic-products machine operators
8229	Chemical-products machine operators not elsewhere classified
823	Rubber- and plastic-products machine operators
8231	Rubber-products machine operators
8232	Plastic-products machine operators
824	Wood-products machine operators
8240	Wood-products machine operators
825	Printing-, binding- and paper-products machine operators
8251	Printing-machine operators
8252	Book-binding-machine operators
8253	Paper-products machine operators
826	Textile-, fur- and leather-products machine operators
8261	Fibre-preparing-, spinning- and winding-machine operators
8262	Weaving- and knitting-machine operators
8263	Sewing-machine operators
8264	Bleaching-, dyeing- and cleaning-machine operators
8265	Fur- and leather-preparing-machine operators
8266	Shoemaking- and related machine operators
8269	Textile-, fur- and leather-products machine operators not elsewhere classified
827	Food and related products machine operators
8271	Meat- and fish-processing-machine operators
8272	Dairy-products machine operators
8273	Grain- and spice-milling-machine operators
8274	Baked-goods, cereal- and chocolate-products machine operators
8275	Fruit-, vegetable- and nut-processing-machine operators
8276	Sugar production machine operators
8277	Tea-, coffee- and cocoa-processing-machine operators
8278	Brewers, wine and other beverage machine operators
8279	Tobacco production machine operators

Definitional notes:

See notes to major group 8.

No changes are proposed for these minor groups.

828	Assemblers ¹	
	8281	Mechanical-machinery assemblers
	8282	Electrical-equipment assemblers
	8283	Electronic-equipment assemblers
	8284	Metal-, rubber- and plastic-products assemblers
	8285	Wood and related products assemblers
	8286	Paperboard, textile and related products assemblers
	8287	Composite products assemblers ²
829	Other machine operators not elsewhere classified	
	8290	Other machine operators not elsewhere classified

Definitional notes:

See notes to major group 8.

1. Assemblers working on automated or semi-automated assembly lines are included in minor group 828. If there is sufficient information to classify assembling occupations in terms of the assembled products, classification is to unit group 8280 (*Assemblers, nothing otherwise specified*).
2. A new category covering the assembly of composite products, involving a variety of assembled parts.

83	Drivers and mobile plant operators
831	Locomotive engine drivers and related workers
8311	Locomotive engine drivers
8312	Railway brakemen, signallers and shunters
832	Motor vehicle drivers
8321	Motorcycle drivers
8322	Car, taxi and van drivers
8323	Bus and tram drivers
8324	Heavy truck and lorry drivers
833	Agricultural and other mobile plant operators
8331	Motorised farm and forestry plant operators
8332	Earth-moving and related plant operators
8333	Crane, hoist and related plant operators
8334	Lifting-truck operators
834	Ships' deck crews and related workers
8340	Ships' deck crews and related workers

Definitional notes:

See notes to major group 8.

No changes are proposed for these minor groups.

MAJOR GROUP 9: ELEMENTARY OCCUPATIONS¹

91	Sales and services elementary occupations
911	Street vendors and related workers
9111	Street vendors ²
	9113 Door-to-door and telephone salespersons
912	Shoe cleaning and other street services elementary occupations
9120	Shoe cleaning and other street services elementary occupations
913	Domestic and related helpers, cleaners and launderers
9131	Domestic helpers and cleaners
9132	Helpers and cleaners in offices, hotels and other establishments
9133	Hand-launderers and pressers
914	Building caretakers, window and related cleaners
9141	Building caretakers
9142	Vehicle, window and related cleaners
915	Messengers, porters, doorkeepers and related workers
9151	Messengers, package and luggage porters and deliverers
9152	Doorkeepers, watchpersons and related workers
9153	Vending-machine money collectors, meter readers and related workers
916	Garbage collectors and related labourers
9161	Garbage collectors
9162	Sweepers and related labourers

Definitional notes:

Elementary occupations consist mainly of simple and routine tasks which mainly require the use of hand-held tools and often some physical effort. Most occupations in this major group require skills at the first ISCO skill level (a primary education which generally begins at the age of 5, 6 or 7 and lasts about 5 years) (ILO, 1990; p.249 & 2).

Strict application of the ISCO skill level to occupations in this major group is inappropriate, given that basic education provision always exceeds this level. A more appropriate test may be the length of any associated vocational training. Typically, such training will consist primarily of induction training, lasting only a matter of weeks.

1. Where there is insufficient information to classify labouring occupations to sub-major group 91 (*Sales and services elementary occupations*), sub-major group 92 (*Agricultural, fishery and related workers*) or sub-major group 93 (*Labourers in mining, construction, manufacturing or transport*), classification is to a unit group 9000 (*Elementary occupations, nothing otherwise specified*).
2. Unit group 9112 (*Street vendors, non-food products*) is not separately identified from unit group 9111 (*Street vendors*).

92	Agricultural, fishery and related labourers
921	Agricultural, fishery and related labourers
9211	Farm-hands and labourers
9212	Forestry labourers
9213	Fishery, hunting and trapping labourers
93	Labourers in mining, construction, manufacturing and transport
931	Mining and construction labourers
9311	Mining and quarrying labourers
9312	Construction and maintenance labourers: roads, dams and similar constructions
9313	Building construction labourers
932	Manufacturing labourers ¹
9320	Manufacturing labourers
933	Transport labourers and freight handlers
9330	Transport labourers and freight handlers ²

Definitional notes:

See notes to major group 9.

1. *Manufacturing labourers* include hand-packing operations and other basic labouring tasks associated with manufacturing operations. *Assemblers* are classified to minor group 828 (*Assemblers*).
2. *Transport labourers and freight handlers* include loaders and unloaders of motor and rail vehicles and ships.

MAJOR GROUP 0: ARMED FORCES

01	Armed forces
010	Armed forces
0100	Armed forces