

Part one
Introduction to ISIC

I. Historical background and revision

A. Historical background

1. The original version of the International Standard Industrial Classification of All Economic Activities (ISIC)¹ was adopted in 1948. In that connection, the Economic and Social Council adopted resolution 149 A (VII) of 27 August 1948, which read:

"The Economic and Social Council,

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

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

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

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

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

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

3. Experience in the use of ISIC has revealed the need for periodic review of the structure and definition of its categories and underlying principles. Changes take place in the organization of economic activities and new types of economic activities become important. New analytical requirements develop for data classified according to kind of economic activity. The continuing experience in the use of ISIC and the corresponding national classifications reveal aspects that should be amplified, clarified or improved in other ways. For these reasons, the Statistical Commission initiated reviews and revisions of ISIC in 1956, 1965 and again in 1979. In each instance, the Commission emphasized the need to maintain as much comparability between the revised and preceding versions of ISIC as was possible while introducing the alterations, modifications and other improvements.

4. The first revision of ISIC² was issued in 1958, after having been considered by the Statistical Commission at its tenth session. The second revision³ was issued in 1968 after proposals for the revision had been considered and approved by the Commission at its fifteenth session in 1968. The third revision of ISIC⁴ was considered and approved by the Commission at its twenty-fifth session in 1989 and issued in 1990.

5. Unlike previous revisions, the third revision of ISIC required harmonization with other activity classifications and with classifications of goods and services. This requirement added considerable complexity and constraints that had not applied in earlier revisions of ISIC. As ISIC occupies a central position in the international comparison and analysis of a wide range of statistics, a great deal of attention was devoted to ensuring that ISIC would be compatible with the economic structure, and the statistical practice and needs of the different countries in the world. Although the general structure of the classification was not changed significantly, a greater level of detail was introduced, especially in the part dealing with service activities, reflecting the growth of this sector of the economy in most countries of the world. The harmonization with other classifications improved the usefulness of ISIC for many analytical and descriptive purposes, for instance, within the context of the extended elaboration of services in the Central Product Classification (CPC).

B. The 2002 update to Revision 3

6. In the 10 years since the publication of the third revision of ISIC, the economic structure in many countries of the world has changed at an unprecedented rate. The emergence of new technologies and new divisions of labour between organizations has created new types of activities and new forms of industries. This poses a challenge for providers as well as users of statistical data. In response to the growing demands of providers and users of data, the Expert Group on International Economic and Social Classifications, at its fourth meeting in 1999, recommended that an update of the third revision of ISIC be undertaken to better reflect changed structures and analytical requirements.

7. In this update to ISIC, Rev.3, the structure of the classification and the boundaries of its building blocks remain largely unchanged. Attention has been paid to providing explanatory notes in extended detail, allowing for more accurate interpretation of the content and boundaries of individual classes. New activities that have emerged over the previous 10 years are reflected in the new explanatory notes, allowing for easier, more consistent and thus less ambiguous application of ISIC.

8. The definition of alternate aggregations for analytical use has been reviewed and updated. While some of the aggregations previously published in the ISIC manual have now been replaced by defined aggregations in other specialized frameworks, new needs for aggregations have emerged. The creation of an “Information sector” was requested by many countries in order to better reflect its importance for national economic activities related to the production and dissemination of information, as well as the interest of analysts in this evolving area. In order to minimize the impact of the creation of this new category, following requests by most countries to preserve the existing structure of ISIC while reflecting change of the economic reality, it was decided to create the information sector in an alternate structure. Experiences with the implementation and use of this alternate structure will be evaluated for inclusion in the regular structure of the classification in future revisions. The definition of an alternate aggregation for the informal sector is in pursuance of the need experienced by many countries to have an internationally agreed definition for data collection and analysis in this area, which is extremely important for a large number of countries.

9. As requested by the Statistical Commission at its thirtieth session in 1999, future work on ISIC will be guided by the need for convergence between existing activity classifications at the international and multinational levels.⁵ This has been reflected in the creation and review of alternate aggregations and, to some degree, in the extended definition of individual classes, drawing on research work already done for other classifications.

II. The underlying principles of the Classification

A. Purpose and nature of the Classification

1. General considerations

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

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

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

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

14. The detail required in the classification of data by kind of economic activity differs from country to country. Differences in the geographical and historical circumstances and in the degrees of industrial development and organization of economic activities result in differences in the degree of elaboration with which various countries find it necessary or feasible to classify their data according to

kind of economic activity. The level of detail for purposes of international comparison is generally lower than that available for national analysis. In chapter III, it will be explained how ISIC can be used or adapted for national purposes.

2. Differences from other types of classifications

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

16. As it is not possible, even in principle, to establish a one-to-one correspondence between activities and products, ISIC is not designed to measure product data at any detailed level. For this purpose a separate classification was developed, namely, the Central Product Classification (CPC). Although each category in CPC is accompanied by a reference to the ISIC class where the goods or services are mainly produced (criterion of industrial origin), classification of products is based on the intrinsic characteristics of the goods or the nature of the services rendered (see also chap. IV, sect. B).

17. ISIC does not draw distinctions according to kind of ownership, type of legal organization or mode of operation because such criteria do not relate to the characteristics of the activity itself. Units engaged in the same kind of economic activity are classified in the same category of ISIC, irrespective of whether they are (part of) incorporated enterprises, individual proprietors or government, and whether or not the parent enterprise consists of more than one establishment. Similarly, manufacturing units are classified according to the principal kind of economic activity in which they engage, whether the work is performed by power-driven machinery or by hand, or whether it is done in a factory or in a household. Modern versus traditional is not a criterion for ISIC, although the distinction may be useful in some statistics. Also, ISIC does not distinguish between formal and informal or between legal and illegal production. Classifications according to kind of legal ownership, kind of organization or mode of operation may be constructed independently of the classification according to kind of economic activity. Cross-classification with ISIC can provide useful extra information.

18. In general, ISIC does not differentiate between market and non-market activities. However, it should be emphasized that this distinction continues to be an important feature of the System of National Accounts (1993 SNA).⁶ A breakdown of economic activities according to this principle is useful in any case where data on value added are collected for activities that take place on both a market and a non-market basis. This criterion should then be cross-classified with the categories of ISIC. Non-market services are most frequently provided by government organizations or non-profit organizations in the field of education, health, social work etc.

19. This revision of ISIC includes categories for the undifferentiated production of goods and services by households for own use. These categories cover, however, only a portion of households, as households with clearly identifiable activities (market or non-market) are classified in other parts of ISIC. These categories have been created for special purposes, such as labour-force surveys, to cover households that it would be otherwise difficult or impossible to assign to other ISIC categories.

B. Principal, secondary and ancillary activities

20. When discussing economic productive activities, the expression “activity” is to be understood as a process, that is to say, the combination of actions that result in a certain type of products. In other words, an activity can be said to take place when resources such as equipment, labour, manufacturing techniques or products are combined to produce specific goods or services. Thus, an activity is characterized by an input of resources, a production process and an output of products. By convention, one single activity is defined as a process resulting in a homogeneous type of products. In this context, a homogeneous type of products are understood to fall within a category, the production of the members of which is characteristic of a class (the most detailed category) of the activity classification.

21. One activity as defined here may consist of one simple process, for example, weaving, but may also cover a whole range of sub-processes, each of which is mentioned in different categories of the classification. For example, the manufacturing of a car is considered one activity even though its integrated production process includes sub-activities such as casting, forging, welding, assembling, painting etc. Moreover, if manufacturing of specific parts, such as engines, gearboxes, furniture or instruments, is organized as an integral part of the same manufacturing process, the whole combination of processes is regarded as one activity.

22. Also, when an enterprise produces end products, the production processes of which fall within different categories of the activity classification, the enterprise is supposed to carry out only one principal activity if these production processes are highly interrelated or integrated. If, for instance, pumps and gearboxes are produced and the casting for both products is carried out by the same employees with the same machines, one of the two processes should be considered a secondary activity; which one is to be so considered should be determined on the basis of the value added (see sect. E of this chap.).

23. On the other hand, when two or more products of a homogeneous type are produced next to each other, but have production processes that are not interrelated, that is to say, the processes are completely independent with respect to the organization of the production, then these processes may be seen as different activities that are similar, however, with respect to the activity classification. If, for example, pens and pencils are produced in the same enterprise, using, however, different inputs and different production techniques, the enterprise may be considered to carry out two activities even though they both fall within the same category of the classification. This does not imply that, as a consequence, different production units must be distinguished.

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

25. The principal activity of an economic entity is the activity that contributes most to the value added of the entity, or the activity the value added of which exceeds that of any other activity of the entity. It is not necessary that the principal activity account for 50 per cent or more of the total value added of an entity. The products resulting from a principal activity are either principal products or by-products. The latter are products that are necessarily produced together with the principal products, for example, hides produced when producing meat by slaughtering animals. In section E of this chapter, it will be explained how, in practice, the principal activity of a statistical unit should be determined when classifying according to ISIC.

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

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

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

29. Since processes are generally not viable without the support of a certain number of ancillary activities, the latter should not be separated to form separate entities even though the ancillary activities may be carried out in a separate legal entity or in a separate location and even though separate records may be available (see also sect. D of this chapter). Also, the ancillary activity should not count in determining the activity code of the entity to which the ancillary activities belong. The value of the ancillary activities should be allocated to the principal and secondary activities of the unit they serve. If no exact information on their distribution is available, they should be proportioned according to the value added of the principal and secondary activities. The clearest examples of entities carrying out ancillary activities are central administrative offices or "head offices". Other examples are sales departments, warehouses, garages, repair shops, electricity power plants and accounting or computer departments that primarily serve their parent units.

30. Under the definition given in paragraph 27 above, the following activities are not to be considered ancillary (therefore, in all these cases, if separate data are available in respect to the activities, separate units should be distinguished and they should be classified by their own activities):

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

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

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

(d) Research and development. These activities are not universal and they do not provide services that are consumed in the course of current production.

31. Where ancillary activities are organized in support of two or more entities of a multi-unit enterprise, they may constitute a central ancillary entity. In such cases, and similarly when there is a strong interest in covering some activities entirely regardless of whether they are carried out independently or by ancillary entities (for example, computer activities), it could be expedient to make

supplementary tabulations. Ancillary entities could for this purpose be classified according to their own activity besides their classification to the activity of their parent unit. For classification of separate units carrying out ancillary activities, see paragraph 96 below.

C. Principles used in constructing the Classification

1. Criteria in respect of divisions and groups

32. The main criteria employed in delineating divisions and groups (the two- and three-digit categories, respectively) of ISIC concern the characteristics of the activities of producing units which are strategic in determining the degree of similarity in the structure of the units and certain relationships in an economy. The major aspects of the activities considered were (a) the character of the goods and services produced, (b) the uses to which the goods and services were put and (c) the inputs, the process and the technology of production. In delineating the divisions of ISIC, attention was also given to the range of kinds of activity frequently carried out under the same ownership or control and to potential differences in scale and organization of activities and in capital requirements and finance that exist between enterprises. Additional criteria used in establishing divisions and groups were the pattern of categories at various levels of classification in national classifications.

33. In the case of the character of the goods and services produced, account was taken of the physical composition and stage of fabrication of the items and the needs served by them. Distinguishing categories of ISIC in terms of nature of goods and services produced furnishes the basis for grouping producing units according to similarities in, and links between, the raw materials consumed and the sources of demand and markets for the items.

34. The criteria relating to the economic transactors (for example, non-financial enterprises, financial institutions, government, households etc.) and to the types of transactions (for example, intermediate and final consumption, capital formation etc.) reinforce the considerations in respect of the stage of fabrication of, and the needs served by, these items. Applying these criteria in establishing divisions and groups enhances substantially the value of ISIC in distinguishing producing units according to sources of demand and markets for their output and in tracing ties among the producing units, and between them and the rest of the economy. These criteria were also employed in ordering classes within groups and groups within divisions. This improved the hierarchical structure of data arranged according to ISIC.

35. The weights assigned to the types of criteria described above varied from one category to another. In a number of instances, for example, food manufacturing, the textile, clothing and leather industries, the production of machinery and equipment and the service industries, the various aspects of activities are so highly correlated that the problem of assigning weights to the criteria did not arise. In the case of intermediate products, physical composition and stage of fabrication of the items were often given the greatest weight. In the case of goods with complicated production processes, the end use, technology and organization of production of the items were frequently given priority over the physical composition of the goods.

2. Criteria in respect of the classes

36. The criteria concerning the manner in which activities are combined in, and allocated among, establishments were central in the definition of classes (four-digit categories) of ISIC. They were intended to ensure that it will be practical most of the time to use the classes of ISIC for the industrial

classification of establishments, and that the units falling into each class will be as similar in respect of the kinds of activity in which they engage, as is feasible. The classes of ISIC are defined so that as far as possible the following two conditions are satisfied:

- (a) The production of the category of goods and services that characterizes a given class accounts for the bulk of the output of the units classified to that class;
- (b) The class contains the units that produce most of the category of goods and services that characterize it.

37. The first condition is required in order that establishments, or similar units, may be classified according to kind of economic activity uniquely and easily and in order that the units included in a given class will be as similar to each other as is feasible. For a more detailed explanation of these homogeneity ratios, see chapter III, section F (paras. 127-132).

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

39. Another major consideration in forming categories in ISIC was the relative importance of the activities to be included. In general, separate classes are provided for kinds of activity that are prevalent in most countries, or that are of particular importance in the world economy. The introduction of certain categories at the class and other levels of classification for purposes of attaining international comparability in the industrial classification of data has also affected the balance of ISIC.

D. Statistical units

1. General remarks

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

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

42. Economic statistics are required by different users for various types of analysis. The System of National Accounts (SNA) is a principal user and it has particular requirements, but there are also other users including policy analysts, business analysts, and businesses themselves that use economic data for

studying industrial performance, productivity, market share and other issues. As different units within an economic entity are suitable for the compilation of different types of data, the type of data that are required is yet another factor in the definition and delineation of statistical units.

(a) Legal entities

43. Most societies provide for the legal recognition of economic entities, under laws that enable them to define and register themselves as legal entities. Legal entities are recognized by law or society, independently of the persons or institutions that own them. The characteristics of a legal entity are the following: they own goods or assets, they incur liabilities, and they enter into contracts.

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

(b) Institutional units

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

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

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

48. The domestic economy is made up of the entire set of institutional units resident in the economy. The institutional sector classification of the SNA defines five mutually exclusive institutional sectors within the economy, which group institutional units by virtue of their economic objectives, principal functions and behaviour.

49. In the majority of cases, an institutional unit will be a single legal entity. However, some corporations may be composed of legal entities set up for convenience as tax shelters or for other administrative reasons. In such cases, for statistical purposes it is inappropriate and unnecessary to regard each legal entity as a separate institutional unit.

50. Similarly, if a corporation has a principal activity supported by ancillary activities that are registered as separate legal entities, they, too, would not constitute separate institutional entities.

51. Because the sector classification distinguishes separate financial and non-financial sectors, it is necessary to define two separate institutional units, as long as the necessary financial accounts are available for each of them, whenever possible, even if the two together have all the other attributes of an institutional unit and consolidated accounts are compiled for them as a single unit.

2. Statistical units in the System of National Accounts

52. The systematic description of the economy as represented by the System of National Accounts analyses two interrelated types of transactors and transactions for which two levels of statistical units are required. In the income and outlay and capital finance accounts, the concepts of the enterprise and the sector classification, for the analysis of financial transactions, are used. In the production accounts, the concepts of the establishment, the international standard industrial classification and the central product classification, for the analysis of transactions in goods and services, are used.

(a) Enterprise

53. An institutional unit in its capacity as a producer of goods and services is known as an enterprise.

54. An enterprise is an economic transactor with autonomy in respect of financial and investment decision-making, as well as authority and responsibility for allocating resources for the production of goods and services. It may be engaged in one or many productive activities.

55. The enterprise is the level at which financial and balance sheet accounts are maintained and from which international transactions, an international investment position (when applicable) and the consolidated financial position can be derived.

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

57. The enterprise is the statistical unit for which financial statistics for the income and outlay accounts and capital finance accounts of the SNA are compiled. They are classified to the sector classification of the SNA.

(b) Establishment

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

59. ISIC is designed for grouping units engaged in similar activities for the purpose of analysing production and compiling production statistics. Although it is possible to classify enterprises according to their principal activities using ISIC and to group them into industries, some of the resulting industries are likely to be very heterogeneous when enterprises have secondary activities that are very different from their principal activities. It therefore becomes necessary to partition large and complex enterprises into more homogeneous units, for which production data can be compiled. This is particularly important when large enterprises account for a large proportion of the value added of the economy or of particular industries.

60. Although the definition of an establishment allows for the possibility that there may be one or more secondary activities carried out, they should be small-scale compared with the principal activity. If a

secondary activity within an enterprise is as important, or nearly as important, as the principal activity, then the unit is more like a local unit, described below. It should be subdivided so that the secondary activity is treated as taking place within an establishment separate from that in which the principal activity takes place. The definition of an establishment does not permit an ancillary activity to constitute an establishment on its own.

61. In the case of most small and medium-sized businesses, the enterprise and the establishment will be identical, though the two different types of data described earlier will be compiled for each. Large and complex enterprises engaged in many activities, belonging to different ISIC industries, will be composed of more than one establishment, provided that smaller, more homogeneous production units for which production data can be compiled, can be identified with the desired geographical precision.

62. The data to be compiled for an establishment relate to its production activities. They include the following:

- (a) The items included in the production account and the generation of income account such as revenues from the sale of goods and services, and all associated costs including employee remuneration, taxes on production and imports, subsidies, depreciation and a meaningful operating surplus;
- (b) Statistics of numbers of employees, types of employees and hours worked;
- (c) Estimates of the stock of capital and land used;
- (d) Estimates of changes in inventories and gross fixed capital formation undertaken.

3. Delineating statistical units

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

64. Enterprises have production units at which or from which they undertake the economic activity of producing goods and services. Production usually takes place at a particular location - for example, at a mine, a factory or a farm. On the other hand, the activity of producing services may take place from a certain location. Transportation services carry the product from the farm or factory gate to the purchaser. They may also carry passengers from one place to another. Even though transportation services are carried out by means of a network that operates over a wide geographical area, it is assumed that the service originates from a certain location. Similarly, telecommunication services are attributed to a particular location from which the service is assumed to be delivered, even though it, too, is carried out through a wired or wireless network that covers a wide geographical area. Certain services may be delivered to the customer at the same location at which it is produced such as accommodation and certain food services. However, others, such as those of engineering consultants, originate at a certain location from which they may be delivered to the location of the customer.

65. The need to delineate statistical units arises in the case of large and complex economic entities in which the activities in which they are engaged fall into different classes of the standard industrial classification or the production units of which they are composed are located in different geographical areas.

66. In large and complex entities, the units at which or from which production takes place are grouped for management, administrative, and decision-making purposes into hierarchical structures.

Higher-level organizational units own, control, or manage the lower-level production units at which production decisions are made or production takes place. An economic entity may be structured along geographical, legal, functional or operational lines. They may have one structure or several structures to carry out different functions or to serve different purposes.

67. In these entities, management of the financial affairs of the business usually occurs at a higher organizational level than does management of production operations. The accounting systems of businesses usually reflect this management structure by mirroring the hierarchy of management responsibility for the operations of the business. The accounts required to support the management and decision-making functions, whether financial or production, are usually maintained for the corresponding level of management responsibility.

68. Enterprises also have a legal structure. They define and register themselves in terms of legal units for the ownership of assets. These legally constituted units or groups of units form the legal base of the business. An enterprise derives its autonomy from the common ownership and control of its resources irrespective of the number of legal units under which it registers them. They usually submit corporate tax returns to government revenue authorities for the legal units of their legal structure. They may use the same or different units for other administrative purposes such as remitting payroll or value-added taxes to government authorities.

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

70. The statistical units of large and complex institutional units may be delineated through a process referred to as profiling. Profiling identifies the enterprise, its legal structure, its operating structure, and the production and organizational units that are used to derive the statistical units. Once identified, the enterprise and its constituent establishments constitute the statistical units of the statistical structure. In delineating the statistical structure, functional or other groups in the organizational structure may be ignored and the constituent units regrouped to form the units of the statistical structure. For multi-establishment enterprises, the statistical structure may not coincide with the legal structure in which ownership of assets is registered.

71. As mentioned earlier for economic analysis, two main types of data are required to describe the economic activities of the units of which the economy is composed: (a) financial statistics organized by institutional or other sectors and (b) production statistics classified by industry and, in some countries, by geographical area. Usually, the data are required for activities carried out within, or from within, domestic boundaries. The two types of data are required separately, as well as integrated into the system of national accounts. Thus, two main statistical units need to be delineated: the enterprise, for the compilation of financial statistics; and the establishment (or kind of activity unit), for the compilation of production statistics.

72. Economic statistics draw upon the accounting records of businesses. The records that are maintained in support of financial decision-making, management, and control provide the data required for financial statistics. Such records include consolidated profit and loss accounts and balance sheets of assets and liabilities. This is the level at which the enterprise is delineated, as those are the data that need to be compiled for the unit.

73. The source of information for production statistics and labour income statistics is often management and cost accounts. These accounts record operating revenues earned from the sale of goods and services and the associated costs, wages and salaries, depreciation, and operating profits. Within the organizational structure of the enterprise, the level of autonomy will determine the nature of the data that will be available for the unit. Countries that are more interested in the higher level of autonomy, in terms of decision-making, of the unit, rather than in the geographical location of the activity, may prefer to delineate and use the kind-of-activity unit. This will be the case particularly if they are not interested in compiling comprehensive production statistics for sub-national geographical regions. However, if production statistics at a subnational level of geographic detail are required, then it will be necessary to delineate the smallest unit that is as homogeneous as possible in terms of activity and geography, for which revenues from the sale of goods and services, associated costs and value added can be compiled or estimated.

74. In those cases where the legal structure and the statistical structure based on production units do not coincide, statistical agencies will need to articulate the statistical structure and compile data with the help of surveys. The legal structure may consist of units created purely for tax purposes that are in no way relevant for the purpose of representing the producing units of the enterprise. However, if it is necessary to draw on tax records for the required data or if survey data need to be supplemented with tax data, statistical agencies will have to decide whether they can find a way to map the legal and statistical structure of the enterprise or whether they prefer to use the legal structure selectively as a proxy for the statistical structure.

75. The statistical structure delineates and identifies the units about which data are to be compiled. However, the data may have to be collected from higher- or lower-level units which are then described as collection entities. With increasing globalization, some multinational global enterprises are keeping integrated accounting records at the global or the regional level and it is becoming increasingly difficult to separate and extract complete accounts for all the activities taking place within each domestic economy, without obtaining the data from the main or regional head office of the global enterprise. Attributing the value of production and value added to domestic economies is particularly complicated when a global enterprise draws on production carried out in different domestic economies, assembles it in one or another of them, and then manages and maintains accounts for the distribution centres in the different economies under a separate division of the global enterprise. The enterprise may, in the first instance, maintain separate accounting records for all its production activities and all its distribution activities in all the economies in which it operates and, only later, attribute revenues and costs to each domestic economy for purposes of submitting tax returns to the revenue authorities.

4. National differences and application of statistical units

76. The concept of the establishment combines both an activity dimension and a locality dimension. It is based on the assumption that the aim of the statistical programme is to compile data classified both by activity and by geographical region. However, ISIC can be used to classify numerous variables including those that are needed to analyse production and industrial performance. In examining the accounting and operating structures of enterprises, it is possible that producing units with differing levels of homogeneity with respect to activities and geographical precision will be found and that they may be suitable for the compilation of data on selected variables, for example, numbers employed, or even for the compilation of production statistics because all the information needed with respect to meaningful operating profit is available.

77. While it may be desirable to give a complete account of possible statistical units, their definition in theoretical terms and in actual statistical applications, their delineation and their use in different forms of statistical data collection, one has to realize that it is impossible to do this at a

worldwide level in a way that would allow their immediate application in any given country. There are many factors that play a role in defining the best statistical unit for a given form of data collection, inter alia, the structure of the legal system in a country, including regulations for the organization of businesses, the particular structure of the industries involved, the type of data collection involved, the purpose and targeted level of data collection etc. The SNA discusses a wider range of statistical units that can serve as models, but may still be adjusted for reasons of national specifics and according to the type of data collection involved. See chapter V of the 1993 SNA for more information.

E. Classification of statistical units

1. General guidelines

78. In the following paragraphs, a number of general rules of interpretation are given that could be helpful when classifying more complex statistical units. It should be noted that the explanatory notes to some sections and divisions of ISIC also indicate how to treat such cases.

79. The activity classification of each unit is determined by the ISIC class in which the principal activity, or range of activities, of the unit is included. Secondary and ancillary activities are to be disregarded when classifying a unit. The principal activities of the unit in general can be determined from the goods that it sells or ships or the services that it renders to other units or consumers. The descriptions and explanatory notes of the individual classes in ISIC should be used to determine the activities carried out in terms of ISIC categories, using not only the output structure, but also the input structure and the production process.

80. Ideally, the principal activity of the unit should be determined by reference to the value added to the goods sold or the services rendered. In practice, it is often not possible to obtain the information on value added for individual products. It is therefore recommended that, in such cases, the principal activity be determined as an approximation by other criteria, such as:

- The proportion of the gross output of the unit that is attributable to the goods or services associated with these kinds of activity
- value of sales of those groups of products
- employment according to the proportion of people engaged in these different kinds of activity.

81. Instances may arise where considerable proportions of the activities of a unit are included in more than one class of ISIC. These cases may result from the vertical integration of activities, for example, tree felling combined with sawmilling or activities in a clay pit combined with those at a brick works; or the horizontal integration of activities that cannot be segregated into separate statistical units, for example, the manufacture of hides and skins in slaughterhouses; or the combination of any activities that cannot be separated at the level of the statistical unit. In these situations, the unit should be classified according to the rules set out below.

2. Treatment of mixed activities

(a) Treatment of independent multiple activities

82. If a unit is engaged in several types of independent activities, but the unit itself cannot be segregated into separate statistical units (when, for example, manufacture of bakery products is combined with manufacture of chocolate confectionery), the unit should be classified to the ISIC class with the largest share of value added by using the “top-down” method. In this case, first the appropriate highest

classification (one-digit level) should be determined, then the lower (two- and three-digit) levels and finally the class (four-digit level). If value added cannot be determined for the activities involved, approximations as set out above can be used, provided that their application to the different activities is consistent.

83. The “top-down” method may identify an activity as the principal activity of the unit, even though this activity does not account for the largest overall share of value added. However, this approach ensures better consistency with aggregated data. Following is an example of applying the top-down method to determine the classification code for a statistical unit.

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

The identification of the principal activity is carried out in five steps:

1. List the activities carried out by the unit, attributing to each appropriate class of ISIC, Rev. 3.1, the value added or another relevant measure (see para. 80) if it is not possible to calculate the value added.
2. Determine the section of ISIC, Rev. 3.1, that has the highest share of the chosen measure.
3. Within this section, determine the division of ISIC, Rev. 3.1, that has the highest share of the chosen measure.
4. Within this division, determine the group of ISIC, Rev. 3.1, that has the highest share of the chosen measure.
5. Within this group, determine the class of ISIC, Rev. 3.1, that has the highest share of the chosen measure. This class identifies the principal activity.

Example

Step 1. A reporting unit may carry out the following activities:

Section	Division	Group	Class	Description of the class	Share of value added (percentage)	
D	28	281	2812	Manufacture of tanks, reservoirs and containers of metal	7	
			29	291	2915	Manufacture of lifting and handling equipment
	292	2921			Manufacture of agricultural and forestry machinery	3
		2922			Manufacture of machine-tools	21
		2924			Manufacture of machinery for mining, quarrying and construction	8
	34	343	3430	Manufacture of parts and accessories for motor vehicles and their engines	5	
G	51	511	5110	Wholesale on a fee or contract basis	7	
		515	5159	Wholesale of other machinery, equipment and supplies	28	
K	74	742	7421	Architectural and engineering activities and related technical consultancy	13	

The principal activity is then determined as follows:

Step 2. Identify the section

Section D	Manufacturing	52
Section G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	35
Section K	Real estate, renting and business activities	13

Step 3. Identify the division (within section D)

Division 28	Manufacture of fabricated metal products, except machinery and equipment	7
Division 29	Manufacture of machinery and equipment n.e.c.	40
Division 34	Manufacture of motor vehicles, trailers and semi-trailers	5

Step 4. Identify the group (within division 29)

Group 291	Manufacture of general-purpose machinery	8
Group 292	Manufacture of special-purchase machinery	32

Step 5. Identify the class (within group 292)

Class 2921	Manufacture of agricultural and forestry machinery	3
Class 2922	Manufacture of machine-tools	21
Class 2924	Manufacture of machinery for mining, quarrying and construction	8

The principal activity is therefore **2922: Manufacture of machine-tools**, although the class with the biggest share of value added is class 5159: Wholesale of other machinery, equipment and supplies.

If the allocation had been made directly to the class with the largest share of value added, this would have achieved the strange result of putting this enterprise outside manufacturing.

(b) Treatment of vertical integration

84. Vertical integration of activities occurs where the different stages of production are carried out in succession by the same unit and where the output of one process serves as input to the next, as in the cases, for example, of tree felling combined with sawmilling, a clay pit combined with a brickworks, or production of synthetic fibres associated with a textile mill.

85. A unit with a vertically integrated chain of activities should generally be classified to the class indicated by the nature of the final products. For instance, in the above example, tree felling combined with sawmilling should be classified as sawmilling in class 2010 (Sawmilling and planing of wood). There are, however, some exceptions made to this general rule for practical reasons. These exceptions are described in the explanatory notes of the affected classes. Some examples of exceptions are illustrated by the following:

- Integrated growing of grapes and manufacture of wine are classified in agriculture (0113), not manufacturing, to account for the specific organization of these activities.

- Finishing of textiles made in the same unit is classified with the manufacture of the textiles in class 1711, 1729 or 1730, reflecting the character of the unit, that is to say, a textile mill etc.
- Retail sale of self-manufactured products is not considered a separate activity and is therefore classified in manufacturing, not in retail trade. If, however, in addition to self-produced goods, other products are also sold, the rules for the treatment of mixed independent activities have to be applied.

(c) Treatment of horizontal integration

86. Horizontal integration of activities occurs when activities are carried out simultaneously using the same factors of production. In this case, it will not be possible to separate them statistically into different processes, assign them to different units or generally provide separate data for these activities, nor will rules relying on allocation of value added or similar measures be applicable. Alternative indicators, such as gross output, may sometimes be applicable, but there is no general rule for identifying the single activity that best represents the mix included in this horizontal integration. As patterns of horizontal integration have been considered in the preparation of the classification, in many cases, either commonly integrated activities are included in the same class or explicit rules for their treatment have been supplied.

3. E-commerce

87. Business units receive orders and transact the sale of goods and services produced by a variety of means, for example, telephone, fax, television, electronic data interchange (EDI), Minitel and the Internet. Many countries have chosen to describe the business transaction that transfers the ownership of the goods or service when it is done through the Internet or other electronic means as e-commerce.

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

89. For many business units, e-commerce is just one of the variety of means by which sales are transacted. The rules for the industrial classification of such units remain unchanged: they are classified to the industry of their principal activity. Increasingly, however, business units that sell goods and supply services exclusively through the Internet are coming into existence. Such units should also be classified to the industry of their principal activity. Business units engaged in e-commerce will therefore be found in any industry of ISIC. It should be noted that the only exception to this rule is the following: in retail trade, business units that undertake their sales exclusively or predominantly through the Internet are classified within industry group 525 (Retail trade not in stores) to class 5251.

4. Repair and maintenance

90. Units that repair or overhaul capital goods are to be classified in the same class as the units that produce the goods. Three main exceptions exist to this rule:

- Repair and maintenance of motor vehicles and maintenance and repair of motorcycles are classified in class 5020 and in class 5040, respectively.
- Repair of personal and household goods is classified in class 5260.
- Repair and maintenance of computers and office equipment are classified in class 7250.

5. Activities on a fee or contract basis

91. Except in cases where special categories exist, units carrying out activities on a fee or contract basis are to be classified in the same class as units that produce for their own account and risk. Conversely, units that sell goods or services under their own name and for their own risk but have the actual production carried out by others are to be classified as if they produce the goods or services themselves, provided that they have considerable influence on the conception of the products or, in the case of the manufacturing industry, they own the materials to be transformed.

6. Government activities

92. ISIC does not make any distinction regarding the institutional sector to which a statistical unit belongs. For instance, there is no category that would describe all activities carried out by the government as such. Activities carried out by government units that are specifically attributable to other areas of ISIC should be classified in the appropriate class of ISIC and not in division 75 (Public administration and defence; compulsory social security). For instance, public hospitals will be classified in class 8511.

7. Classification of enterprises

93. Since the activities of an enterprise sometimes cover a great variety of ISIC groups or classes, it may be appropriate for certain statistics to classify them at the division level only. In any case, when such a unit is to be classified at a lower level of the classification, the top-down approach, as set out in subsection 2 of the present section (paras. 82-83), should be used.

94. The classification of a multi-activity enterprise should be determined from the value added by its constituent units. Such a unit should be classified in the category of ISIC that covers the kinds of activity of the constituent units that account for the principal amount of value added. For example, in the case of establishments of an enterprise that make up a vertical chain of production, this principle gives proportional weight to establishments included in each portion of the chain. The use of the principle also makes it feasible to determine the category of an industrial classification to which an enterprise is to be assigned directly from the categories of the classification to which its constituent units are classified.

95. If data are not available on the value added of the constituent units of enterprises, figures on employment, or wages and salaries paid by these units might be used in order to determine their preponderant class of activities. As far as possible, use should be made of net measures of the activities of the establishment-type units. Figures of the gross output of these units can be misleading. The portion of the gross output of each establishment that is accounted for by the value added there can vary markedly from one unit to another. In some instances, for example, in dealing with industries with a very high investment quota and a relatively low wage quota, the value of assets in each constituent unit may also be taken into account when weighing the different activities to determine the preponderant class.

96. The classification of entities engaged in ancillary activities, particularly central administrative offices, according to the predominant kind of activity of the establishments served by them may, in some cases, be questionable or difficult. The predominant kind of activity may account for much less than half of the total activity of the establishments served, or these establishments and the central administrative office may be located in different countries. This has led to the provision of a special category for central administrative offices in the case of some national industrial classifications. The special category is included under the equivalent of business activities in ISIC (class 7414).

8. Classification of households

97. Previous versions of ISIC have included categories for the classification of households when they were employers of domestic personnel. These included households employing maids, gardeners, cooks etc. As employment is generated, data on these units have been collected for various statistics, usually outside of the general business statistics.

98. Outside of this existing category, the need to describe activities of households for own use has emerged in data collections, such as in labour-force surveys. While market activities should generally be described according to existing rules for identifying the correct ISIC code for an activity, the application of these rules for activities producing goods and services for own use has proved difficult. These activities often combine agricultural, construction, textile manufacturing, repair and other services. In general, it is not possible to assign value-added ratios to these activities and reasonably identify a primary activity. To provide a place for these mixed activities in the classification, two new divisions have been created. These new divisions, 96 (Undifferentiated goods-producing activities of private households for own use) and 97 (Undifferentiated service-producing activities of private households for own use), will normally not be relevant in business statistics, but rather in data collections covering household and subsistence activities.

F. Structure and coding system of the classification

99. A comparison of the general structure of ISIC, Rev.2, with that of ISIC, Rev.3, indicates that the former was not essentially changed. However, more detail was introduced, especially at the one- and two-digit levels in the services areas. A request for this change was made by both producers and users of statistics. In the present update to ISIC, Rev.3, there is again no alteration in the structure at any of the higher levels.

100. The versions of ISIC up to and including Revision 2 used a hierarchical system of categories that were entirely coded using Arabic numerals, based on a decimal system arrangement. This system was considered to be more universally applicable than one employing letters or Roman numerals. It also met the requirements of offices using data-processing equipment. ISIC, Rev.2, had nine one-digit categories which were most of the time further subdivided into a maximum of nine subcategories at each subsequent level.

101. During the third revision of ISIC, new needs added considerable complexity to the revision process. In addition to maintaining as much comparability as possible by introducing only those changes upon which there was a wide measure of agreement, creating a structure that would achieve greater balance between higher- and lower-level categories than had been the case with ISIC, Rev.2, was also deemed important. In the previous revision, some one-digit categories had been undivided and others were broken down into many subcategories, often up to the four-digit level. As a result, some classes deserved more weight than some categories at higher levels of the classification, in terms of economic importance.

102. The need for economic statistics to reflect the structure of an economy in a modern way, giving due consideration to the increasing importance of some service industries in terms of their contribution to the gross domestic product (GDP), made the use of a new coding system inevitable. In devising the coding system for ISIC, Rev.3, a separation was introduced in the coding structure in order to make the classification responsive to the tabulation needs of certain users. This was accomplished by

the use of letters at the one-digit level to single out broad tabulation categories, in contrast with the coding itself, which would remain purely numerical at the two-, three- and four-digit levels.

103. The two-digit categories were grouped in clusters of multiples of 5, which theoretically allowed for 20 of such clusters instead of only 10 at the highest level of the classification. They represent the most important sectors of the economy of most countries: agriculture, fishing, mining, manufacturing, energy supply, construction, trade, hotels and restaurants, transport, finance, business activities, public administration, education, health, community service activities, households and extraterritorial bodies. For reasons related to tabulation, these sectors were coded with a Roman capital letter.

104. For quick comparisons, it should be noted that the tabulation categories of ISIC, Rev.3, can easily be converted into the one-digit major divisions of ISIC, Rev.2. This conversion can be carried out as follows: tabulation categories A+B equal old Major Division 1; C equals 2; D equals 3; E equals 4; F equals 5; G+H equal 6; I equals 7; J+K equal 8; L to Q equal 9. The main exception is research and development, which was transferred from Major Division 9 to new section K. These relationships remain unchanged in ISIC, Rev.3.1.

105. The names given to the categories at the different levels in ISIC, Rev. 3, and ISIC, Rev. 3.1, were changed from those in the second revision. This was done for two reasons. First, it seemed better to discontinue the use of a name in combination with a number of digits as in ISIC, Rev.2, in order to prevent confusion of categories from Rev.3 with those from Rev.2. Only the "Division" for the two-digit categories was maintained. The second reason was to harmonize the use of category names with other classifications of the United Nations, for example, the Standard Industrial Trade Classification (SITC)⁷ and the Central Product Classification.⁸ For practical reasons, the tabulation categories are called "sections", the two-digit categories "divisions", the three-digit categories "groups" and the four-digit categories "classes".

106. While the tabulation categories are assigned capital letters, the Arabic numbers assigned to a given category of ISIC may be read as follows: the first and second digits, taken together, indicate the division in which the category is included; the first three digits identify the group; and all four digits indicate the class. ISIC now comprises 17 sections, which are then further subdivided into a total of 62 divisions, 161 groups and 298 classes. The added detail has considerably increased the number of these categories compared with ISIC, Rev.2. The changes made in the present update to ISIC, Rev.3, have resulted in the creation of only six new classes.

107. In cases where a given level of the classification is not divided into categories of the next more detailed level of classification, "0" is used in the code position for the next more detailed level. For example, the code for the group "Fishing" is 050 since the division "Fishing" (code 05) is not divided into groups. Or, the code for the class "Mining of uranium and thorium ores" is 1200 because the division "Mining of uranium and thorium ores" (code 12) is divided neither into groups nor into classes. The group "Cargo handling" is coded as 6301 since the division "Supporting and auxiliary transport activities" (code 63) is not divided into groups but the group "Supporting and auxiliary transport activities" (code 630) is divided into classes. In computers, the "0" could also indicate that a total of all more detailed categories is being used. Hence, the code 2690 could be used for the total 2691-2699 and 3300 could represent the total 3311-3330. This could of course also be achieved by using the next higher level of the classification, but in some instances it may be appropriate to use the same format, that is to say, number of digits, for all code numbers.

III. Application of the Classification

A. General remarks

108. The Statistical Commission has recommended that countries classify data according to ISIC, or according to categories convertible to ISIC, in such areas of statistics as production, employment or national accounts. ISIC is being utilized by the United Nations and other international and national bodies in assembling and publishing internationally comparable data for a wide range of statistical series classified according to kind of economic activity. The International Conference of Labour Statisticians has also made explicit references to ISIC in respect of several areas of labour statistics.

109. The range of application of ISIC extends far beyond the traditional areas such as data collection in industrial statistics. It includes applications for methodological work and policy decisions, such as descriptions of barriers to trade in the system of foreign direct investment, the activities of foreign affiliates for statistics on international trade in services and work related to the functions of government. For many purposes, ISIC is used in conjunction with or as proxy for other classifications, such as the Classifications of Expenditure According to Purpose.⁹

110. ISIC is intended to meet the needs of those who are looking for data classified according to internationally comparable categories of kind of economic activity. Its purpose is not to supersede national classifications, but to provide a framework for the international comparison of national statistics. Where national classifications differ from the international classification, this comparison may be achieved by regrouping figures obtained under national classifications; but to do this, all the elements required for such a rearrangement need to be obtainable from the national statistics.

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

112. The character and definition of categories of ISIC can also serve as a useful guide to those countries that are developing an activity classification for the first time, or to those that are revising an existing one. A number of countries have utilized ISIC in this way.

113. The international classification provides categories for economic activities that are important in nearly every country or that, while found only in some countries, are of considerable importance in the world economy. In delineating these individual categories, ISIC reflects the structure of production, that is to say, the way in which economic activities are combined in, and distributed among, producing units in most countries.

114. The United Nations Statistics Division has put in place mechanisms to distribute relevant information on international classifications, including ISIC, their revisions, their applications and their interpretations and on national specifications and adaptations. With respect to these, ISIC may serve as model and provide guidelines for the development of national classifications. These tools or information about them can be accessed through the web site of the Statistics Division (<http://unstats.un.org/unsd/class>).

B. Use of ISIC in establishing related national classifications

115. Regarding the relationship between ISIC and related national activity classifications, one may distinguish two broad groups of countries: (a) countries that have developed their own national classifications and perceive ISIC as being essentially based on, or derived from, these; and (b) countries that see their own national classification as one that is based on, or derived from, ISIC. Countries in the second group often lack the infrastructure required to develop and maintain their own activity classification, and may therefore adopt ISIC as their national activity classification with little or no modification.

116. The desire for international comparability does not, however, imply that countries have to adopt ISIC as a whole, without modification. The intention is rather to have countries use ISIC as a guide in adapting their national classifications to the international standard. Adapting ISIC to specifics of the national economy while maintaining international comparability requires observation of a number of rules outlined below.

C. Aggregation and disaggregation of ISIC

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

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

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

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

121. ISIC categories may be aggregated, for example, by combining the classes of selected groups into fewer, less detailed classes, or by entirely telescoping classes into groups. It may even, in certain instances, be desirable or necessary to have categories at the most detailed level of the national classification that combine classes of ISIC. This may be because the kinds of activity segregated by selected classes of ISIC are not important enough in a given country. Or, it may be due to a much smaller degree of specialization in the activities of the statistical units than is required in order to use certain classes of ISIC in the national scheme. For example, some countries may not establish categories in their national classifications that are similar to the individual categories of divisions 29 to 32 (Manufacture of machinery), inasmuch as the majority of establishments engaging in activities of class X also carry out the activities of class Y and vice versa, thereby making it impractical to separate these activities in the national classification. They may need to combine some of, or all, the groups or classes into single categories at the most detailed level of their national classification.

122. It should be kept in mind that combining classes into higher aggregates, either at the group level or elsewhere, will limit comparability of data at the international level to that level or to even higher aggregates. The latter can occur if countries decide to aggregate some of the four-digit classes within, for example, group 291. If two countries aggregate classes within group 291, comparability of their data will not be available at their respective aggregated levels, but only at the higher level of group 291. The combining of classes should therefore be carefully considered in respect of the impact on comparability for data compiled according to these new categories.

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

123. The quality as well as the comparability of the statistics produced according to ISIC will depend upon the correctness of the codes assigned to the statistical units. This will again depend on the information available for determining the correct code and upon the tools and procedures used for this determination.

124. To some extent, the quality of the information will depend upon the type of statistical source. The quality of information collected for administrative registrations will depend on the extent to which this information has a function in the administrative procedures for which the registrations are being made, and what kind of distinctions this function will require, for example, whether tax rules, social security regulations, the rules for investment credits or the services provided by employment agencies will require precise registration of the type of activity undertaken. The statistical offices will therefore frequently need to collect directly from the units the information needed to determine the activity codes of the units, even when the register used as the basis for their surveys is derived from or developed in cooperation with one or more of the administrative agencies. Given the nature of ISIC, the information that is needed to code for the register as well as the surveys will have to describe the main outputs, that is to say, goods, services or function, of the units' productive activities. For units with a wide range of products, information about them will also be necessary to determine their contributions to the value added or other relevant factors by which to determine the units' main activity. This information must be obtained from the units, and care must be taken to ensure that those individuals who provide the information on behalf of the units understand the type of information needed so that they can find it in the records of the units or from their own knowledge. Thus, testing of question formulations is as important for establishment surveys as it is for household surveys. For household surveys and population censuses, it is recommended that information be obtained both regarding the name and address of the place of work and about the main products made there. Then it may be possible to obtain the correct code either from a matching unit in the register or on the basis of the product information. For the registers as well as for the two types of surveys, finding the correct codes on the basis of product information will be greatly facilitated by a well-organized and comprehensive coding index.

E. Use of different levels of the classification for the presentation of statistics

125. It may be desirable to utilize less detailed classification categories of kind of economic activity for some types of statistics than for other series, and the number and size of the categories for which reliable statistics are presented may depend on the type of source for the statistics as well as on confidentiality considerations. For example, it may not be feasible to present data on employment gathered in household inquiries in as great detail as data on employment obtained from establishment inquiries. Or, it may not be necessary to present data according to kind of economic activity in as great detail in national accounting as in industrial statistics. By providing for four levels of classification (sections, divisions, groups and classes), ISIC furnishes a framework for comparable classifications of data at different levels of detail. It is important to note, however, that the fact that a category has been defined at the class level in ISIC will not prevent it from being larger in a particular national economy than a category defined at the group level or even at the level of division or section, as will be the case, for example, for division B (Fishing) versus class 8021 (General secondary education) in many countries. Thus, it may be inappropriate to specify tabulation programmes as tabulation for a particular level of aggregation for ISIC.

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

F. Compilation of homogeneity ratios

127. Despite the endeavour to define the classes of ISIC or the most detailed level of any other national activity classification in such a way that the two conditions described in paragraph 12 above are satisfied, some of the activities of establishments, or similar units, that are classified to a given class will be characteristic of other classes of the classification. In compiling data classified according to kind of economic activity, it will therefore be valuable to compute measures of homogeneity in respect of kinds of activity for the units falling into the various categories of the scheme of classification.

128. The two most important ratios for assessing the homogeneity of the various categories are the specialization ratio and the coverage ratio. The specialization ratio of an industry is the output by that industry of goods or services characteristic of that industry in proportion to its total output. The coverage ratio is the output of goods or services characteristic of the industry in proportion to the total output of the same goods or services by the economy as a whole.

129. When calculating these ratios, a number of problems should be kept in mind. Some products can be characteristic of more than one industry (for example, by-products that occur by necessity); some other products may be non-characteristic of any particular industry (for example, waste); and some may have to be declared characteristic of one or more industries by convention (for example, industrial repair services). In such cases, judgement should be exercised in interpreting the calculated ratios.

130. It should also be noted that the creation of an industry with high ratios is no guarantee of useful statistics. Nor is a category with low ratios by definition useless. It is possible to create a category with a high specialization or coverage ratio that in economic terms is negligible. On the other hand, a category with a relatively low coverage ratio but a high specialization ratio may very well provide useful information for further analysis. Therefore, the ratios should not be used as the only determining factors

when establishing an industry classification; instead, they should always be used in combination with other criteria.

131. The homogeneity ratios might be computed in respect of the total gross output of the units classified to each class of the classification or – this being more preferable though more burdensome – in respect of the gross output of the individual statistical units. In the latter case, the establishments or similar units that fall into the various categories of the industrial classification would be arrayed according to class intervals of the homogeneity ratio. The specialization ratio especially should be a determining criterion when classifying a unit.

132. Homogeneity ratios can also be calculated in respect of the classification of kind of activity units or establishments to the groups or divisions as well as to the classes of ISIC. It will also be desirable to compute homogeneity ratios in respect of the classification of enterprises to the divisions of the industrial classification. Some enterprises will own establishments the principal kind of activity of which falls outside the scope of the division to which the enterprise is classified. The homogeneity ratios of enterprises might be based on the value added, or, if necessary, the employment, of the constituent units. It would indicate the proportion of the total value added, or employment, of enterprises accounted for by the constituent units classified to the same division as the owning enterprise. Such ratios would be extremely valuable in assessing the degree of comparability of enterprise data from different countries.

IV. Relationship with other classifications

A. General remarks

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

B. Relationship with product classifications: CPC, HS and SITC, Rev.3

134. The relationship between ISIC on the one hand and the product classifications HS, CPC and SITC on the other is based on the fact that the product classifications in principle combine in one category goods or services that are normally produced in only one industry as defined in ISIC. In HS, this origin criterion was respected as far as possible at the time. In some cases – for instance, when it seemed impossible that a customs officer could make the distinction – the principle was not applied. Still, most headings and sub-headings of HS contain goods that are generally produced in only one ISIC category. The arrangement of headings and sub-headings of HS, however, follows criteria that are quite different from industrial origin and the structure of CPC or SITC.

135. The differences between CPC, HS and SITC result from the fact that they were created for different purposes. HS is the detailed classification for international trade of transportable goods, while SITC is a more aggregated classification for analytical purposes with the same scope as HS, that is to say,

trade of transportable goods. The scope of CPC exceeds that of HS and SITC, in that it is intended to cover the production, trade and consumption of all goods and services. Both CPC and SITC, Rev.3, regroup HS categories, albeit in different ways. SITC follows a traditional order in which the materials used, the stage of processing and the end use are the main considerations. CPC arranges its categories in groups that are similar to ISIC categories. This does not mean, however, that all goods are grouped according to their industrial origin.

136. Although origin had been an important criterion when developing CPC, it was produced as a classification in its own right – one in which classification is based on the physical characteristics and intrinsic nature of goods or on the nature of the services rendered. For example, while meat and hides are both outputs of slaughterhouses (ISIC class 1511, "Production, processing and preserving of meat and meat products"), they appear in different sections of CPC. However, each type of good or service distinguished in CPC is defined so that it is normally produced by only one activity as defined in ISIC. As far as practically possible, an attempt is made to establish a correspondence between the two classifications, each category of CPC being accompanied by a reference to the ISIC class in which the good or service is mainly produced.

137. For SITC, the same relationship with ISIC exists, that is to say, each item (five-digit category) of SITC is generally produced by only one ISIC class. The relationship between SITC and CPC is such that whole items of SITC can be aggregated to one CPC subclass and, conversely, whole CPC subclasses can be aggregated into one group (three-digit category) of SITC¹⁰.

C. Relationship with other classifications of goods and services (BEC, EBOPS)

138. The Classification by Broad Economic Categories (BEC)¹¹ has been developed by the United Nations. BEC is designed to serve as a means for converting data compiled on SITC –which, as it stands, is not entirely suitable for analysis by end use – to meaningful aggregates for purposes of economic analysis of the use to which goods are put, based on concepts of the SNA (distinction between capital goods, intermediate goods and consumption goods). There is no relationship between ISIC and BEC other than the fact that BEC rearranges the SITC categories in 19 BEC categories. In doing so, it takes no account of the industrial origin of the goods. BEC was revised in 1986, based on the third revision of SITC, and in 2003 to reflect its relationship with the revised version of HS.

139. A correspondence between ISIC and the Extended Balance of Payments Services Classification (EBOPS)¹² has been developed to describe the link between primary activities of enterprises in terms of ISIC with balance-of-payments categories.

D. Other derived and related activity classifications (NACE, ANZSIC, NAEMA, NAICS, ICFA)

140. From the start of the work on harmonization of economic classifications the Statistical Commission emphasized that efforts should be made to harmonize multinational classifications with ISIC, Rev.3. The work of the Expert Group on International Economic and Social Classifications has continued these efforts with the work within the International Family of Economic and Social Classifications. The preamble lays out the foundations of these relationships between reference classifications (such as ISIC for economic activities) and derived and related classifications. The need for convergence of existing activity classifications has been stressed again by the Statistical Commission and will be a key element in the future work on these classifications.

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

1. Derived classifications

142. Through the United Nations Statistical Office/Statistical Office of the European communities (UNSO/SOEC) Joint Working Group and the cooperation of all parties concerned, it was agreed that the revised General Industrial Classification of Economic Activities within the European Communities (NACE) and the related product classification of the European Communities would be identical with, or an extension of, ISIC and CPC, respectively. Also the coding systems used in classifications of the United Nations and the European Communities would be, as far as possible, the same. As a result, data of both organizations became widely compatible. ISIC and NACE are identical up to the two-digit level (divisions) of the classification. At lower levels, NACE has created more detail suitable for European users of the classification. The additional detail created can always be aggregated to ISIC categories at the three- and four-digit levels, within the same structure.

143. The member States of Afristat have developed an activity classification known as Nomenclature d'Activités des Etats Membres d'Afristat (NAEMA)¹³, derived from ISIC, Rev.3. Guiding its development was the desire to respect international recommendations, and take into account the needs of member States at the same time. The NAEMA came into force in member States of Afristat in January 2001.

144. NAEMA follows ISIC by using the 17 sections (one-digit level) and 60 divisions (two-digit level) of ISIC, Rev.3, without change. The 149 groups (three-digit level) of this classification are generally identical to those of ISIC. The exceptions relate to aggregations of groups of ISIC when the latter seemed too detailed, relative to the economy of the member States, or to splitting of groups of ISIC for a better breakdown of significant African activities, in particular agriculture and the agricultural processing industry, while observing the procedure of adaptation of the international classifications, as set out in chapter III, sections B and C.

145. Given that the economies of Afristat's member States encompass a significant share of the primary sector (agriculture, breeding, fishing and forestry development) and few developed industrial activities, the work on NAEMA resulted in an increase in the number of classes in the primary sector and a reduction of classes for the activities of manufacturing.

146. The ISIC Categories for Foreign Affiliates (ICFA)¹⁴ is a system of industry groupings drawn from ISIC, provided for use in reporting statistics on foreign affiliates to international organizations. ICFA has been developed to allow the activities of services enterprises to be viewed in the context of the activities of all enterprises.

2. Related classifications

147. The Australian and New Zealand Standard Industrial Classification (ANZSIC), released in 1993, broadly aligns with ISIC at the detailed level. At the class level, ANZSIC has been designed to correspond to individual or aggregate ISIC classes. In some industries, combinations of activities within

Australian and New Zealand economic units cross ISIC boundaries creating a number of m-to-n links. These instances have been kept to the minimum. ISIC concepts and interpretations underpin the ANZSIC without deviation.

148. The North American Industry Classification System (NAICS) was developed in the mid-1990s. Efforts have been undertaken to minimize the extent to which the lowest levels of NAICS (five-digit, industries) cross the boundaries of the two-digit level of ISIC, Rev.3. This allows statistical data collected according to NAICS to be reaggregated into the two-digit divisions of ISIC, Rev.3, and reflects a striving to ensure comparability of data, even if NAICS has been developed on a different conceptual basis than ISIC.

E. Relationship of other international classifications with ISIC

149. There are other classifications developed by the United Nations or its subsidiary organs that have some relationship with ISIC or that make use of parts of ISIC in defining their own scope or categories. They have been developed for the description of statistics on occupations, employment, expenditures, education, tourism and environment. These are the Classification of the Functions of Government (COFOG), the International Standard Classification of Education (ISCED),¹⁵ the International Standard Classification of Occupations (ISCO)¹⁶ and the activity classification of the Tourism Satellite Account (TSA)¹⁷.

150. COFOG, which was developed by the former Statistical Office of the United Nations Secretariat mainly for use in the System of National Accounts, was first published in 1980 and revised in 2000. COFOG is in practice very similar to ISIC. In principle, its unit of classification is the individual transaction, but for many types of outlays, the unit will be the same government unit as for ISIC. Moreover, the criteria of classification - function in the case of COFOG and activity for ISIC - are conceptually rather similar. However, COFOG is more appropriate than ISIC for classifying government expenditures because the COFOG list of functions is more detailed than the ISIC list of activities, having been drawn up specifically to take account of the range and diversity of government activities. Although there are similarities between the criteria of the two classifications, problems may arise when comparing data collected according to ISIC and COFOG. For instance, COFOG covers not only direct outlays on government-owned schools, but also the subsidizing of privately owned schools and outlays on subsidiary services to education such as school transport, food and lodging for students etc. A correspondence table between COFOG and ISIC categories is shown in part five, section A, of this publication.

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

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

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

154. The primary units to be classified to ISCO are jobs. Jobs are classified to ISCO on the basis of the type of work performed, that is to say, the task and duties to be carried out. As ISIC and ISCO have entirely different functions and conceptual foundations – in other words, they measure very different aspects of the economy – there is no need to “harmonize” their structures. However, ISCO makes use of appropriate references to ISIC when defining similarities and differences between certain groups, when these are based on the type of distinctions that are reflected in ISIC, that is to say, between the type of products, namely, goods and services, that are being produced or sold. In ISCO-88, such references are given for distinctions made between the unit groups in minor groups 122 ("Production and operations department managers") and 131 ("General managers").

155. A new international standard, the Tourism Satellite Account (TSA), has recently been developed and was approved by the Statistical Commission at its thirty-first session in 2000.¹⁸ It sets the measurement of tourism and its impact on the economy within the macroeconomic framework of the SNA. The list of tourism-related activities that appeared in annex II of part two of ISIC, Rev.3, has been superseded by the TSA which identifies tourism in terms of characteristic products purchased by visitors and the activities that produce them, and lists them in terms of CPC and ISIC. Tourism characteristic activities are defined as those productive activities that produce one or more tourism characteristic products as a typical output of the production process characterizing the activity. The concepts, definitions and classifications to be used as well as the recommended methodological framework are described in *Tourism Satellite Account: Recommended Methodological Framework*. Tourism characteristic products and tourism characteristic activities are listed in annex II of that publication.

V. Other topics

A. Changes in ISIC, Rev.3.1, as compared with ISIC, Rev.3

156. The current update to ISIC, Rev.3, has been limited in respect of its impact on the structure of the classification. Some changes were necessary to allow proper aggregation of complete ISIC classes into the alternate aggregations shown in part four of this publication. Only two ISIC groups had to be split to accomplish this. Since these groups (515 and 722) have not been subdivided before, countries unable to implement this new detail of the classification can still produce data at the three-digit level, that is to say, the group level, without compromising comparability with other, newer time series.

157. ISIC group 050 (Fishing, aquaculture and service activities incidental to fishing) has been subdivided into two classes: 0501 (Fishing) and 0502 (Aquaculture) to account for the differences in the nature, and the importance, of these two activities.

158. ISIC group 515 (Wholesale of machinery, equipment and supplies) has been subdivided into three classes: 5151 (Wholesale of computers, computer peripheral equipment and software), 5152 (Wholesale of electronic and telecommunications parts and equipment) and 5159 (Wholesale of other machinery, equipment and supplies).

159. ISIC group 722 (Software publishing, consultancy and supply) has been subdivided into two classes: 7221 (Software publishing) and 7229 (Other software consultancy and supply). In addition, these classes now include the creation and publication of software for all kinds of platforms, including video games.

160. ISIC section M (Education) has been adjusted to take account of the changes in the International Standard Classification of Education (ISCED), which was revised in 1997. Most notably, the treatment of adult education at various levels has been changed.

161. Two new divisions have been included in ISIC, Rev.3.1 (division 96: Undifferentiated goods-producing activities of private households for own use; and division 97: Undifferentiated service-producing activities of private households for own use) in order to cover production activities carried out by private households for their own use. Hence, these divisions would normally not be relevant in business statistics, but useful in data collections covering household and subsistence activities.

162. A number of smaller corrections have been made to the classifications. Details of these corrections are reflected in the correspondence tables between ISIC, Rev.3, and ISIC, Rev.3.1, contained in part five of this publication. A more detailed description of these corrections is available in the Classifications Registry on the United Nations Statistics Division web site (<http://unstats.un.org/unsd/class>).

B. Indexes to the classification

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

164. New interpretations of the classification, usually related to new activities, can be easily reflected in the index, while usually no change in the classification or its related texts is necessary. Indexes for ISIC were published in printed form for ISIC, Rev.2, in 1971¹⁹. Indexes for this new version of ISIC will be available in machine-readable form only, published in the Classifications Registry on the United Nations Statistics Division web site (<http://unstats.un.org/unsd/class>).

C. Correspondence tables

165. Correspondence tables are an important tool for comparing statistical data that have been collected and presented using different classifications. They become necessary when the classification changes over time or when different underlying frameworks do not allow classifications to be closely related. Correspondence tables between different versions of the same classification are used to describe the detailed changes that have taken place in the revision process.

166. Since ISIC has been used for the collection and presentation of statistics in many areas, there has been a strong need for correspondence tables between ISIC and other classifications. This publication includes correspondence tables between ISIC, Rev.3.1, and ISIC, Rev.2, to allow for comparison of historical data, as well as correspondence tables between ISIC, Rev.3.1, and ISIC, Rev.3, to detail the changes that have been made in the current revision.

167. When drafting ISIC, Rev.3, and simultaneously CPC, a strong link was established between the two classifications. By rearranging the CPC categories according to their industrial origin, and using the link between CPC, SITC and HS, a detailed correspondence table between HS, SITC, CPC and ISIC was established, but has not been included in this publication.

168. There is a strong need to link ISIC and the Classification of the Functions of Government (COFOG). While the latter classifies transactions and not transactors, there is usually an activity characteristic for the transactions classified in COFOG that allows linking the transactions with the appropriate statistical units. It should be noted that ISIC does not make any distinctions between government-owned and privately owned businesses. A correspondence between the two classifications is provided in part five of this publication.

D. Special-purpose groupings of ISIC/alternate aggregations

169. Economic analysis and presentation of statistics on specific subjects often require aggregation of data, collected according to ISIC, in ways that are different from the aggregation provided by the ISIC structure. For these special purposes, standard aggregations have been created to meet these demands, such as those presented in part four of this publication (for the information sector, the information and communication technologies (ICT) sector and the informal sector) and those defined in other statistical frameworks (for "Tourism activities", "Environmental activities" etc.). These alternate aggregations may use either complete ISIC classes, such as the alternate aggregation for the information sector, or only parts of ISIC classes, if the underlying concept for the aggregation is not comparable with the principle used in ISIC (see part four for more detailed information).

170. Annex II on tourism-related industries found in part two of ISIC, Rev. 3, has not been reproduced in ISIC, Rev. 3.1, as the simple approach of showing a list of tourism-related industries (Standard International Classification of Tourism Activities (SICTA)) as an annex to ISIC has been superseded by a much more comprehensive satellite account framework, as described in paragraph 155 above.

E. Support for ISIC users

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

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

173. Communications may be sent to the Director, United Nations Statistics Division, Attention: Statistical Classifications Section, by mail (address: 2 United Nations Plaza, Room DC2-1670, New York, NY 10017, USA); by fax (1-212-963-1374); or through the Classifications Hotline by e-mail (chl@un.org).

Notes:

- ¹ Statistical Papers, Series M, No. 4, Lake Success, New York, 31 October 1949.
- ² *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev. 1 (United Nations publication, Sales No. E.58.XVII.7).
- ³ *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev. 2 (United Nations publication, Sales No. E.68.XVII.8).
- ⁴ *International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev. 3 (United Nations publication, Sales No. E.90.XVII.11).
- ⁵ See *official records of the Economic and Social Council, 1999, Supplement No. 4 (E/1999/24)*, para. 108 (b).
- ⁶ Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations and World Bank, *System of National Accounts, 1993* (United Nations publication, Sales No. E.94.XVII.4).
- ⁷ *Standard International Trade Classification, Revision 3*, Statistical Papers, Series M, No. 34, Rev. 3, and corrigenda (United Nations publication, Sales No. E.86.XVII.12 and Corr. 1 and 2).
- ⁸ *Central Product Classification (CPC), Version 1.1*, Statistical Papers, Series M, No. 77, Ver.1.1 (United Nations publication, Sales No. E.03.XVII.3).
- ⁹ *Classifications of Expenditure According to Purpose: Classification of the Functions of Government (COFOG), Classification of Individual Consumption According to Purpose (COICOP), Classification of the Purposes of Non-Profit Institutions Serving Households (COPNI), Classification of the Outlays of Producers According to Purpose (COPP)*, Statistical Papers, Series M, No. 84 (United Nations publication, Sales No. E.00.XVII.6).
- ¹⁰ See *Central Product Classification (CPC), Version 1.0*, Statistical papers, Series M, No. 77, Ver.1.0 (United Nations publication, sales No. E.98.XVII.5), part one, paras. 35, 36, 44.
- ¹¹ *Classification by Broad Economic Categories: Defined in Terms of the Standard International Trade Classification, Rev. 3 and the Harmonized Commodity Description and Coding System (2002)*, Statistical Papers, Series M, No. 53, Rev.4 (United Nations publication, Sales No. E.03.XVII.8).
- ¹² International Monetary Fund, *Balance of Payments Manual*, 5th ed. (Washington, D.C., IMF, 1993).
- ¹³ *Nomenclature d'Activités des Etats Membres d'Afristat (NAEMA)*, Série Méthodes, No. 3 (Bamako, Afristat, December 2000).
- ¹⁴ See United Nations, European Commission, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations Conference on Trade and Development and World Trade Organization, *Manual on Statistics of International Trade in Services*, Statistical Papers, Series M, No. 86 (United Nations publication, Sales No. E.02.XVII.11).
- ¹⁵ *International Standard Classification of Education (ISCED 1997)* (Paris, UNESCO, November 1997).
- ¹⁶ *International Standard Classification of Occupations (ISCO-1988)* (Geneva, ILO, 1988).
- ¹⁷ Commission of the European Communities, Organisation for Economic Co-operation and Development, United Nations and World Tourism Organization, *Tourism Satellite Account: Recommended Methodological Framework*, Statistical Papers, Series F, No. 80 (United Nations publication, Sales No. E.01.XVII.9).
- ¹⁸ See *Official Records of the Economic and Social Council, 2000, Supplement No. 4 (E/2002/24)*, para. 18.
- ¹⁹ *Indexes to the International Standard Industrial Classification of All Economic Activities*, Statistical Papers, Series M, No. 4, Rev.2, Add.1 (United Nations publications, Sales No. E.71.XVII.8).

"Code","Description"

"A","Agriculture, hunting and forestry"

"01","Agriculture, hunting and related service activities"

"011","Growing of crops; market gardening; horticulture"

"0111","Growing of cereals and other crops n.e.c."

"0112","Growing of vegetables, horticultural specialties and nursery products"

"0113","Growing of fruit, nuts, beverage and spice crops"

"012","Farming of animals"

"0121","Farming of cattle, sheep, goats, horses, asses, mules and hinnies; dairy farming"

"0122","Other animal farming; production of animal products n.e.c."

"013","Growing of crops combined with farming of animals (mixed farming)"

"0130","Growing of crops combined with farming of animals (mixed farming)"

"014","Agricultural and animal husbandry service activities, except veterinary activities"

"0140","Agricultural and animal husbandry service activities, except veterinary activities"

"015","Hunting, trapping and game propagation including related service activities"

"0150","Hunting, trapping and game propagation including related service activities"

"02","Forestry, logging and related service activities"

"020","Forestry, logging and related service activities"

"0200","Forestry, logging and related service activities"

"B","Fishing"

"05","Fishing, aquaculture and service activities incidental to fishing"

"050","Fishing, aquaculture and service activities incidental to fishing"

"0501","Fishing"

"0502","Aquaculture"

"C","Mining and quarrying"

"10","Mining of coal and lignite; extraction of peat"

"101","Mining and agglomeration of hard coal"

"1010","Mining and agglomeration of hard coal"

"102","Mining and agglomeration of lignite"

"1020","Mining and agglomeration of lignite"

"103","Extraction and agglomeration of peat"

"1030","Extraction and agglomeration of peat"

"11","Extraction of crude petroleum and natural gas; service activities incidental to oil and gas extraction, excluding surveying"

"111","Extraction of crude petroleum and natural gas"

"1110","Extraction of crude petroleum and natural gas"

"112","Service activities incidental to oil and gas extraction excluding surveying"

"1120","Service activities incidental to oil and gas extraction excluding surveying"

"12","Mining of uranium and thorium ores"

"120","Mining of uranium and thorium ores"

"1200","Mining of uranium and thorium ores"

"13","Mining of metal ores"

"131","Mining of iron ores"

"1310", "Mining of iron ores"
"132", "Mining of non-ferrous metal ores, except uranium and thorium ores"
"1320", "Mining of non-ferrous metal ores, except uranium and thorium ores"
"14", "Other mining and quarrying"
"141", "Quarrying of stone, sand and clay"
"1410", "Quarrying of stone, sand and clay"
"142", "Mining and quarrying n.e.c."
"1421", "Mining of chemical and fertilizer minerals"
"1422", "Extraction of salt"
"1429", "Other mining and quarrying n.e.c."
"D", "Manufacturing"
"15", "Manufacture of food products and beverages"
"151", "Production, processing and preservation of meat, fish, fruit, vegetables, oils and fats"
"1511", "Production, processing and preserving of meat and meat products"
"1512", "Processing and preserving of fish and fish products"
"1513", "Processing and preserving of fruit and vegetables"
"1514", "Manufacture of vegetable and animal oils and fats"
"152", "Manufacture of dairy products"
"1520", "Manufacture of dairy products"
"153", "Manufacture of grain mill products, starches and starch products, and prepared animal feeds"
"1531", "Manufacture of grain mill products"
"1532", "Manufacture of starches and starch products"
"1533", "Manufacture of prepared animal feeds"
"154", "Manufacture of other food products"
"1541", "Manufacture of bakery products"
"1542", "Manufacture of sugar"
"1543", "Manufacture of cocoa, chocolate and sugar confectionery"
"1544", "Manufacture of macaroni, noodles, couscous and similar farinaceous products"
"1549", "Manufacture of other food products n.e.c."
"155", "Manufacture of beverages"
"1551", "Distilling, rectifying and blending of spirits; ethyl alcohol production from fermented materials"
"1552", "Manufacture of wines"
"1553", "Manufacture of malt liquors and malt"
"1554", "Manufacture of soft drinks; production of mineral waters"
"16", "Manufacture of tobacco products"
"160", "Manufacture of tobacco products"
"1600", "Manufacture of tobacco products"
"17", "Manufacture of textiles"
"171", "Spinning, weaving and finishing of textiles"
"1711", "Preparation and spinning of textile fibres; weaving of textiles"
"1712", "Finishing of textiles"
"172", "Manufacture of other textiles"
"1721", "Manufacture of made-up textile articles, except apparel"

"1722", "Manufacture of carpets and rugs"
"1723", "Manufacture of cordage, rope, twine and netting"
"1729", "Manufacture of other textiles n.e.c."
"173", "Manufacture of knitted and crocheted fabrics and articles"
"1730", "Manufacture of knitted and crocheted fabrics and articles"
"18", "Manufacture of wearing apparel; dressing and dyeing of fur"
"181", "Manufacture of wearing apparel, except fur apparel"
"1810", "Manufacture of wearing apparel, except fur apparel"
"182", "Dressing and dyeing of fur; manufacture of articles of fur"
"1820", "Dressing and dyeing of fur; manufacture of articles of fur"
"19", "Tanning and dressing of leather; manufacture of luggage, handbags, saddlery, harness and footwear"
"191", "Tanning and dressing of leather; manufacture of luggage, handbags, saddlery and harness"
"1911", "Tanning and dressing of leather"
"1912", "Manufacture of luggage, handbags and the like, saddlery and harness"
"192", "Manufacture of footwear"
"1920", "Manufacture of footwear"
"20", "Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials"
"201", "Sawmilling and planing of wood"
"2010", "Sawmilling and planing of wood"
"202", "Manufacture of products of wood, cork, straw and plaiting materials"
"2021", "Manufacture of veneer sheets; manufacture of plywood, laminboard, particle board and other panels and boards"
"2022", "Manufacture of builders' carpentry and joinery"
"2023", "Manufacture of wooden containers"
"2029", "Manufacture of other products of wood; manufacture of articles of cork, straw and plaiting materials"
"21", "Manufacture of paper and paper products"
"210", "Manufacture of paper and paper products"
"2101", "Manufacture of pulp, paper and paperboard"
"2102", "Manufacture of corrugated paper and paperboard and of containers of paper and paperboard"
"2109", "Manufacture of other articles of paper and paperboard"
"22", "Publishing, printing and reproduction of recorded media"
"221", "Publishing"
"2211", "Publishing of books, brochures and other publications"
"2212", "Publishing of newspapers, journals and periodicals"
"2213", "Publishing of music"
"2219", "Other publishing"
"222", "Printing and service activities related to printing"
"2221", "Printing"
"2222", "Service activities related to printing"
"223", "Reproduction of recorded media"
"2230", "Reproduction of recorded media"
"23", "Manufacture of coke, refined petroleum products and nuclear fuel"
"231", "Manufacture of coke oven products"
"2310", "Manufacture of coke oven products"

"232", "Manufacture of refined petroleum products"
"2320", "Manufacture of refined petroleum products"
"233", "Processing of nuclear fuel"
"2330", "Processing of nuclear fuel"
"24", "Manufacture of chemicals and chemical products"
"241", "Manufacture of basic chemicals"
"2411", "Manufacture of basic chemicals, except fertilizers and nitrogen compounds"
"2412", "Manufacture of fertilizers and nitrogen compounds"
"2413", "Manufacture of plastics in primary forms and of synthetic rubber"
"242", "Manufacture of other chemical products"
"2421", "Manufacture of pesticides and other agrochemical products"
"2422", "Manufacture of paints, varnishes and similar coatings, printing ink and mastics"
"2423", "Manufacture of pharmaceuticals, medicinal chemicals and botanical products"
"2424", "Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations"
"2429", "Manufacture of other chemical products n.e.c."
"243", "Manufacture of man-made fibres"
"2430", "Manufacture of man-made fibres"
"25", "Manufacture of rubber and plastics products"
"251", "Manufacture of rubber products"
"2511", "Manufacture of rubber tyres and tubes; retreading and rebuilding of rubber tyres"
"2519", "Manufacture of other rubber products"
"252", "Manufacture of plastics products"
"2520", "Manufacture of plastics products"
"26", "Manufacture of other non-metallic mineral products"
"261", "Manufacture of glass and glass products"
"2610", "Manufacture of glass and glass products"
"269", "Manufacture of non-metallic mineral products n.e.c."
"2691", "Manufacture of non-structural non-refractory ceramic ware"
"2692", "Manufacture of refractory ceramic products"
"2693", "Manufacture of structural non-refractory clay and ceramic products"
"2694", "Manufacture of cement, lime and plaster"
"2695", "Manufacture of articles of concrete, cement and plaster"
"2696", "Cutting, shaping and finishing of stone"
"2699", "Manufacture of other non-metallic mineral products n.e.c."
"27", "Manufacture of basic metals"
"271", "Manufacture of basic iron and steel"
"2710", "Manufacture of basic iron and steel"
"272", "Manufacture of basic precious and non-ferrous metals"
"2720", "Manufacture of basic precious and non-ferrous metals"
"273", "Casting of metals"
"2731", "Casting of iron and steel"
"2732", "Casting of non-ferrous metals"
"28", "Manufacture of fabricated metal products, except machinery and equipment"

"281", "Manufacture of structural metal products, tanks, reservoirs and steam generators"
"2811", "Manufacture of structural metal products"
"2812", "Manufacture of tanks, reservoirs and containers of metal"
"2813", "Manufacture of steam generators, except central heating hot water boilers"
"289", "Manufacture of other fabricated metal products; metalworking service activities"
"2891", "Forging, pressing, stamping and roll-forming of metal; powder metallurgy"
"2892", "Treatment and coating of metals; general mechanical engineering on a fee or contract basis"
"2893", "Manufacture of cutlery, hand tools and general hardware"
"2899", "Manufacture of other fabricated metal products n.e.c."
"29", "Manufacture of machinery and equipment n.e.c."
"291", "Manufacture of general-purpose machinery"
"2911", "Manufacture of engines and turbines, except aircraft, vehicle and cycle engines"
"2912", "Manufacture of pumps, compressors, taps and valves"
"2913", "Manufacture of bearings, gears, gearing and driving elements"
"2914", "Manufacture of ovens, furnaces and furnace burners"
"2915", "Manufacture of lifting and handling equipment"
"2919", "Manufacture of other general-purpose machinery"
"292", "Manufacture of special-purpose machinery"
"2921", "Manufacture of agricultural and forestry machinery"
"2922", "Manufacture of machine tools"
"2923", "Manufacture of machinery for metallurgy"
"2924", "Manufacture of machinery for mining, quarrying and construction"
"2925", "Manufacture of machinery for food, beverage and tobacco processing"
"2926", "Manufacture of machinery for textile, apparel and leather production"
"2927", "Manufacture of weapons and ammunition"
"2929", "Manufacture of other special-purpose machinery"
"293", "Manufacture of domestic appliances n.e.c."
"2930", "Manufacture of domestic appliances n.e.c."
"30", "Manufacture of office, accounting and computing machinery"
"300", "Manufacture of office, accounting and computing machinery"
"3000", "Manufacture of office, accounting and computing machinery"
"31", "Manufacture of electrical machinery and apparatus n.e.c."
"311", "Manufacture of electric motors, generators and transformers"
"3110", "Manufacture of electric motors, generators and transformers"
"312", "Manufacture of electricity distribution and control apparatus"
"3120", "Manufacture of electricity distribution and control apparatus"
"313", "Manufacture of insulated wire and cable"
"3130", "Manufacture of insulated wire and cable"
"314", "Manufacture of accumulators, primary cells and primary batteries"
"3140", "Manufacture of accumulators, primary cells and primary batteries"
"315", "Manufacture of electric lamps and lighting equipment"
"3150", "Manufacture of electric lamps and lighting equipment"
"319", "Manufacture of other electrical equipment n.e.c."

"3190", "Manufacture of other electrical equipment n.e.c."
"32", "Manufacture of radio, television and communication equipment and apparatus"
"321", "Manufacture of electronic valves and tubes and other electronic components"
"3210", "Manufacture of electronic valves and tubes and other electronic components"
"322", "Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy"
"3220", "Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy"
"323", "Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods"
"3230", "Manufacture of television and radio receivers, sound or video recording or reproducing apparatus, and associated goods"
"33", "Manufacture of medical, precision and optical instruments, watches and clocks"
"331", "Manufacture of medical appliances and instruments and appliances for measuring, checking, testing, navigating and other purposes, except optical instruments"
"3311", "Manufacture of medical and surgical equipment and orthopaedic appliances"
"3312", "Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment"
"3313", "Manufacture of industrial process control equipment"
"332", "Manufacture of optical instruments and photographic equipment"
"3320", "Manufacture of optical instruments and photographic equipment"
"333", "Manufacture of watches and clocks"
"3330", "Manufacture of watches and clocks"
"34", "Manufacture of motor vehicles, trailers and semi-trailers"
"341", "Manufacture of motor vehicles"
"3410", "Manufacture of motor vehicles"
"342", "Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers"
"3420", "Manufacture of bodies (coachwork) for motor vehicles; manufacture of trailers and semi-trailers"
"343", "Manufacture of parts and accessories for motor vehicles and their engines"
"3430", "Manufacture of parts and accessories for motor vehicles and their engines"
"35", "Manufacture of other transport equipment"
"351", "Building and repairing of ships and boats"
"3511", "Building and repairing of ships"
"3512", "Building and repairing of pleasure and sporting boats"
"352", "Manufacture of railway and tramway locomotives and rolling stock"
"3520", "Manufacture of railway and tramway locomotives and rolling stock"
"353", "Manufacture of aircraft and spacecraft"
"3530", "Manufacture of aircraft and spacecraft"
"359", "Manufacture of transport equipment n.e.c."
"3591", "Manufacture of motorcycles"
"3592", "Manufacture of bicycles and invalid carriages"
"3599", "Manufacture of other transport equipment n.e.c."
"36", "Manufacture of furniture; manufacturing n.e.c."
"361", "Manufacture of furniture"
"3610", "Manufacture of furniture"
"369", "Manufacturing n.e.c."
"3691", "Manufacture of jewellery and related articles"
"3692", "Manufacture of musical instruments"
"3693", "Manufacture of sports goods"

"3694", "Manufacture of games and toys"
"3699", "Other manufacturing n.e.c."
"37", "Recycling"
"371", "Recycling of metal waste and scrap"
"3710", "Recycling of metal waste and scrap"
"372", "Recycling of non-metal waste and scrap"
"3720", "Recycling of non-metal waste and scrap"
"E", "Electricity, gas and water supply"
"40", "Electricity, gas, steam and hot water supply"
"401", "Production, transmission and distribution of electricity"
"4010", "Production, transmission and distribution of electricity"
"402", "Manufacture of gas; distribution of gaseous fuels through mains"
"4020", "Manufacture of gas; distribution of gaseous fuels through mains"
"403", "Steam and hot water supply"
"4030", "Steam and hot water supply"
"41", "Collection, purification and distribution of water"
"410", "Collection, purification and distribution of water"
"4100", "Collection, purification and distribution of water"
"F", "Construction"
"45", "Construction"
"451", "Site preparation"
"4510", "Site preparation"
"452", "Building of complete constructions or parts thereof; civil engineering"
"4520", "Building of complete constructions or parts thereof; civil engineering"
"453", "Building installation"
"4530", "Building installation"
"454", "Building completion"
"4540", "Building completion"
"455", "Renting of construction or demolition equipment with operator"
"4550", "Renting of construction or demolition equipment with operator"
"G", "Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods"
"50", "Sale, maintenance and repair of motor vehicles and motorcycles; retail sale of automotive fuel"
"501", "Sale of motor vehicles"
"5010", "Sale of motor vehicles"
"502", "Maintenance and repair of motor vehicles"
"5020", "Maintenance and repair of motor vehicles"
"503", "Sale of motor vehicle parts and accessories"
"5030", "Sale of motor vehicle parts and accessories"
"504", "Sale, maintenance and repair of motorcycles and related parts and accessories"
"5040", "Sale, maintenance and repair of motorcycles and related parts and accessories"
"505", "Retail sale of automotive fuel"
"5050", "Retail sale of automotive fuel"
"51", "Wholesale trade and commission trade, except of motor vehicles and motorcycles"

"511", "Wholesale on a fee or contract basis"
"5110", "Wholesale on a fee or contract basis"
"512", "Wholesale of agricultural raw materials, live animals, food, beverages and tobacco"
"5121", "Wholesale of agricultural raw materials and live animals"
"5122", "Wholesale of food, beverages and tobacco"
"513", "Wholesale of household goods"
"5131", "Wholesale of textiles, clothing and footwear"
"5139", "Wholesale of other household goods"
"514", "Wholesale of non-agricultural intermediate products, waste and scrap"
"5141", "Wholesale of solid, liquid and gaseous fuels and related products"
"5142", "Wholesale of metals and metal ores"
"5143", "Wholesale of construction materials, hardware, plumbing and heating equipment and supplies"
"5149", "Wholesale of other intermediate products, waste and scrap"
"515", "Wholesale of machinery, equipment and supplies"
"5151", "Wholesale of computers, computer peripheral equipment and software"
"5152", "Wholesale of electronic and telecommunications parts and equipment"
"5159", "Wholesale of other machinery, equipment and supplies"
"519", "Other wholesale"
"5190", "Other wholesale"
"52", "Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods"
"521", "Non-specialized retail trade in stores"
"5211", "Retail sale in non-specialized stores with food, beverages or tobacco predominating"
"5219", "Other retail sale in non-specialized stores"
"522", "Retail sale of food, beverages and tobacco in specialized stores"
"5220", "Retail sale of food, beverages and tobacco in specialized stores"
"523", "Other retail trade of new goods in specialized stores"
"5231", "Retail sale of pharmaceutical and medical goods, cosmetic and toilet articles"
"5232", "Retail sale of textiles, clothing, footwear and leather goods"
"5233", "Retail sale of household appliances, articles and equipment"
"5234", "Retail sale of hardware, paints and glass"
"5239", "Other retail sale in specialized stores"
"524", "Retail sale of second-hand goods in stores"
"5240", "Retail sale of second-hand goods in stores"
"525", "Retail trade not in stores"
"5251", "Retail sale via mail order houses"
"5252", "Retail sale via stalls and markets"
"5259", "Other non-store retail sale"
"526", "Repair of personal and household goods"
"5260", "Repair of personal and household goods"
"H", "Hotels and restaurants"
"55", "Hotels and restaurants"
"551", "Hotels; camping sites and other provision of short-stay accommodation"
"5510", "Hotels; camping sites and other provision of short-stay accommodation"

"552", "Restaurants, bars and canteens"
"5520", "Restaurants, bars and canteens"
"I", "Transport, storage and communications"
"60", "Land transport; transport via pipelines"
"601", "Transport via railways"
"6010", "Transport via railways"
"602", "Other land transport"
"6021", "Other scheduled passenger land transport"
"6022", "Other non-scheduled passenger land transport"
"6023", "Freight transport by road"
"603", "Transport via pipelines"
"6030", "Transport via pipelines"
"61", "Water transport"
"611", "Sea and coastal water transport"
"6110", "Sea and coastal water transport"
"612", "Inland water transport"
"6120", "Inland water transport"
"62", "Air transport"
"621", "Scheduled air transport"
"6210", "Scheduled air transport"
"622", "Non-scheduled air transport"
"6220", "Non-scheduled air transport"
"63", "Supporting and auxiliary transport activities; activities of travel agencies"
"630", "Supporting and auxiliary transport activities; activities of travel agencies"
"6301", "Cargo handling"
"6302", "Storage and warehousing"
"6303", "Other supporting transport activities"
"6304", "Activities of travel agencies and tour operators; tourist assistance activities n.e.c."
"6309", "Activities of other transport agencies"
"64", "Post and telecommunications"
"641", "Post and courier activities"
"6411", "National post activities"
"6412", "Courier activities other than national post activities"
"642", "Telecommunications"
"6420", "Telecommunications"
"J", "Financial intermediation"
"65", "Financial intermediation, except insurance and pension funding"
"651", "Monetary intermediation"
"6511", "Central banking"
"6519", "Other monetary intermediation"
"659", "Other financial intermediation"
"6591", "Financial leasing"
"6592", "Other credit granting"

"6599", "Other financial intermediation n.e.c."
"66", "Insurance and pension funding, except compulsory social security"
"660", "Insurance and pension funding, except compulsory social security"
"6601", "Life insurance"
"6602", "Pension funding"
"6603", "Non-life insurance"
"67", "Activities auxiliary to financial intermediation"
"671", "Activities auxiliary to financial intermediation, except insurance and pension funding"
"6711", "Administration of financial markets"
"6712", "Security dealing activities"
"6719", "Activities auxiliary to financial intermediation n.e.c."
"672", "Activities auxiliary to insurance and pension funding"
"6720", "Activities auxiliary to insurance and pension funding"
"K", "Real estate, renting and business activities"
"70", "Real estate activities"
"701", "Real estate activities with own or leased property"
"7010", "Real estate activities with own or leased property"
"702", "Real estate activities on a fee or contract basis"
"7020", "Real estate activities on a fee or contract basis"
"71", "Renting of machinery and equipment without operator and of personal and household goods"
"711", "Renting of transport equipment"
"7111", "Renting of land transport equipment"
"7112", "Renting of water transport equipment"
"7113", "Renting of air transport equipment"
"712", "Renting of other machinery and equipment"
"7121", "Renting of agricultural machinery and equipment"
"7122", "Renting of construction and civil engineering machinery and equipment"
"7123", "Renting of office machinery and equipment (including computers)"
"7129", "Renting of other machinery and equipment n.e.c."
"713", "Renting of personal and household goods n.e.c."
"7130", "Renting of personal and household goods n.e.c."
"72", "Computer and related activities"
"721", "Hardware consultancy"
"7210", "Hardware consultancy"
"722", "Software publishing, consultancy and supply"
"7221", "Software publishing"
"7229", "Other software consultancy and supply"
"723", "Data processing"
"7230", "Data processing"
"724", "Database activities and online distribution of electronic content"
"7240", "Database activities and online distribution of electronic content"
"725", "Maintenance and repair of office, accounting and computing machinery"
"7250", "Maintenance and repair of office, accounting and computing machinery"

"729", "Other computer-related activities"
"7290", "Other computer-related activities"
"73", "Research and development"
"731", "Research and experimental development on natural sciences and engineering (NSE)"
"7310", "Research and experimental development on natural sciences and engineering (NSE)"
"732", "Research and experimental development on social sciences and humanities (SSH)"
"7320", "Research and experimental development on social sciences and humanities (SSH)"
"74", "Other business activities"
"741", "Legal, accounting, bookkeeping and auditing activities; tax consultancy; market research and public opinion polling; business and management consultancy"
"7411", "Legal activities"
"7412", "Accounting, bookkeeping and auditing activities; tax consultancy"
"7413", "Market research and public opinion polling"
"7414", "Business and management consultancy activities"
"742", "Architectural, engineering and other technical activities"
"7421", "Architectural and engineering activities and related technical consultancy"
"7422", "Technical testing and analysis"
"743", "Advertising"
"7430", "Advertising"
"749", "Business activities n.e.c."
"7491", "Labour recruitment and provision of personnel"
"7492", "Investigation and security activities"
"7493", "Building-cleaning and industrial-cleaning activities"
"7494", "Photographic activities"
"7495", "Packaging activities"
"7499", "Other business activities n.e.c."
"L", "Public administration and defence; compulsory social security"
"75", "Public administration and defence; compulsory social security"
"751", "Administration of the State and the economic and social policy of the community"
"7511", "General (overall) public service activities"
"7512", "Regulation of the activities of agencies that provide health care, education, cultural services and other social services, excluding social security"
"7513", "Regulation of and contribution to more efficient operation of business"
"7514", "Supporting service activities for the government as a whole"
"752", "Provision of services to the community as a whole"
"7521", "Foreign affairs"
"7522", "Defence activities"
"7523", "Public order and safety activities"
"753", "Compulsory social security activities"
"7530", "Compulsory social security activities"
"M", "Education"
"80", "Education"
"801", "Primary education"
"8010", "Primary education"
"802", "Secondary education"

"8021", "General secondary education"
"8022", "Technical and vocational secondary education"
"803", "Higher education"
"8030", "Higher education"
"809", "Other education"
"8090", "Other education"
"N", "Health and social work"
"85", "Health and social work"
"851", "Human health activities"
"8511", "Hospital activities"
"8512", "Medical and dental practice activities"
"8519", "Other human health activities"
"852", "Veterinary activities"
"8520", "Veterinary activities"
"853", "Social work activities"
"8531", "Social work activities with accommodation"
"8532", "Social work activities without accommodation"
"O", "Other community, social and personal service activities"
"90", "Sewage and refuse disposal, sanitation and similar activities"
"900", "Sewage and refuse disposal, sanitation and similar activities"
"9000", "Sewage and refuse disposal, sanitation and similar activities"
"91", "Activities of membership organizations n.e.c."
"911", "Activities of business, employers and professional organizations"
"9111", "Activities of business and employers organizations"
"9112", "Activities of professional organizations"
"912", "Activities of trade unions"
"9120", "Activities of trade unions"
"919", "Activities of other membership organizations"
"9191", "Activities of religious organizations"
"9192", "Activities of political organizations"
"9199", "Activities of other membership organizations n.e.c."
"92", "Recreational, cultural and sporting activities"
"921", "Motion picture, radio, television and other entertainment activities"
"9211", "Motion picture and video production and distribution"
"9212", "Motion picture projection"
"9213", "Radio and television activities"
"9214", "Dramatic arts, music and other arts activities"
"9219", "Other entertainment activities n.e.c."
"922", "News agency activities"
"9220", "News agency activities"
"923", "Library, archives, museums and other cultural activities"
"9231", "Library and archives activities"
"9232", "Museums activities and preservation of historic sites and buildings"

"9233", "Botanical and zoological gardens and nature reserves activities"
"924", "Sporting and other recreational activities"
"9241", "Sporting activities"
"9249", "Other recreational activities"
"93", "Other service activities"
"930", "Other service activities"
"9301", "Washing and (dry-)cleaning of textile and fur products"
"9302", "Hairdressing and other beauty treatment"
"9303", "Funeral and related activities"
"9309", "Other service activities n.e.c."
"P", "Activities of private households as employers and undifferentiated production activities of private households"
"95", "Activities of private households as employers of domestic staff"
"950", "Activities of private households as employers of domestic staff"
"9500", "Activities of private households as employers of domestic staff"
"96", "Undifferentiated goods-producing activities of private households for own use"
"960", "Undifferentiated goods-producing activities of private households for own use"
"9600", "Undifferentiated goods-producing activities of private households for own use"
"97", "Undifferentiated service-producing activities of private households for own use"
"970", "Undifferentiated service-producing activities of private households for own use"
"9700", "Undifferentiated service-producing activities of private households for own use"
"Q", "Extraterritorial organizations and bodies"
"99", "Extraterritorial organizations and bodies"
"990", "Extraterritorial organizations and bodies"
"9900", "Extraterritorial organizations and bodies"