## Part one

## Introduction

## Chapter I

## **Overview**

- 1. The International Standard Industrial Classification of All Economic Activities (ISIC) consists of a coherent and consistent classification structure of economic activities based on a set of internationally agreed concepts, definitions, principles and classification rules. It provides a comprehensive framework within which economic data can be collected and reported in a format that is designed for purposes of economic analysis, decision-taking and policy-making. The classification structure represents a standard format to organize detailed information about the state of an economy according to economic principles and perceptions.
- 2. In practice, the classification is used for providing a continuing flow of information that is indispensable for the monitoring, analysis and evaluation of the performance of an economy over time. In addition to its primary application in statistics and subsequent economic analysis, where information needs to be provided for narrowly defined economic activities (also referred to as "industries"), ISIC is increasingly used also for administrative purposes, such as in tax collection, issuing of business licenses etc. An important gain for the statistical system in the administrative use of the same classification of economic activity is that this option strengthens the articulation with administrative records (Business Registers), which is of great value for the rationalization of statistical production, as it facilitates the collection of information from companies and the use of other data sources.
- 3. This fifth revision of ISIC enhances the relevance of the classification by better reflecting the current structure of the world economy, recognizing new industries and new activities that have emerged over the past 15 years and facilitating international comparison through increased alignment with existing regional classifications.

#### Main features of the classification

- 4. The scope of ISIC in general covers productive activities, i.e., economic activities within the production boundary of the System of National Accounts (SNA). A few exceptions have been made to allow for the classification of activities beyond the production boundary but which are of importance for various other types of statistics.<sup>1</sup>
- 5. These economic activities are subdivided in a hierarchical, four-level structure of mutually exclusive categories, facilitating data collection, presentation and analysis at detailed levels of the economy in an internationally comparable, standardized way. The categories at the highest level are called sections, which are alphabetically coded categories intended to facilitate economic analysis. The sections subdivide the entire spectrum of productive activities into broad groupings, such as "Agriculture, forestry and fishing" (section A), "Manufacturing" (section C) and "Accommodation and food service activities" (section I). The classification is then organized into successively more detailed categories, which are numerically coded: two-digit divisions; three-digit groups; and, at the greatest level of detail, four-digit classes.
  - 6. The classification is used to classify statistical units, such as establishments or enterprises, according to the

<sup>&</sup>lt;sup>1</sup> See para. 29 below.

economic activity in which they mainly engage. At each level of ISIC, each statistical unit is assigned to one and only one ISIC code, as set out below. The set of statistical units that are classified into the same ISIC category is then often referred to as an industry, such as "the furniture manufacturing industry", which would refer to all units classified in ISIC division 31 (Manufacture of furniture), or the "construction industry", which would refer to all units classified in ISIC section F (Construction). This standardized categorization or subdivision of the complete set of producing units in an economy makes ISIC an important tool for socio-economic statistics that need to be arranged in accordance with the productive system of the economy.

#### Principles, definitions and classification rules

- 7. All categories at each level of the classification are mutually exclusive. The principles and criteria that have been used to define and delineate these categories have not changed from previous versions of ISIC and are based on the inputs of goods, services and factors of production; the process and technology of production; the characteristics of outputs; and the use to which the outputs are put. Economic activities that are similar in respect of these criteria have been grouped together in the categories of ISIC. At the most detailed level of the classification, preference has been given to the process and technology of production to define individual ISIC classes, particularly in the classes related to services. At higher levels, characteristics of outputs and the use to which outputs are put become more important to create analytically useful aggregation categories. For many analytical purposes and for reasons of historical continuity, a strict application of these criteria has not proven useful. The weight that has been applied to each of these criteria will therefore invariably change throughout the classification. In addition, practical considerations, such as the organization of economic production in most countries and the need for stability of the classification, are factors that have also influenced the way categories have been defined at different levels of the classification.
- 8. The content and scope of each category in the classification is defined through a detailed explanatory note, which also highlights boundary issues by providing examples of activities that may appear similar but are classified elsewhere in ISIC.
- 9. In order to apply the classification to a particular statistical unit, information on the activity in which the unit engages has to be obtained. This information is then used to find the category in ISIC that corresponds to this activity, based on the definitions provided in the explanatory notes.
- 10. In practice, it will often be the case that a statistical unit (no matter how narrowly defined) engages in a variety of activities, which may be linked to each other or be completely independent. In order to arrive at a single ISIC code for these units, ISIC provides a set of rules that have to be applied in the process of classifying a given unit. Section II.C below outlines these rules and gives examples for their application in special cases.

#### Harmonization with other statistical classification systems and international statistical frameworks

- 11. ISIC has a central position among existing classifications of economic activities, as well as other economic classifications, such as those for products. ISIC provides the internationally accepted standard for categorizing producing units within an economy, which allows for data comparison at the national and international levels. During the revision process of ISIC, Rev.5, special attention was paid to improving the links between existing activity classifications, especially at the regional level, to facilitate future international data comparison. In the course of this revision, a review of other activity classifications was undertaken, and subsequent changes to ISIC were introduced to further harmonize these existing classifications with ISIC..
- 12. Harmonization of ISIC with other statistical frameworks that have conceptual linkages to some part or all of the economic structure has also been considered in the process of developing ISIC, Rev.5. This applies in particular to the System of National Accounts, the System of Environmental Economic Accounting 2012 Central Framework, and the International Standard Classification of Education (ISCED 2011).

#### Aggregates of ISIC

- 13. ISIC disaggregates the economy into the more detailed levels of classes and groups, as well as the more aggregated levels of divisions and sections. It can be used to examine particular industries or industry groups or to analyse the economy as a whole by disaggregating it to different levels of detail. For analytical purposes, it is important to implement ISIC at its lower levels of detail to be able to observe and analyse the economic interactions taking place between the different activities, allowing understanding of the interlinkages of the production of an economy.
- 14. The categories of ISIC (especially higher-level categories) have become an accepted way of subdividing the overall economy into useful coherent industries that are widely recognized and used in economic analysis, and as such they have become accepted groupings for data used as indicators of economic activity.
- 15. While ISIC provides a standard way of grouping economic activities, there is sometimes a need to provide data on other sets of economic activities that may cross the boundaries of existing high-level ISIC categories but have become of interest to the statisticians, economists and policy makers. An example of this is the interest in measuring the information economy, which includes activities from a wide range of ISIC sections, including section C (Manufacturing), section J (Publishing, broadcasting, and content production and distribution activities), section K (Telecommunications, computer programming, consultancy, computing infrastructure, and other information service activities) and others. Since such groupings cannot be built into the existing ISIC structure, additional alternative aggregations can be created to serve these special data needs and provide a standard way of presenting such data.

#### International acceptance of ISIC

- 16. ISIC was developed with rigorous consultation and collaboration among all stakeholders—national statistical offices, international and regional organizations, academia and others. Through this inclusive revision process, it has been possible to include features in ISIC that make it useful and attractive for the majority of countries around the world. ISIC has been recommended to countries as an international standard and model in the development and/or adaptation of their national activity classifications.
- 17. While ISIC was developed with a view to categorizing economic activities for national accounts and other economic analysis purposes, its use extends to data collection, tabulation, analysis and presentation for a variety of social and environmental applications, such as the link between the economy, education and health sectors and the environment at the national and international levels. Moreover, at the national level, ISIC and its national versions are increasingly used for administrative and business purposes, such as the categorization of revenues and expenditures. It may be interesting to consider that this type of use results in gains in the quality and effectiveness of the articulation of information systems, as well as valuable support for the decisions and actions of the State.
- 18. Previous versions of ISIC have been used—either directly or through compatible national adaptations—by the majority of countries around the world. It is expected that ISIC, Rev.5 will continue to play this role as the only fully internationally accepted activity classification. Apart from the increasing number of countries that have adapted their national activity classifications or can provide statistical series according to ISIC, the classification is used by many international organizations when publishing and analysing statistical data by economic activity. Those organizations include the United Nations and its specialized agencies, 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), the International Monetary Fund (IMF), the World Bank and other international bodies.
- 19. In its function as the internationally accepted reference classification for economic activities and its strong link to other existing activity classifications, ISIC can be viewed as an effective tool for the harmonization of economic statistics.

#### Structure of this publication

20. The present ISIC publication is organized into four parts, as follows:

**Part one** describes the underlying principles that are used in constructing the classification. Apart from facilitating the understanding of the current classification structure, the principles may assist in developing national

classifications by applying criteria consistent with those of ISIC. Part one also describes the application rules that allow for the correct and consistent classification of any given production unit in ISIC. It concludes with a description of the relationship between ISIC and other classifications.

**Part two** shows the complete structure of the classification in a condensed form, allowing for easy viewing of the format in which ISIC subdivides economic activities.

**Part three** provides a detailed description of the classification, with full explanatory notes that describe the content of each ISIC category.

**Part four** outlines the major changes in ISIC, Rev.5 as compared to the previous version (ISIC, Rev.4), covering both methodological and major structural changes.

21. While it may be intuitive to immediately use the detailed definitions of part three of this publication, users are strongly encouraged to first familiarize themselves with the application rules set out in part one so as to correctly understand and use the classification.

## Chapter II

# The underlying principles of the classification

## A. Purpose and nature of the classification

#### 1. General considerations

- 22. In the study of economic phenomena, taking all elements into account simultaneously is not always possible. For the purposes of analysis, certain elements need to be chosen and grouped according to particular characteristics. Thus, all economic phenomena 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.
- 23. ISIC is intended to be a standard classification of productive 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.
- ISIC provides categories for the classification of units based on the activities carried out by these units, but it does not per se provide categories for specific types of units. This conceptual underpinning has been retained in the fifth revision for two reasons. First, naming actual units may be ambiguous if the same title or name is used differently across countries. For example, a "board of education" may have completely different functions and carry out completely different activities in different countries. Another example is the use of the term "Internet café". In some cases, this term refers to a restaurant that provides (wired or wireless) Internet access to its customers as an amenity; in other cases it refers to a business service centre renting time on PCs along with Internet access and related activities; while in still other cases, it refers to a unit providing entertainment services by offering games that can be played over the Internet. Such terminology may change from country to country or region to region. Therefore, creating categories for "board of education" or "Internet café" might lead to the classification of units in the same class that should not be compared. Second, the name or title of a unit may not reflect the activity carried out by the unit. For example, a shipyard is usually engaged in the building of ships. However, the same infrastructure can be used for the dismantling of ships. If such a shipyard carries out mostly the dismantling of ships, it should not be combined in the same class with other units that build ships. Therefore, classifying a unit based on its characteristic as being a "shipyard" (e.g., based on existing capital equipment) would be ambiguous. Another example is gas stations that also operate convenience stores. A class "gas station with convenience store" would allow an easy classification of such units based on their appearance, but it would not reflect the actual activity carried out. In ISIC, such a unit would be classified according to its principal activity (see sect. III.C below), which could place it in "retail sale of automotive fuels" or "retail sale in non-specialized stores with food, beverages or tobacco predominating". While both options may have merits, the consistent approach of classifying according to activities carried out has been followed in ISIC. Notwithstanding the above, in some cases a unit-type description has been employed, such as in new ISIC classes that exceed the previous scope of the classification.
- 25. 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, so that a unit could be unequivocally classified in a certain

- category. For practical reasons, however, 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, with bookkeeping practices. In addition, for units undertaking several economic activities, some types of data, such as financial data, are often only available for the unit as a whole, which consequently is not homogeneous in respect of economic activity. Another aspect of homogeneity is the distribution in geographical areas, which is 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.
- 26. The requirements for homogeneity and data availability are sometimes in conflict with each other because the smaller or more homogeneous the unit, the less likely that the required data are available. It is suggested (see sect. III.B below) 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.
- 27. 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. National analysis often requires greater detail than is required or possible for international comparison purposes. Section IV below explains how ISIC can be used or adapted for national purposes.

#### Scope of the classification

- 28. ISIC is a classification according to kind of economic activity and therefore its scope has historically been restricted to the classification of units engaged in economic production as defined by SNA, which states: "Economic production is an activity carried out under the control and responsibility of an institutional unit that uses inputs of labour, capital, and goods and services to produce outputs of goods and services" (2008 SNA, para. 6.24).
- 29. The scope of the present version of ISIC is defined by the production boundary of the System of National Accounts, with one exception—activities in ISIC class 9820 (Undifferentiated services-producing activities of private households for own use). This type of activity, in combination with class 9810 (Undifferentiated goods-producing activities of private households for own use), is used for measuring subsistence activities of households that cannot otherwise be captured in the classification. These categories, however, cover only a subset of all households, because households with clearly identifiable economic activities (whether market or for own final use) are classified in other parts of ISIC. These two categories have been created for special purposes, such as labour-force surveys, to cover combinations of household activities that would otherwise be difficult or impossible to assign to a single ISIC category. These two categories are generally not used in business surveys.

#### 2. Differences from other types of classifications

- 30. ISIC is a classification according to kind of productive 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 activity.
- 31. ISIC is distinctively different in nature and purpose from the classifications of goods and services, ownership, institutional units or other types of classifications.
- 32. As it is in general not possible 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 exists, namely, the Central Product Classification (CPC). Although each category in CPC is accompanied by a reference to the ISIC class in which the goods or services are mainly produced (criterion of industrial origin), this does not imply that all units producing these goods or services are classified here. By contrast, the classification of products is based

on the intrinsic characteristics of the goods or the nature of the services rendered (see also sect. IV.C below), which results in a classification structure that is different from that used for ISIC.

- 33. Notwithstanding the above, it is often possible to use the classification of outputs in CPC as a tool for identifying the principal activity of a unit.
- 34. ISIC does not draw distinctions according to kind of ownership of a producing unit or type of legal organization 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 unincorporated enterprises, (part of) incorporated enterprises or government units, foreign controlled or have a parent enterprise that consists of more than one establishment. Therefore, a strict link between ISIC and the Classification of Institutional Sectors in SNA does not exist.
- 35. 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. The distinction between modern and traditional production methods is not a criterion for ISIC, although that distinction may be useful in some statistics. Special considerations are necessary in cases where a unit sells manufactured goods under its own name but has the actual production (fully on in part) outsourced to other units. Guidelines for these cases are described in section III.C.5 below.
- 36. In addition, 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.
- 37. 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 SNA. A breakdown of economic activities according to this principle is useful wherever 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 institutions serving households in the field of education, health, social work etc.

## B. Principles used in constructing the classification

- 38. The principles and criteria used to define and delineate classification categories at any level depend on many factors, such as the potential use of the classification and the availability of data. These criteria will also change depending on the level of aggregation considered. In an activity classification, the criteria for detailed levels of the aggregation will inevitably consider similarities in the actual production process, while at more aggregated levels of the classification, this is largely irrelevant.
- 39. ISIC is built on a production-oriented or supply-based conceptual framework that groups producing units into detailed industries based on similarities in the economic activity, taking into account the following characteristics of the activity as given in 2008 SNA para. 5.5:
  - Type of goods and services produced as outputs
  - Type of inputs used or consumed
  - Technique of production employed
  - Ways in which the outputs are used
- 40. The weights assigned to these types of criteria may vary from one category to another and between different levels of the classification. The criteria 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 as is feasible in respect of the kind of activity in which they engage.

- 41. In general, the fifth revision of ISIC has tried to apply a more consistent approach, namely the use of the production process to define categories at the most detailed level. Thus, activities that share a common process in producing goods or services and use similar technologies are grouped together. As in many other cases, however, the strong need for continuity, i.e., comparability with previous versions of the classification, may override changes in the classification that could be made from the viewpoint of a consistent application of such a rule.
- 42. In addition, in a number of instances, such as the production of machinery and equipment with additive manufacturing machinery (3D printing) instead of traditional manufacturing methods, or intermediation service activities via an online platform or through other means, the various aspects of activities are so highly correlated that it's practically very difficult to classify those activities by using the technology of production as a primary criterion.
- 43. Since there is also a strong interest in relating activities and their outputs, the classes of ISIC are defined so that as far as possible the following two conditions are fulfilled:
  - (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.

These conditions are 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.

- 44. 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 terms of the 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.
- 45. 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 or at regional level.
- 46. Unlike for ISIC classes, the actual production process and technology used become less important as a criterion for grouping activities at more aggregated levels. At the section, division and group levels, not only the general characteristics of the goods and services produced but also the potential use of the statistics, for instance in the SNA, become more important. 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. Finally, existing patterns of categories at various levels of national classifications have been used as additional criteria in establishing divisions and groups in ISIC.
- 47. In general, technology is not a main criterion for defining economic activities in ISIC. In ISIC, it does not matter if an activity is carried out by means of traditional or modern production techniques. For instance, fintech activities, which provide, improve or increase access to financial services through the extensive use of digitalization, were already carried out in the past, albeit with less advanced technical instruments than those existing today. As these activities are already defined in ISIC, no additional groups or classes related to financial technology (fintech) were introduced in ISIC Rev.5.
- 48. ISIC Rev.5 does not longer make any difference as to how goods are distributed. The ISIC structure is based on the product sold, no matter whether the good is sold in a shop, online, via stalls and markets or via vending machines.

#### C. Structure and coding system of the classification

- 49. The fifth revision of ISIC provides substantially more detail at all levels than the previous versions of the classification. This increased detail responds to requests by both producers and users of statistics. However, the basic coding system of the classification has not been changed.
- 50. As in the previous revision of ISIC where the number of sections exceeds 10, the use of capital letters for coding the sections was continued in order to avoid having to change the ISIC coding structure to a five-level structure.
- 51. The names given to the different levels in ISIC, Rev.5 remain unchanged from those in the previous revision. The tabulation categories, identified by letters, are called "sections", the 2-digit categories "divisions", the 3-digit categories "groups" and the 4-digit categories "classes". As in the previous version of ISIC, the use of letters for the section level of the classification is complemented by the use of a purely numerical system at the division (2-digit), group (3-digit) and class (4-digit) levels.<sup>2</sup>
- 52. While some of the categories in ISIC have remained unchanged from the previous revision, others have been split to give appropriate weight to new activities, often elevating the level of existing categories.
- 53. At the highest level of ISIC, some sections can be compared to the previous version of the classification. Correspondence tables to assist in this process will be provided separately.
- 54. The divisions are coded consecutively. Some "gaps" have been provided to allow countries to introduce division-level categories without a complete change of the ISIC coding. These gaps have been introduced in sections where the need for additional divisions at the national level is most likely to arise. For this purpose, the following division code numbers have been left unused: 04, 34, 40, 44, 45, 48, 54, 57, 67, 76, 83 and 89.
- 55. While the sections 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 22 sections, which are then further subdivided into a total of 87 divisions, 258 groups and 463 classes. the number of categories remain relatively stable compared with ISIC, Rev.4.
- 56. Whenever 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 "Remediation and other waste management service activities" is 390 since the division "Remediation and other waste management service activities" (code 39) is not divided into either groups or classes. Again, the code for the class "Manufacture of tobacco products" is 1200 because the division "Manufacture of tobacco products" (code 12) is divided neither into groups nor into classes. The class "Manufacture of pulp, paper and paperboard" is coded as 1701 since the division "Manufacture of paper and paper products" (code 17) is not divided into groups but the group "Manufacture of paper and paper products" (code 170) is divided into classes.

<sup>&</sup>lt;sup>2</sup> It is recognized that the connection between sections, on the one hand, and divisions, groups and classes, on the other, is not very intuitive, but it does allow the preservation of a four-level ISIC structure. The current system uses letters only for the high-level sections, while coding and data entry are carried out completely with a numerical system. Other options considered, such as a purely numerical coding system or a system that combines section and class codes (e.g., "A0111"), would either expand the coding system to more levels, expand the code itself to a 5-digit code or create mixed alphanumerical codes that might be difficult to use in basic data entry.

## Chapter III

## Application of the classification

### A. Principal, secondary and ancillary activities

- 57. In ISIC, the expression "activity" is used to identify productive activities. These activities are defined as the use of inputs (e.g., capital, labor, energy and materials) to produce outputs. The outputs that result from undertaking activities can be transferred or sold to other units (in market or non-market transactions), placed in inventory or used by the producing units for own final use.
- 58. Some activities separately identified in ISIC are simple processes that convert inputs to outputs, such as dyeing of fabric, while other activities are characterized by highly complex and integrated steps, such as automobile manufacturing or computer system integration.
- 59. The principal activity of an economic entity is the activity that contributes most to the value added of the entity, as determined by the top-down method (see sect. III.C below). As a result of the top-down method, it is not necessary that the principal activity account for 50 per cent or more of the total value added of an entity or even that its generated value added exceed that of all other activities carried out by the unit, although in practice it will do so in the majority of cases. Products resulting from a principal activity are either principal products or by-products. By-products are products that are necessarily produced together with principal products (for example, hides produced when producing meat by slaughtering animals). In section III.C below, it will be explained how, in practice, the principal activity of a statistical unit should be determined when classifying according to ISIC.
- 60. A secondary activity is each separate activity that produces products eventually for third parties and that is not the principal activity of the entity in question. The outputs of secondary activities are secondary products. Most economic entities produce at least some secondary products.
- 61. 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 are undertaken to support the main productive activities of an entity by providing goods or services entirely or primarily for the use of that entity.
- 62. A 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 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.
- 63. There are a number of characteristics of ancillary activities that can generally be observed in practice and that help to identify them. 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.
- 64. If an establishment undertaking ancillary activities is statistically observable, in the sense that separate accounts for the production it undertakes are readily available, or if it is in a geographically different location from the establishments it serves, it may be desirable and useful to consider it as a separate unit and allocate it to the industrial classification corresponding to its principal activity. However, it is recommended that statisticians not make extraordinary efforts to create separate establishments for these activities artificially in the absence of suitable basic data being available.
- 65. Under the definition given in paragraph 61 above, the following activities are not to be considered ancillary:
  - (a) Producing goods or services as 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) Producing output which, although also 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 activities, which are considered part of fixed capital formation in the context of SNA.

#### B. Statistical units

#### 1. General remarks

- 66. 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 (whether as observation units or analytical units) that are suitable for data compilation and aggregation. The comparability of statistics is greatly enhanced when the units about which statistics are compiled are similarly defined and classified.
- 67. 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 classification by (a) institutional sector, (b) activity and (c) location. 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.
- 68. Statistical units may be defined as the entities about which information is sought and about which statistics are ultimately compiled. These may be identifiable legal or physical entities or statistical constructs.
- 69. Statistical units may be defined following many criteria, namely: legal, accounting or organizational criteria; geographical criteria; and economic criteria. The relative importance of these criteria depends on the type of unit concerned. A legal or institutional criterion helps to define units that are recognizable and identifiable in the economy. In some cases, legally separate units need to be grouped together because they are not sufficiently autonomous in their organization. In order to define some types of units, accounting or financial criteria also have to be applied. The availability of accounting criteria requires that an institutional unit maintain a complete set of accounts. In the case of the organizational criteria of an enterprise, the defining characteristic is that the organizational unit should have an appreciable degree of

autonomy.

- 70. A unit can also be geographically identified. Observational and analytical units are defined in such a way as to permit data to be compiled for local, regional and national economies. The rule regarding geographical criteria is helpful in order to permit consolidation and avoid omissions or duplications of units.
- 71. Activity criteria suggest that entities engaged in similar economic activities be grouped together because this makes it easier to analyse goods and services produced in the economy using a homogeneous production technology.
- 72. 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 that use economic data for studying industrial performance, productivity, market share and other issues. Since different units within an economic entity are suitable for the compilation of different types of data, the type of data that are required is another factor that influences the definition and delineation of statistical units.

#### (a) Legal entities

- 73. 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: they own goods or assets, they incur liabilities and they enter into contracts. The legal unit always forms, either by itself or sometimes in combination with other legal units, the legal basis for the statistical unit.
- 74. 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 a complete set of accounts, including profit and loss accounts and balance sheets.

#### (b) Institutional units

- 75. Institutional units are the core unit of SNA. All subsequent definitions embody the definition of this basic unit. Institutional units are transactors in the SNA and must therefore be capable of engaging in the full range of transactions in their own right and on their own behalf.
- 76. An institutional unit is defined as an economic entity that is capable, in its own right, of owning assets, incurring liabilities and engaging in economic activities and 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. This set of accounts includes consolidated financial accounts and/or a balance sheet of assets and liabilities.
- 77. 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.

#### 2. Statistical units in the System of National Accounts

78. The systematic description of the economy, as represented by SNA, analyses two interrelated types of transactors and transactions that require two levels of statistical units. The establishment, in combination with ISIC and CPC, is used for the analysis of transactions in goods and services and for compilation of the production account. The enterprise is used as the statistical unit for compilation of income accounts, accumulation accounts and balance sheet accounts, as well as in the institutional sector classification of economic entities.

#### (a) Enterprise

- 79. An institutional unit in its capacity as a producer of goods and services is known as an enterprise. 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 more productive activities.
- 80. 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.
- 81. The enterprise is the level of statistical unit at which all information relating to its transactions, including financial and balance-sheet accounts, are maintained, and from which international transactions, an international investment position (when applicable), consolidated financial position and net worth can be derived.

#### (b) Establishment

- 82. 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.
- 83. 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 activity 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 for enterprises that account for a large proportion of the value added of particular industries or the economy as a whole.
- 84. 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 in magnitude compared with the principal activity. If a secondary activity within an establishment is as important, or nearly as important, as the principal activity, then the unit is more like a local unit (see paras. 86 and 87 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.
- 85. In the case of most small and medium-sized businesses, the enterprise and the establishment will be identical. Large and complex enterprises that are engaged in many economic activities belonging to different ISIC industries will be composed of more than one establishment, provided that smaller, more homogeneous production units can be identified for which production data can be compiled.

#### 3. Other statistical units

86. The concept of the establishment combines both a kind-of-activity dimension and a locality dimension. The concept is based on the assumption that the aim of the statistical programme is to compile data that is classified both by activity and by geographical region. In circumstances in which precision in either the geographic or the activity dimension is not required, there are other units that may be used as statistical units for the compilation of production or production-related statistics.

#### (a) Kind-of-activity unit

87. A kind-of-activity unit is an enterprise or part of an enterprise that engages in only one kind of

productive activity or in which the principal productive activity accounts for most of the value added. Compared with the establishment, in the case of such a unit, there is no restriction on the geographic area in which the activity is carried out but it is characterized by homogeneity of activity.

#### (b) Local unit

- 88. Enterprises often engage in productive activity at more than one location, and for some purposes it may be useful to partition them accordingly. Thus, a local unit is defined as an enterprise or a part of an enterprise (for example, a workshop, factory, warehouse, office, mine or depot) which engages in productive activity at or from one location. The definition has only one dimension, in that it does not refer to the kind of activity that is carried out.
- 89. When the criterion of kind-of-activity unit and the local unit are combined, the resulting concept corresponds to the operational definition of the establishment.

#### (c) Unit of homogeneous production

- 90. Units that are defined to be optimal for a particular type of analysis are described as analytical units. Establishments are designed to be units that are more suitable for analysis of production in which the technology of production plays an important role. However, the appropriate analytical unit for the purposes of input-output analysis is a unit of homogeneous production that is defined as a production unit in which only a single (non-ancillary) productive activity is carried out. Units of homogeneous production are independent of the location of the activity.
- 91. If it is desired to compile production accounts and input-output transaction tables by region, it is necessary to treat units of homogeneous production located in different places as separate units even though they may be engaged in the same activity and belong to the same institutional unit.

### 4. Delineating statistical units

- 92. The universe of economic entities is composed of large and complex enterprises engaged in many different activities, whether horizontally or vertically integrated, that may be undertaken at or from many geographical locations, as well as small enterprises engaged in one or very few activities that are undertaken at or from a single geographical location.
- 93. Enterprises have production units at which or from which they undertake the economic activity of producing goods and services. Production can take place at a particular location—for example, at a mine, a factory or a farm, or in the case of production of services from a certain location. For example, either transportation services deliver the product from the farm or factory gate to the purchaser or the product is delivered by means of a network that operates over a wide geographical area. Either way, it is assumed that the service originates from a certain location. Similarly, other services, such as those of engineering consultants, originate at a certain location from which they may be delivered to the location of the customer.
- 94. The need to delineate statistical units arises for large and complex economic entities whose activities fall into different classes of ISIC or whose production units are located in different geographical areas.
- 95. 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 where production decisions are made or production takes place. 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.

- 96. Enterprises also have a legal structure that may constitute units or groups of units that 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.
- 97. 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.
- 98. 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 comprise 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.
- 99. The source of information for production statistics and income statistics is often the management and cost accounts of businesses. These accounts record operating revenues earned from the sale of goods and services produced and the associated costs, wages and salaries, depreciation and operating profits. Countries that are more interested in the higher level of autonomy in the structure of enterprises than in the geographical location of the activity may prefer to delineate and use the kind-of-activity unit. On the other hand, if they are more interested in compiling comprehensive production statistics at a subnational level of geographic detail, then it will be necessary to delineate the smallest unit (a) that is as homogeneous as possible in terms of activity and geography, and (b) for which statistics on revenues from the sale of goods and services, associated costs, value added and gross fixed capital formation undertaken can be compiled or estimated. This is the level at which the establishment (local kind-of-activity unit) is delineated as the statistical unit.
- 100. Whenever the legal structure and the statistical construct 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 completely irrelevant to 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 (a) they can find a way to map the legal and statistical structure of the enterprise, or (b) they prefer to use the legal structure selectively as a proxy for the statistical structure.
- 101. 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. As a result of globalization, some multinational global enterprises are keeping integrated accounting records at the global or the regional levels only; it may thus be increasingly difficult to separate and extract complete accounts for all the activities taking place within each domestic economy if such data are not obtained from the main or regional head office of the global enterprise.

#### 5. National differences in selecting statistical units

An establishment undertakes an activity at or from a particular location. Thus, the concept of the establishment combines two dimensions — an activity dimension and a locality dimension. The concept is based on the assumption that the aim of the statistical programme is to compile data that is classified both by activity and by location, e.g., by geographical region. However, ISIC can be used to classify many other variables 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, such as number of persons employed; they may even be suitable for the compilation of production statistics if all the information needed with respect to meaningful operating profit is available.

- Many different factors play a role in defining the best statistical unit for a given form of data collection, such as 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; and the purpose and targeted level of data collection. The statistical units discussed in this section can be taken to serve as models, but the actual choice of the type of statistical unit to be used by countries would depend upon national specifics and the type and the purpose of data collection involved.
- 104. Finally, it should be noted that in order to ensure reliability and comparability of data in delineating statistical units, such units should be defined in a consistent manner. The consistent definition of these units is equally as important as their accurate classification.

#### C. Classification of statistical units

#### 1. General guidelines

- 105. In the following paragraphs, a number of general rules of interpretation are given that should be followed when classifying more complex statistical units. It should be noted that the explanatory notes to some sections and divisions of ISIC (see part three below) also indicate how to treat such cases.
- 106. A unit may perform one or more economic activities falling into one or more categories of ISIC, Rev.4. Units are classified according to their principal activity. In practice, the majority of production units perform activities of a mixed character. The identification of a principal activity is necessary to allocate a unit to a particular ISIC, Rev.4 category.
- 107. 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. All activities are considered when determining the principal activity, but only the principal activity is used to classify a unit. The principal activity of the unit in general can usually be determined from the goods that it sells or ships or the services that it renders to other units or consumers. However, the descriptions and explanatory notes of the individual classes in ISIC (see part three below) 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 most importantly the production process.
- 108. Ideally, the principal activity of the unit should be determined with reference to the value added to the goods and services produced. The relevant valuation concept is gross value added at basic prices, defined as the difference between output at basic prices and intermediate consumption at purchaser's prices.

#### (a) Value-added substitutes

- 109. In order to determine the principal activity of a unit, the shares of value added by that unit to the activities falling into different categories of ISIC, Rev.5 have to be known. In practice, however, it is often impossible to obtain the information on value added of the different activities performed and the activity classification has to be determined by using substitute criteria, such as:
  - (a) Substitutes based on output, such as:
    - (i) The gross output of the unit that is attributable to the goods or services associated with each activity;
    - (ii) The value of sales or shipments of those groups of products falling into each category of activity;
  - (b) Substitutes based on input, such as:
    - (i) Wages and salaries attributable to the different activities;
    - (ii) Hours worked attributable to the different activities;
    - (iii) Employment according to the proportion of people engaged in the different activities of the unit;
    - (iv) Capital intensity attributable to the different activities.

- 110. Such substitute criteria can be used as proxies for the unknown value-added data to obtain the best approximation possible compared to the result which would have been obtained on the basis of the value-added data. The use of substitute criteria does not change either the methods used to determine the principal activity or the rules of the top-down method. Substitutes are only operational approximations of value added.
- 111. The simple use of the above listed substitute criteria may sometimes be misleading, however; this will always be the case when the structure of the substitute criteria is not directly proportional to the (unknown) value added.

#### (b) Problems with output substitutes

- 112. When using sales (turnover) or shipments as a proxy for value added, it immediately becomes evident that in certain cases turnover and value added are not proportional. For example, trade turnover usually has a much lower share of value added than a manufacturing activity. Other examples are turnover of forwarding agents or of general contractors. Even within manufacturing, the relation between sales and the resulting value added may vary between and within activities. If a significant portion of production goes into inventory and is therefore not sold within the same reporting period, the value of sales may grossly underestimate the value added. In addition, in some cases a turnover figure makes no sense or does not exist, e.g., for financial intermediation activities or insurance activities. Similar considerations should be borne in mind when using gross output data as substitute criteria.
- 113. Many units perform trade and other activities. In such cases, trade turnover figures are the most unsuitable indicators for the unknown value-added share of the trade activity. A much better indicator is the gross margin (difference between the trade turnover and purchases of goods for resale adjusted by changes in stocks). The trade margins may vary within a single wholesale or retail trade activity, however, and may also vary between trade activities. In addition, the specific classification rules for retail trade should be considered as set out below.
- 114. Sales (turnover) as a proxy for value added is not appropriate when the principal activity is provided free of charge or at reduced prices and sales can be attributed to other activities. For example, a business providing online services that sells advertising space may have no sales attributed to the online service. Using sales as proxy would result in the business being classified to advertising. However most of the employment, wages, and capital (i.e. IP and infrastructure) will be used to provide the online service, therefore the principal activity of the business is the online service.

#### (c) Problems with input substitutes

115. Similar precautions have to be considered when input-based substitute criteria are applied. The proportionality between wages and salaries or employment and value added is not reliable if the capital intensity of the various activities is different. Higher capital intensity normally implies higher depreciation and a lower share of wages and salaries in the gross value added. Capital intensity varies substantially between different economic activities and also between activities of the same ISIC, Rev.5 class. For example, the activity of producing items by hand will have a lower capital intensity than the mass production of the same item in an industrial plant; both activities, however, fall in the same ISIC, Rev.5 class.

#### 2. Treatment of mixed activities

116. Instances may arise in which 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 the manufacture of textiles with subsequent production of wearing apparel); the horizontal integration of activities (for example, the manufacture of hides and skins in slaughterhouses); or any combination of activities that cannot be separated at the level of the statistical unit. In

such situations, the unit should be classified according to the rules set out below.

117. Although typically applied at the class level, the rules set out below are valid for applying the classification at any level of the coding structure.

#### (a) Treatment of independent multiple activities

- 118. If a unit is engaged in several types of independent activities but cannot itself 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 according to the activity that contributes most to the value added of the unit (i.e., the principal activity), as determined by the "top-down" method described in paras. 125–133 below.
- 119. The "top-down" method also applies wherever a unit performs only one activity or one activity accounts for more than 50 per cent of the value added. However, in such cases the classification of the unit is rather straightforward and no step-by-step application of the "top-down" method is necessary. In such cases, the unit will be classified to the single ISIC category representing the activity carried out, or in the latter case, to the ISIC category that represents the activity that accounts for more than 50 per cent of the value added.

#### (b) Treatment of vertical integration

- 120. The vertical integration of activities occurs wherever the different stages of production are carried out in succession by the same unit and the output of one process serves as input to the next. Examples of common vertical integration include tree felling and subsequent on-site sawmilling, a clay pit combined with a brickworks or production of synthetic fibres in a textile mill.
- 121. ISIC, Rev.5 treats vertical integration in the same manner as ISIC, Rev. 4 and as any other form of multiple activities. In consequence, a unit with a vertically integrated chain of activities should be classified to the class corresponding to the principal activity within this chain, i.e., the activity accounting for the largest share of value added, as determined by the top-down method. It should be noted that the term "activity" in this context is used for each step in the production process that is defined in a separate ISIC class, even though the output of each step may not be intended for sale.
- 122. If value added or substitutes for the individual steps in a vertically integrated process cannot be determined directly from accounts maintained by the unit itself, comparisons with other units (e.g., based on market prices for intermediate and final products) could be used. The same precautions for using substitutes as listed above apply here. If it is still impossible to determine the share of value added (or its substitutes) for the different stages in the chain of production activities, default assignments for typical forms of vertical integration can be applied.

#### (c) Treatment of horizontal integration

- 123. Horizontal integration occurs when an activity results in end-products with different characteristics. This could theoretically be interpreted as activities carried out simultaneously using the same factors of production, in which case it would often be impossible to separate such activities statistically into different processes, assign them to different units or generally provide separate data for them, nor would rules relying on allocation of value added or similar measures be applicable. Alternative indicators, such as gross output, might sometimes be applicable, but there is no general rule for identifying the single activity that best represents the mix included in this horizontal integration. Since patterns of horizontal integration have been considered in the preparation of the classification, in many cases commonly integrated activities are included in the same class of ISIC even though their outputs have quite different characters.
- 124. For example, the production of crude glycerol is classified in ISIC class 2023 (Manufacture of soap and detergents, cleaning and polishing preparations, perfumes and toilet preparations), while the production of synthetic glycerol is classified in class 2011 (Manufacture of basic chemicals). Crude glycerol is a by-product of soap manufacturing and therefore the production process of crude glycerol cannot be separated from the production process of soap; as a result, both productive activities have to be classified in the same ISIC

class, even though their physical output is quite different. On the other hand, the production of synthetic glycerol is a chemical process quite distinct from the production of crude glycerol and these two activities are classified separately even though their physical output is quite similar. Another example would be the production of electricity through a waste-incineration process. The activity of waste disposal and the activity of electricity production cannot be separated in this case and ISIC assigns them, by convention, to class 3821.

125. In some cases, activities are carried out using the same factors of production but the activities also exist independently, i.e., neither one provides input into the other nor could it be considered as producing a by-product of the other activity. An example would be the combined transport of passengers and freight. Since both activities independently have a substantial size in most economies and are separately of interest for analytical purposes, they have not been combined in a single ISIC class. In this case, value-added substitutes should be used to determine the primary activity of the unit in question if both activities are carried out simultaneously.

#### (d) The "top-down" method

- 126. The top-down method follows a hierarchical principle: the classification of a unit at the lowest level of the classification must be consistent with the classification of the unit at the higher levels. To satisfy this condition the process starts with the identification of the relevant category at the highest level and progresses down through the levels of the classification in the following way:
  - Step 1. Identify the section that has the highest share of the value added.
  - Step 2. Within this section, identify the division that has the highest share of the value added.
- *Step 3.* Within this division, identify the group that has the highest share of the valued added (see below for exception in the case of wholesale and retail trade activities).
  - Step 4. Within this group, identify the class that has the highest share of value added.

Section	Division	Group	Class	Description of the class	Share of value added (percentage)
С	25	251	2512	Manufacture of tanks, reservoirs and containers of metal	7
	28	281	2816	Manufacture of lifting and handling equipment	8
		282	2821	Manufacture of agricultural and forestry machinery	3
			2822	Manufacture of metal-forming machinery and machine tools	21
			2824	Manufacture of machinery for mining, quarrying and construction	8
	29	293	2930	Manufacture of parts and accessories for motor vehicles	5
_	46	461	4610	Wholesale on a fee or contract basis	7
G		465	4659	Wholesale of other machinery and equipment	28
N	71	711	7110	Architectural and engineering, and related technical consultancy activities	13
•	•	•	nen dete	rmined as follows:	
Section (	,	Manufa	cturing		52

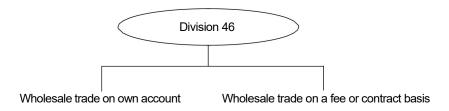
Section G	Wholesale and retail trade	35
Section N	Professional, scientific and technical activities	13
Step 2.	Identify the division (within section C)	
Division 25	Manufacture of fabricated metal products, except machinery and equipment	7
Division 28	Manufacture of machinery and equipment n.e.c.	40
Division 29	Manufacture of motor vehicles, trailers and semi-trailers	5
Step 3.	, , ,	
Group 281	Manufacture of general-purpose machinery	8
Group 282	Manufacture of special-purchase machinery	32
Step 4.	Identify the class (within group 282)	
Class 2821	Manufacture of agricultural and forestry machinery	3
Class 2822	Manufacture of metal-forming machinery and machine tools	21
Class 2824	Manufacture of machinery for mining, quarrying and construction	8

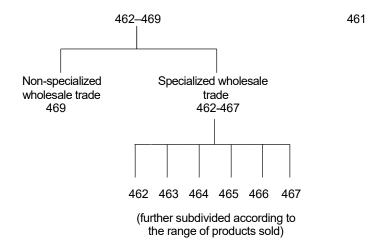
The principal activity is therefore **2822 (Manufacture of metal-forming machinery and machine tools)**, although the class with the biggest share of value added is class 4659 (Wholesale of other machinery and equipment).

If a "bottom-up" approach is used, the reporting unit would be classified to wholesale trade in class 4659 (Wholesale of other machinery and equipment), based on the single largest share of value added at the class level. This would result in a reporting unit with a value added share in manufacturing of 52 per cent being classified outside of manufacturing.

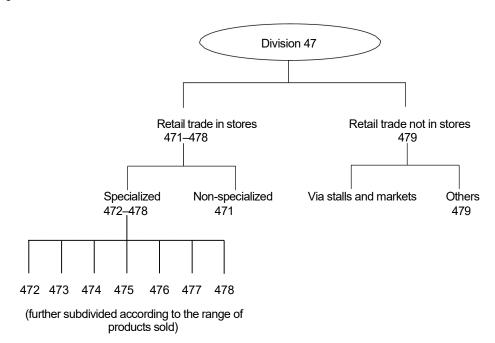
The top-down method may apply to only a small part of the statistical universe, depending on the selection of the statistical unit, especially if the selected units are defined so that they carry out only one activity.

- 127. If none of the ISIC classes accounts for at least 50 per cent of the value added, in the case of wholesale and retail trade activities, additional steps are being considered in step 3 of the above process, which can be considered to correspond to additional levels in the classification. For practical reasons, these levels have not been reflected as separate levels in the classification structure itself but rather consist of clusters of ISIC, Rev.5 groups. For wholesale activities, these additional steps relate to (*a*) the distinction between commission and own-account trade and (*b*) the distinction between specialized and non-specialized trade activities, these additional steps relate to (*a*) the distinction between specialized and non-specialized trade and (b) the distinction between own-account retail trade and intermediation service activities for retail sale. These distinctions must be considered as additional levels (within step 3) and must be applied when using the top-down method. After determining the correct group in step 3, the determination of the class representing the principal activity is carried out in accordance with step 4 above.
- 128. Following the additional criteria provided above, the following figure represents the decision tree to be used for the allocation of a unit within ISIC division 46 (Wholesale trade):





129. Following the additional criteria provided in paragraph 124 above, the following figure represents the decision tree to be used for the allocation of a unit within ISIC division 47 (Retail trade):



- 130. No attempt is made to reflect other possible aspects of retail activity, such as the kind of service (e.g., traditional service or self-service), outlets run by voluntary services or purchasing associations, or to distinguish between cooperative and other retail trade. Units whose main activity in terms of value added is obviously retail trade are classified based on the types of goods being traded in division 47.
- 131. When choosing between specialized retail trade in ISIC groups 472–478 and non-specialized retail trade in ISIC group 471, the outcome will depend on the number of ISIC, Rev.4 classes involved, irrespective of the group-level importance. The following rules apply to make that determination (similar considerations apply to specialized vs. non-specialized wholesale trade activities):
  - (a) If the products sold comprise up to four classes in ISIC, Rev.5 groups 472 to 478, none of which accounts for a share of 50 per cent or more in terms of value added but each of which represents 5 per cent or more of value added, a specialized trade is still involved. It is then necessary only to determine the focus of the activities on the basis of value added. Selecting first the main group and then the class within that group will determine the allocation of the principal activity;
  - (b) If the products sold comprise five or more classes in groups 472 to 478, each representing 5 per cent or more of value added but none of which accounts for a share of 50 per cent or more, the unit should be classified as a non-specialized store and allocated to group 471. If food, beverages and tobacco represent at least 35 per cent of value added, allocation will be made to ISIC, Rev.4 class 4711. In all other cases, allocation should be to class 4719;
  - (c) The above allocation rules are always based exclusively on the retail activity of the unit. If, in addition to its retail trade, a unit has a secondary activity that also provides services or produces goods, the allocation of the unit to the appropriate class of division 47 is determined only by the composition of its retail activity. In other words, the 5 per cent rule provided above applies to 5 per cent of the value added of all retail sale activities, not 5 per cent of the value added of all activities of the unit.

[Example: Identifying the principal activity of a unit using the top-down method within wholesale and retail trade] – to be developed

- 132. 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.
- 133. The top-down method satisfies the principle that at the lower levels the activity classification is in conformity with the principal activity of the unit from the point of view of the upper levels of the activity classification. At lower levels of the classification, the share of value added of the category of ISIC, Rev.5 that results from using the top-down method will not necessarily account for more than 50 per cent of total valued added of that unit. The more one proceeds from the upper to the lower levels of the hierarchical structure of ISIC Rev.4, the more often will this be the case. Theoretically, at the highest hierarchical level of ISIC, Rev.4 no section might account for more than 50 per cent of the value added of a unit.
- 134. In principle, the top-down method permits determination of the principal activity of a unit down to the lowest level of the hierarchical activity classification; in practice, it is only necessary to apply the method to the lowest level that is actually used in a specific application, such as the division or group level, depending on the respective rules of the specific application. Whatever the case, the top-down method ensures that the classification of the unit is consistent at every level.

#### 3. E-commerce

- 135. Production units receive orders and transact the sale of goods and services produced by a variety of means, such as by telephone, fax, television or over the Internet. Many countries have chosen to describe as e-commerce any business transaction that transfers the ownership of the goods or service through the Internet or by other electronic means.
- 136. There are three stages in the transfer of the ownership of a good or service: (a) the placement of the order, (b) the payment and (c) the delivery of the good or service. E-commerce transactions may be defined to include situations where only the first stage, only the first and second stages, or all three stages are conducted through the Internet or by other electronic means.
- 137. For many production units, e-commerce is just one of a variety of means by which sales are transacted. The rules for the classification of such units in ISIC 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. Production units engaged in e-commerce will therefore be found in any industry of ISIC.

#### 4. Repair and maintenance

- 138. No single high-level category exists that would cover all repair activities. Based on the type of good repaired, the activities are classified as follows:
  - (a) Repair and maintenance of machinery and equipment is classified in division 33;
  - (b) Repair of buildings and civil engineering works in division 43;
  - (c) Repair and maintenance of computers, personal and household goods, and motor vehicles and motorcycles is classified in division 95;
- 139. Units that engage in factory rebuilding or overhaul of aircraft, locomotives, railroad cars and ships are not included in division 33. Instead, they are classified in division 30, in the same classes as the units that manufacture them.

#### 5. Outsourcing / activities on a fee or contract basis

- 140. In some cases, units sell goods or services under their own name but the actual production, such as the physical transformation process in the case of manufacturing, is carried out fully or in part by others through specific contractual arrangements. This section describes how units involved in such arrangements should be classified in ISIC.
  - 141. In this section, the following terminology is applied:
- (a) The *principal*<sup>3</sup> is a unit that enters in a contractual relationship with another unit (here called contractor) to carry out some part (or all) of the production process;
- (b) The *contractor*<sup>4</sup> is a unit that carries out a specific production process based on a contractual relationship with a principal. The activities performed by the contractor are denominated "on a fee or contract basis".
- (c) *Outsourcing* is a contractual agreement according to which the principal requires the contractor to carry out a specific production process. The term "subcontracting" is sometimes used as well. In this context, the production process also includes supporting activities.

<sup>&</sup>lt;sup>3</sup> Elsewhere sometimes known as "contractor" or "converter".

<sup>&</sup>lt;sup>4</sup> Elsewhere sometimes known as the "subcontractor".

142. The principal and the contractor may be located in the same economic territory or in different economic territories. The actual location does not affect the classification of either one of these units.

#### (a) Classification of the contractor

143. Contractors, i.e., units carrying out an activity on a fee or contract basis, are usually classified in the same ISIC category as units producing the same goods or services for their own account. Exceptions to this rule exist for trade activities, for which separate categories for such outsourced activities exist.

#### (b) Classification of the principal

#### Outsourcing of parts of the production process

- 144. If only part of the production process is outsourced, the principal is classified to the class that corresponds to the activity representing the complete production process, i.e., it is classified as if it were carrying out the complete process, including the contracted work, itself.
- 145. This applies not only to the outsourcing of support functions in the production process, such as accounting or computing activities, but also to the outsourcing of parts of the core production process, such as parts of a manufacturing process.

#### Outsourcing of the complete production process

- 146. In general, if the principal outsources the complete production process of a good or service, it is classified as if it were carrying out the production process itself. This applies in particular to all service-producing activities, including construction. In the case of manufacturing, however, the following special considerations apply.
- 147. In manufacturing, the principal provides the contractor with the technical specifications of the manufacturing activity to be carried out on the input materials. The input materials (raw materials or intermediate goods) can either be provided (owned) by the principal or not.
- 148. A principal who completely outsources the transformation process should be classified into manufacturing if and only if it owns the input materials to the production process including the intellectual property products (IPP)—and therefore owns the final output. In the case of factoryless good producers (FGPs), in addition to the technical specifications for the manufacturing activity to be carried out, the principal provides the intellectual property products (IPP) as well. The criteria for defining the FGPs should cover some aspects of the control of the transformation process including quality control, oversight of the production process etc. The distinction between affiliates and non-affiliates is not a relevant criterion in the definition and classification of FGPs.
- 149. The importance of separately identify FGPs has been long recognised, however, based on the current practices and the feedback collected, it is difficult at this stage to separately classify FGPs in ISIC. As a result, ISIC, Rev. 5 continues to classify FGPs in Section C in the same class where they would have been classified if they carried out the manufacturing process themselves. In addition, countries are encouraged to develop approaches to identify FGPs, so that this issue can be reconsidered as part of the research agenda for the next revision of ISIC.
- 150. A principal who completely outsources the transformation process but does not own the input materials is in fact buying the completed good from the contractor with the intention to re-sell it. Such an activity is classified in section G (Wholesale and retail trade), specifically according to the type of sale and the specific type of good sold.5

<sup>&</sup>lt;sup>5</sup> The final classification of the principal may also depend on other activities that are carried out in the same unit.

#### 6. Outsourcing of other production and service producing processes

- 151. If a principal sub-contracts construction work to other units, but remains overall responsible for the construction process, both the principal and the contractor are classified in section F (Construction), specifically to the class that corresponds to the construction activities carried out.
- 152. When a principal carries out the whole or a part of the production process (of a good or a service) but delegates to a contractor certain support, or ancillary, functions (such as accounting or computer services) which are not part of the production process and do not directly lead to the final good or service, but support the general functioning of the principal as a production unit, the activities of the principal are classified to the same ISIC code as the one that represents the core production process. The contractor is classified according to the specific activity he is carrying out, e.g., class 6920 "Accounting, bookkeeping and auditing activities; tax consultancy", class 6220 "Computer consultancy and computer facilities management activities" etc.
- 153. A principal outsourcing a part of the goods production process in Section A "Agriculture, forestry and fishing", Section B "Mining and quarrying", Section D "Electricity, gas, steam and air conditioning supply" and Section E "Water supply; sewerage, waste management and remediation activities" is classified as if he is covering the whole production process. The activity of the contractor is classified with units producing the same goods for their own account.
- 154. A principal outsourcing the whole production process of Section A "Agriculture, forestry and fishing", Section B "Mining and quarrying" and Section E "Water supply; sewerage, waste management and remediation activities" is classified in Division 46 "Wholesale trade" (depending on the activity and the specific good sold). The contractor is classified with units producing the same goods for their own account
- 155. A principal outsourcing the whole production process of Section D "Electricity, gas, steam and air conditioning" is classified in Section D as per the activity and the specific good sold.
- 156. Concerning the outsourcing of services, the principal who outsources a part of the service-producing activities must be classified as if he were provisioning the whole service process. The contractor is classified according to the portion of the services provision he is undertaking. If the principal subcontracts the whole services activity, both the principal and the contractor are classified as if they were carrying out the complete services activity.

#### 7. Intermediation services

- 157. Intermediation activities have increased enormously due to the technological advances through digital platforms. The UN Expert Group of International Statistical Classifications evaluated in past years the treatment of intermediation activities within ISIC Rev. 46, indicating how the use of such services related to service transactions could be addressed in ISIC. However, companies continued to be codified in Statistical Business Registers based on national rules or reflections.
- 158. In the framework of the revision of ISIC Rev. 4 and the update of NACE Rev 2, it was agreed to define non-financial intermediation services activities as activities that facilitate transactions between buyers and sellers for the ordering and/or delivering of goods and services for a fee or commission, without supplying the services or taking ownership of the goods that are intermediated. These activities can be carried out on digital platforms or through non-digital channels. Revenue for the intermediation activities can include other sources of income, such as revenues from sale of advertising space. This definition excludes financial and insurance service activities, which are classified in section L "Financial

<sup>&</sup>lt;sup>6</sup> https://unstats.un.org/unsd/classifications/expertgroup/egm2017/ac340-10.PDF

and insurance activities"

159. To reflect these activities in the classification, separate groups or classes have been created in the divisions where these goods and services are produced (see chapter 4.2.1). Thus, those new categories, combined with previously dedicated categories, can identify all non-financial intermediation services which are now a significant component in the delivery of the underlying good or service of the respective divisions. A dedicated class 8240 was created to include all intermediation services that are not elsewhere classified (except financial intermediation and intermediation service activities for telecommunications activities).

#### 8. Financial activities

- 160. In recent years, there have been various innovations in the provision of financial services. Some examples of these innovations include increase in the use of digital technologies to facilitate the provision of or access to financial services, the expansion in many financial markets by units other than the traditional banks, and a greater number of financial activities provided by the traditional units that are engaged in financial activities. The provision of financial intermediation services facilitated by information and communication technology (digital technologies) is as well integrated in Section L "Financial and insurance activities".
- 161. No new groups and classes have been created for the classification of activities carried out by financial technology companies (fintechs) that are using digital techniques to provide, improve or increase access to financial services. Such activities will be integrated in the existing structure of NACE, since these are not actually viewed as new activities, but just being provided via a new modality. Fintech companies are classified based on their principal economic activity. Thus, a fintech unit principally active in financial intermediation will be classified in Section L, whereas a unit whose principal activity is to provide digital technology that supports the provision of a financial service will be classified in Section K. Digital technology provision activities include, for example, provision of software used by financial services firms to digitise and improve their compliance structures, risk management procedures, regulatory monitoring, regulatory reporting, financial investigations and sanctions, provision of information technology infrastructure (including hardware and software) and analytics to support insurance as underwriting, distribution, pricing, and claims processing.
- 162. Section L contains two groups, 642 "Activities of holding companies and financial conduits" and 643 "Activities of trusts, funds and similar financial entities", which classify units that usually generate little or no value added or do not employ staff. Sometimes some of these units are called "brass plates", "post boxes", "empty boxes" or "special purpose entities" (SPEs), as they have just a name and an address.
- 163. These two groups are different from all other group in ISIC, Rev.5, in the sense that the units in the two groups are recognized institutional units in an economy, yet they have little or no employment, physical presence, or physical production. The two group are also different from each other in the following manner:
  - (a) group 642 "Activities of holding companies and financing conduits" refers to the activities of holding companies, whose principal activity is owning the group, and that do not administer or manage the group;
  - (b) group 643 "Activities of trusts, funds and similar financial entities" covers the activities of legal entities organised to pool securities or other financial assets, without managing them, on behalf of shareholders or beneficiaries;
- 164. The principal activity of a unit performing several activities among those just mentioned should be identified, as usual, based on the value added principle. It should be kept in mind that capital gains do not constitute value added, and therefore should not be considered.

#### 9. Government activities

- 165. 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 a 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 section P or division 84 (Public administration and defence; compulsory social security). For instance, public hospitals run by a government unit will be classified in class 8610, together with hospitals run by private organizations, by non-profit organizations, and military-base and prison hospitals. Units carrying out activities at national, regional or local levels that are specifically attributable to other areas of ISIC are classified in the appropriate section. For example, the activities of a secondary school administered by the central or local government are allocated to group 853 "Secondary and post-secondary non-tertiary education" and those of a public hospital are allocated to class 8610 "Hospital activities". On the other hand, not only government bodies are classified in section P: private units performing typical "public administration activities" are also classified here.
- 166. It is true that ISIC division 84 includes activities of a governmental nature that are normally carried out by the public administration, including the enactment and judicial interpretation of laws and their pursuant regulation; the administration of programmes based on them; legislative activities; taxation; national defense; public order and safety; immigration services; foreign affairs; and the administration of government programmes. Nevertheless, the legal or institutional status is not, in itself, the determining factor for an activity to belong in that division.

#### 10. On-site installation

- 167. Units principally engaged in the installation or assembly of items or equipment in buildings for their functioning are classified in the construction section (see division 43).
- 168. Installation of machinery and other equipment other than those linked to the functioning of buildings (or civil engineering works) is classified in group 332 "Installation of industrial machinery and equipment".

#### 11. Individual entrepreneurs

169. Individual entrepreneurs are classified according to the economic activity/activities they perform, based on what they do and not according to their professional position.

#### 12. Classification of enterprises

- 170. Since the activities of an enterprise sometimes cover a large 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 paragraphs 125–133 above, should be used.
- 171. The classification of a multi-activity enterprise should be determined by the value added generated by its constituent units. In other words, the ISIC category should be selected according to the kinds of activity of the constituent units that account for the principal share of value added, following the top-down method.

#### 13. Classification of households

- 172. ISIC includes a category for the classification of households when they are employers of domestic personnel. This includes households employing maids, gardeners, cooks etc. As employment is generated, data on these units have been collected for various statistics, usually outside of general business statistics, i.e., using sample frames with households as collection units rather than businesses as collection units.
- 173. Outside 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 might combine a mix of activities undertaken by household enterprises, such as agricultural activities, construction, textile manufacturing, repair and other service activities. In general, it is not possible to assign value-added ratios to these activities and reasonably identify a principal activity. To provide a place for these mixed activities in the classification, two groups in division 98 (Undifferentiated goods- and services-producing activities of private households for own use) have been designated. This division will not normally be relevant to business statistics but rather applies to data collections covering household and subsistence activities.

#### 14. Changes in the classification of units

- 174. Units can change their principal activity either at once or gradually over a period of time. The principal activity may change within the year from one statistical period to the next, either because of seasonal factors or because of a management decision to vary the pattern of output. In each case, there will have been a fairly sudden change in the balance of activities. Alternatively, a change in the pattern of output or sales may take place gradually over several years. While all these cases call for the classification of the unit to be changed, if made too often such changes distort statistics to the extent of making interpretation extremely difficult.
- 175. To avoid frequent changes it is necessary to have a stability rule. Without such a rule, there would be apparent changes in the economic demography of the business population that would be no more than statistical artifacts. Such a stability rule is intended for units that engage in a mix of activities that are almost balanced and are thus subject to increased risk of changes for the principal activity resulting from only small changes in the ratio of the activities involved. In such cases, the ratio of activities over the past two to three years should be taken into account when determining the principal activity of the unit.
- 176. Changes in the classification of units for the purpose of statistical inquiries are made not more than once a year, either at fixed dates or as information becomes available. More frequent changes would result in inconsistency between short-term (monthly and quarterly) and longer-term statistics.

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

- 177. The quality and comparability of the statistics produced according to ISIC will depend largely on the correctness of the codes assigned to the statistical units. In turn, the correctness of the codes will depend on the information available for determining them and the tools and procedures used.
- 178. 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 that information has a function in the administrative procedures for which the registrations are being made. It will also depend on what kind of distinctions that function will require, such as, 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.

179. 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 inputs, processes and outputs 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 their main activity. This information must be obtained from the units and care must be taken to ensure that the individuals who provide the information on behalf of the units understand the type of information needed so that they can obtain it from the records of the units or their own knowledge. Thus, the testing of question formulations is as important for establishment surveys as it is for household surveys. 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.

# Chapter IV **Other topics**

## A. Use of ISIC in establishing related national classifications

- 180. As an international standard classification, ISIC is the primary tool for collecting and presenting internationally comparable statistics by economic activity. It is therefore of great importance that data collected at the national level, and therefore the classifications used at the national level, are compatible with ISIC.
- 181. The need for international comparability does not, however, imply that countries must 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. Countries may choose to either use ISIC directly for their national purposes or develop their own national classification. Wherever countries lack the infrastructure required to develop and maintain their own activity classification, they may adopt ISIC as their national activity classification with little or no modification. This is often done by extending or collapsing the detail of ISIC while maintaining its general structure. Other countries may have historically developed a classification that suits their particular needs. Those countries should make efforts to adapt their classification in a way that allows for the provision of data according to ISIC without substantial loss of information.
- 182. 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 (for the principles and definitions that were developed for this purpose and are embodied in ISIC, see sect. II above). 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 this may not always be possible since certain categories at the most detailed level of ISIC may not be distinguished in the industrial classifications of some countries.
- 183. Adapting ISIC to the specifics of the national economy while maintaining international comparability requires the observation of a number of rules as set out below.

#### 1. Aggregation and disaggregation of ISIC

184. 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 that are 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. The calculation of homogeneity ratios may serve as a tool in determining the feasibility and usefulness of more detailed categories of

the classification.7

- 185. 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. In this way, 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.
- 186. 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.
- 187. 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.
- 188. 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 26 to 28 (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 or all of the groups or classes into single categories at the most detailed level of their national classification.
- 189. It should be kept in mind that combining classes into higher aggregates, either at the group level or elsewhere, will limit the 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 281. If two countries aggregate classes within group 281, the comparability of their data may not be available at their respective aggregated levels but only at the higher level of group 281. The combining of classes should therefore be carefully considered in respect of its possible impact on the comparability of data compiled according to these new categories.

#### 2. Level of international comparability

190. Ideally, countries would be able to provide data according to ISIC at all levels of the classification for the purposes of international comparability. As mentioned above, however, not all detailed categories of the classification may be suitable for all countries and countries may wish to develop national classifications based on their own priorities. Still, the problem of international comparability remains and countries should make effort to use a classification that is as much as possible compatible with ISIC and for which data can be collected and reported.

<sup>&</sup>lt;sup>7</sup> For a more detailed discussion of homogeneity ratios, see Companion Guide to ISIC and CPC (United Nations publication, forthcoming).

191. At its thirty-seventh session, the United Nations Statistical Commission recommended that countries adapt their national classifications in a way that allows them to report data at least at the two-digit level of ISIC, Rev.4 without loss of information. It is clear that the interest in more detailed internationally comparable information will remain, especially for specific studies.

# B. Use of different levels of the classification for the presentation of statistics

192. 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 both their source and 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 class 8531 (General secondary education) versus division 03 (Fishing and aquaculture) in many countries.

193. 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 such cases, ISIC classes can be further subdivided for specific purposes, as necessary. It is suggested, however, that the new detailed categories still be aggregated to the existing ISIC classes for comparability reasons.

## C. Relationship with other classifications

#### 1. General remarks

194. At its nineteenth session, the Statistical Commission had requested the Secretariat to prepare a set of classifications that together would form an integrated system for classifying activities, goods and services and 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 subheadings of the Harmonized Commodity Description and Coding System (HS) as building blocks for their categories. Subsequently, relationships with other classifications that may require a degree of comparability with ISIC have been added to these considerations.

#### 2. Relationship with product classifications: CPC, HS and SITC

195. 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 of its development. 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 subheadings of HS contain goods that are generally produced in only one ISIC category. There are frequent

exceptions in some areas, however, where outputs do not enter international trade to a large degree. For instance, raw and processed agricultural products may be combined in HS since the international trade of raw and unprocessed products is negligible. Still, raw and processed products are outputs of distinct industries in ISIC, which makes a strict link between these classifications impossible. In addition, the arrangement of headings and subheadings of HS follows criteria that are quite different from industrial origin and the structure of CPC or SITC.

- 196. 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. 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 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.
- 197. 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 1010, "Processing and preserving of meat"), 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.

#### 3. Other derived and related activity classifications

- 198. The work on the fifth revision of ISIC has been driven by a strong desire to improve comparability among activity classifications around the world. In the process, the experiences obtained during recent or still ongoing revisions of national and regional classifications have been taken into account. It is clear, however, that needs for detail and structure, especially at the lower levels of the classification, differ from country to country and from region to region. The work of the Expert Group on International Statistical Classifications has continued these harmonization efforts in its work on the International Family of Statistical Classifications. The need to converge existing activity classifications has been stressed again by the Statistical Commission and will be a key element in future work on these classifications.
- 199. 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.

#### (a) Derived classifications

- 200. The revision of the General Industrial Classification of Economic Activities within the European Communities (NACE) has been developed based on the fifth revision of ISIC, continuing the strong relation between these two classifications. Categories at all levels of NACE have been defined to be either identical or to form subsets of single ISIC categories.
- 201. In addition, the coding systems used in classifications of the United Nations and the European Community are as far as possible the same. As a result, the data of both intergovernmental organizations have become 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.

202. Work to create similar derived classifications is also being carried out in other regions.

#### (b) Related classifications

- 203. The North American Industry Classification System (NAICS) was developed in the mid-1990s and has undergone some changes to increase comparability among the three custodians of this classification. The research work carried out during the development of NAICS has been a major input into the ISIC revision process. The review of the NAICS structure and concepts by other countries has not only resulted in the desire to reflect some of the NAICS top-level categories, such as "Information" in ISIC, but has also initiated reviews of ISIC principles and encouraged detailed discussions on criteria to be applied for boundary decisions between existing categories.
- 204. Work on the development of a common top-level structure for both classifications has shown limitations in this effort arising from specific country needs; the desire to maintain continuity in each of the classifications; and the cost/benefit analysis of a complete change of the classifications involved. As a result, the structures of ISIC and NAICS seem substantially different. However, definitions of individual categories have been designed in a way that statistical data collected according to NAICS can be reaggregated into the two-digit divisions of ISIC, Rev.5, ensuring the comparability of data as described in paragraph 192 above. In many cases, more detailed links are possible.
- 205. The Australian and New Zealand Standard Industrial Classification (ANZSIC) was revised in 2006 and broadly aligns with ISIC at the higher levels. As for ISIC, the conceptual approach for ANZSIC has been re-evaluated. The revised ANZSIC takes into account activities within Australian and New Zealand economic units. The ANZSIC structure broadly follows the ISIC structure, so that categories at the division and more detailed levels can be aggregated into the two-digit categories of ISIC.

#### 4. Relationship of other international classifications with ISIC

- 206. The following classifications developed by the United Nations or its subsidiary organs have some relationship with ISIC or make use of parts of ISIC in defining their own scope or categories; whether describing statistics on occupations, employment, expenditures, education, tourism or the environment: the Classification of the Functions of Government (COFOG), the International Standard Classification of Education (ISCED),<sup>8</sup> the International Standard Classification of Occupations (ISCO),<sup>9</sup> the activity classification of the Tourism Satellite Account (TSA)<sup>10</sup> and the International Classification of Non-Profit Organizations (ICNPO).<sup>11</sup>
- 207. 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. The criteria of classification—function in the case of COFOG and activity for ISIC—are conceptually rather similar. COFOG is more appropriate than ISIC for classifying government expenditures, however, 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,

<sup>&</sup>lt;sup>8</sup> International Standard Classification of Education (ISCED 1997) (Paris, UNESCO, November 1997).

<sup>&</sup>lt;sup>9</sup> International Standard Classification of Occupations (ISCO-1988) (Geneva, ILO, 1988).

<sup>&</sup>lt;sup>10</sup> 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).

<sup>&</sup>lt;sup>11</sup> See Annex A1 of the Handbook of National Accounting: Handbook on Non-Profit Institutions in the System of National Accounts, Statistical Papers, Series F, No. 91 (United Nations publication, Sales No. E.03.XVII.9).

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.

- 208. ISCED was developed by UNESCO as an instrument for assembling, compiling and presenting statistics of education, both within individual countries and internationally, and was last updated in 2011. 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 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.
- 209. 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 defined in line with the changes applied in the last ISCED revision.
- 210. 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 and communicating other occupational information, such as 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.
- 211. 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, the task and duties to be carried out. Since 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, when similarities and differences between certain groups in ISCO are based on the type of distinctions that are reflected in ISIC (i.e., between the type of products, namely, goods and services, that are being produced or sold), the ISCO groups are defined in a manner that is generally consistent with the definition of these goods and services in ISIC and CPC.

#### D. Indexes to the classification

- 212. 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, comparing national classifications to ISIC and classifying data according to ISIC. They should also provide a guide to the correct classification of statistical units.
- 213. New interpretations of the classification, usually related to new activities, can be easily reflected in the index, while no change in the classification or its related texts is usually necessary. 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 website

## E. Correspondence tables

214. 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. A complete detailed correspondence between ISIC, Rev.5 and ISIC, Rev.4 is available electronically but is not included in the present publication.

- 215. 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. When drafting ISIC, Rev.5, and simultaneously CPC, Ver.3, 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.
- 216. These and other correspondence tables are available in electronic format only and can be accessed at the United Nations Statistics Division website

## F. Alternative aggregations for ISIC

217. Economic analysis and the 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. These alternative aggregations may use either complete ISIC classes; only parts of ISIC classes (if the underlying concept for the aggregation is not comparable with the principle used in ISIC); or a standardized subdivision of existing ISIC classes to improve the application of ISIC for their specific purposes (for more detailed information, see part four below).

## Part Five

## Changes in ISIC, Rev.5

## I. Methodological changes

- 218. Although the structure of ISIC, Rev.5 is different from its predecessor, the methodological aspects underpinning the scope, development and application of the classification remain largely unchanged. Some of the perceived changes are actually clarifications of the concepts or rules already used in previous versions of ISIC.
- 219. The criteria for delineating categories within ISIC remain the same, although the weights with which these criteria have been applied have changed (for more details, see part one, sect. II.B above).
- 220. In the rules for the application of the classification, only one explicit change has been made. In the case of multiple activities, the use of value added as the determining criterion is now universally applied to all cases; in other words, the exception for the treatment of vertically integrated activities has been eliminated.
- 221. Other general application rules, such as the use of the top-down-method to determine the principal activity of a unit, remain unchanged.
- 222. It should be noted, however, that the application rules provided in ISIC, Rev.5 are the same as in ISIC Rev.4.

## II. Structural changes

- 223. The fifth revision of ISIC has responded to a large number of requests from countries that have ultimately changed the overall structure and detail of the classification in very substantial ways. New concepts at the highest level of the classification have been introduced and new detail has been created to reflect different forms of production and newly emerging industries. At the same time, efforts have been made to maintain the structure of the classification in all areas that do not explicitly require change based on new concepts.
- 224. The detailed changes to ISIC, Rev.5 are too numerous to be listed here in their entirety. The reason for most of these changes, however, can be roughly divided into three categories: (*a*) the introduction of new concepts at higher levels (e.g., "information and communication" or "waste management and remediation activities"); (*b*) necessary changes to regroup activities that are residuals of the previous type of changes; and (*c*) smaller adjustments and clarifications of concepts at lower levels, typically driven by efforts to enhance comparability.

#### Intermediation service activities

- 225. To reflect the increasing importance of intermediation service activities, the following new classes have been created in the ISIC Rev.5 Divisions where these goods and services are produced (see also chapter 3.3.2).
  - 3540 "Activities of brokers and agents for electric power and natural gas"
  - 4340 "Intermediation service activities for specialised construction services"

- 4790 "Intermediation service activities for retail sale"
- 5231 "Intermediation service activities for freight transportation"
- 5232 "Intermediation service activities for passenger transportation"
- 5330 "Intermediation service activities for postal and courier activities"
- 5540 "Intermediation service activities for accommodation"
- 5640 "Intermediation service activities for food and beverage services activities"
- 6120 "Telecommunication reselling activities and intermediation service activities for telecommunication"
- 6821 "Intermediation service activities for real estate"
- 7491 "Patent brokering and marketing service activities"
- 7751 "Intermediation service activities for rental and leasing of cars, motorhomes and trailers"
- 7752 "Intermediation service activities for rental and leasing of other tangible goods and non-financial intangible assets"
- 8240 "Intermediation service activities for business support service activities n.e.c., except financial intermediation"
- 8561 "Intermediation service activities for courses and tutors"
- 8691 "Intermediation service activities for medical, dental and other human health services"
- 8791 "Intermediation service activities for residential care activities"
- 9540 "Intermediation service activities for repair and maintenance of computers, personal and household goods, and motor vehicles and motorcycles"
- 9640 "Intermediation service activities for personal services"

#### Section A: Agriculture, forestry and fishing

226. Creation of a new group 033 "Support activities for fishing and aquaculture" and a new class 0330 "Support activities for fishing and aquaculture".

#### **Section C: Manufacturing**

- 227. Split of class 1079 into two classes: 1076 "Processing of coffee and tea" and 1079 "Manufacture of other food products n.e.c."
  - 228. Split of class 1103 into two classes: 1103 "Manufacture of beer" and 1104 "Manufacture of malt".
- 229. Split of class 2610 into two classes: 2611 "Manufacture of solar cells, solar panels and photovoltaic inverters" and 2619 "Manufacture of other electronic components and boards".
- 230. Split of group 310 "Manufacture of furniture" into classes 3101 "Manufacture of wooden furniture" and 3102 "Manufacture of other furniture".

#### Section D: Electricity, gas, steam and air conditioning supply

231. Restructuring of group 351 "Electric power generation, transmission and distribution": creation of new classes 3511 "Electric power generation activities from non-renewable sources", 3512 "Electric power generation activities from renewable sources" and 3513 "Electric power transmission and distribution activities".

#### Section E: Water supply; sewerage, waste management and remediation activities

232. The scope of class 3900 "Remediation and other waste management services activities" is extended by making explicit reference to carbon capture and storage activities in the explanatory notes.

#### Section G: Wholesale and retail trade

- 233. The distinction at group and class level between in-store and online retail trade has been eliminated in ISIC Rev. 5. As a consequence, groups 478 "Retail sale via stalls and markets" and 479 "Retail trade not in stores, stalls or markets" of ISIC Rev. 5 have been dropped.
- 234. Division 45 "Wholesale and retail trade and repair of motor vehicles and motorcycles" has been eliminated to achieve a consistent application of classification rules within section G. This means that the wholesale activities of motor vehicles have been moved to Division 46 "Wholesale trade", the activities of retail trade of motor vehicles to division 47 "Retail trade" and the activities of maintenance and repair of motor vehicles and motorcycles to division 95 "Repair and maintenance of computers, personal and household goods, and motor vehicles and motorcycles" in Section T.

#### **Section H: Transportation and storage**

235. Group 49.1 "Transport via railways" has been split into two classes 49.11 "Passenger rail transport, interurban" and 49.12 "Freight rail transport".

#### Former Section J: Information and communication

- 236. ISIC Rev. 4 Section J has been split into two new sections: Section J "Publishing, broadcasting, and content production and distribution activities" and Section K "Telecommunications, computer programming, consulting, computing infrastructure and other information service activities".
- 237. The first section (for which code J will be re-used), "Publishing, broadcasting, and content production and distribution activities", includes the existing divisions 58, 59 and 60, as well as news agencies and post-production recording conversion services to streaming formats, formerly in division 63; the second section new section (for which code K will be re-used) "Telecommunications, computer programming, consulting, computing infrastructure, and other information service activities", includes existing divisions 61, 62 and part of 63.
- 238. Creation of a new group 603 "News agency and other content distribution activities" composed of classes 6031 "News agency activities" (moved from ISIC Rev.4 Class 6391) and 6039 "Other content distribution activities" (new class).
- 239. Removal of the distinction at the group level between wired, wireless, and satellite telecommunications activities. Groups 611, 612 and 613 have been merged into one only group 611 "Wired, wireless and satellite telecommunication activities" containing a single class 6110 "Wired, wireless and satellite telecommunication activities".
- 240. Class 6201 "Computer programming activities" has been transformed in Class 6211 "Development of video games, video game software, and video game software tools" and class 6219 "Other computer programming activities".
- 241. Classes 6202 "Computer consultancy activities and computer facilities management activities" have been transformed into one new group 622 "Computer consultancy and computer facilities management activities" containing a single class 6220 "Computer consultancy and computer facilities management activities".

- 242. Class 6209 "Other information technology and computer service activities" has been transformed in a new group 629 "Other information technology and computer service activities" containing a single class 6290 "Other information technology and computer service activities".
- 243. Group 631 "Data processing, hosting and related activities; web portals" has been split into Group 591 "Motion picture, video and television programme activities", Group 631 "Computing infrastructure, data processing, hosting and related activities" and Group 639 "Web search portals activities and other information service activities.
- 244. The new group 631 "Computing infrastructure, data processing, hosting and related activities" contains a single class 6310 "Computing infrastructure, data processing, hosting and related activities" to include activities such as cloud infrastructure and platform provision (IaaS, PaaS) and cloud computing (except software publishing and computer systems design) whether or not in combination with infrastructure provision, distributed ledger (blockchain) technology data processing activities and technical infrastructure provisioning services related to streaming.
- 245. The new group 639 "Web search portal activities and other information service activities" contains a single classes: 6390 "Web search portal activities and other information service activities". This class has been created to cover activities of web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (known as Web search portals).
- 246. Cybersecurity activities will be integrated in activities of software development, programming, consultancy activities and incident/information management under the new classes 6219 "Other computer programming activities", 6220 "Computer consultancy and computer facilities management activities" and 6290 "Other information technology and computer service activities". Cybersecurity software publishing will be added to group 582 "Software publishing".

#### Section L (former Section K): Financial and insurance activities

- 247. ISIC Rev.4 Section K has been renamed to Section L.
- 248. Group 642 "Activities of holding companies" has been split into class 6421 "Activities of holding companies" and 6422 "Activities of financing conduits".
- 249. Group 643 "Activities of trusts, funds and similar financial entities" has been split into class 6431 "Activities of money market", class 6432 "Activities of non-money market investments funds" and class 6433 "Activities of trust, estate and agency accounts".

#### Section M (former Section L): Real estate activities

- 250. ISIC Rev.4 Section L has been renamed to Section M.
- 251. Activities of "Development of building projects" has been moved out of Section F Construction to group 681 "Real estate activities with own property or leased property").

#### Section N (former Section M: Professional, scientific and technical activities

- 252. ISIC Rev.4 Section M has been renamed to Section N.
- 253. ISIC Rev.4 Group 702 "Management consultancy activities" has been split into group 702 "Business and other management consultancy activities" containing a single class 7020 "Business and other management consultancy activities" and a new group 733 "Public relations activities" containing a single class 7330 "Public relations activities".

254. Group 749 "Other professional, scientific and technical activities n.e.c." has been split into a new group 743 "Translation and interpretation activities" containing a single class 7430 "Translation and interpretation activities" and group 749 "Other professional, scientific and technical activities n.e.c." containing a new class 7491 "Patent brokering and marketing service activities" and a residual class 7499 "All other professional, scientific and technical activities n.e.c."

#### Section O (former Section N): Administrative and support service activities

- 255. ISIC Rev.4 Section N has been renamed to Section O.
- 256. Class 7722 "Rental of video tapes and disks" has been dropped and its content move to class 7729 "Rental and leasing of other personal and household goods".
- 257. Group 783 "Other human resources provision" has been dropped and its content moved to group 782 "Temporary employment agency activities and other human resource provisions" containing a single class 7820 "Temporary employment agency activities and other human resource provisions".
- 258. Groups 802 "Security systems service activities" and 803 "Investigation activities" have been integrated into group 801 "Investigation and security activities", which itself has been restructured to new classes 8011" Investigation and private security activities" and 8019 "Security activities n.e.c.".
- 259. The scope of class 8130 "Landscape service activities" is extended by making explicit reference to activities on managing and conserving ecosystem and biodiversity in the explanatory notes.

#### Section P (former Section O): Public administration and defence; compulsory social security

- 260. ISIC Rev.4 Section O has been renamed to Section P.
- 261. Class 8412 "Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security" has been split into class 8412 "Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security and environment" and class 8413 "Regulation of the activities of providing environmental services".

#### Section Q (former Section P): Education

- 262. ISIC Rev.4 Section P has been renamed to Section Q.
- 263. The content of this section was adapted to the new ISCED classification by splitting group 851 "Preprimary and primary education" into a new group 851 "pre-primary education" containing a single class "preprimary education" and group 852 "primary education" containing a single class "primary education". The ISIC Rev.4 group 852 "Secondary education" is coded and renamed as ISIC Rev.5 Group 853 "Secondary and post-secondary non-tertiary education", extended with a new class 8533 "Post-secondary non-tertiary education".

#### Section R (former Section Q): Human health and social work activities

- 264. ISIC Rev.4 Section Q has been renamed to Section R.
- 265. Group 86.9 "Other human health activities" has been split into 2 classes: 8691 "Intermediation service activities for medical, dental, and other human health services" and 8699 "Other human health activities n.e.c.".

#### Section S (former Section R): Arts, sports and recreation

- 266. ISIC Rev.4 Section R has been renamed to Section S "Arts, sports and recreation".
- 267. Division 90 is renamed to "Arts creation and performing arts activities", with a complete restructuring of the division with definition of new groups 901 "Arts creation activities", 902 "Activities of performing arts" and 903 "Support activities to arts creation and performing arts" with the corresponding new classes.
- 268. Division 91 is renamed to "Libraries, archives, museums and other cultural activities", with a complete restructuring of the division with definition of new groups: 911 "Library and archive activities", 912 "Museums, collections, historical sites and monuments activities", 913 "Conservation, restoration and other support activities for cultural heritage" and 914 "Botanical and zoological garden and nature reserve activities" with the corresponding new classes.

#### Section T (former Section S): Other service activities

- 269. ISIC Rev.4 Section S has been renamed to Section T.
- 270. Merger of ISIC Rev.4 classes 9511 "Repair of computers and peripheral equipment" and 9512 "Repair of communication equipment" in the new class 9510 "Repair and maintenance of computers and communication equipment".
- 271. Integration of a new group 953 "Repair and maintenance of motor vehicles and motorcycles" containing two classes 9531 "Repair and maintenance of motor vehicles" and 95.32 "Repair and maintenance of motorcycles" (both moved from division 45).
- 272. Complete restructuring of Division 96 "Personal service activities" with upgrade of previous classes to groups resulting in the definition of new groups: 961 "Washing and cleaning of textile and fur products", 962 "Hairdressing, beauty treatment, day spa and similar activities", 963 "Funeral and related activities", 964 "Intermediation service activities for personal services" and 969 "Other personal service activities n.e.c." with the corresponding new classes.

## Section U (former Section T): Activities of households as employers; undifferentiated goods- and service-producing activities of households for own use

273. ISIC Rev.4 Section T has been renamed to Section U.

#### Section V (former Section U): Activities of extraterritorial organisations and bodies

274. ISIC Rev.4 Section U has been renamed to Section V.