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Aggregation structures for ISIC Rev.4

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Prepared by UNSD

Executive summary

The draft structure for the International Standard Industrial Classification of All Economic Activities (ISIC) Rev.4 shows an increased number of categories at the top level of the classification. The need for aggregation structures with a limited number of categories, for particular use in the System of National Accounts (SNA), has arisen in the discussions on ISIC Rev.4. This paper shows proposals for aggregation structures with about 10 categories (proposed by the Technical Subgroup working on the ISIC Revision) and about 30-40 categories.

The ISWGNA is expected to provide recommendations for ISIC aggregates that are suitable for SNA purposes. The group can evaluate the structures shown in this paper or propose different approaches. In this context the ISWGNA may wish to discuss:

- (a) if a single aggregation structure, consisting of about 10 categories, should be recommended for general use in the SNA framework (see section 4);
- (b) whether an intermediate aggregation structure with about 30 (or more) categories should be recommend for use in SNA or not;

(b1) if yes, whether and/or to what degree such a structure should follow the list shown in section 5 below.

(c) if a group of individual aggregations, such as those for use in the supply and use tables of the SNA, as illustrated in section 6 below, should be recommended;

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1. Background

1. The International Standard Industrial Classification of All Economic Activities (ISIC) is currently being revised for 2007. The timeline approved by the United Nations Statistical Commission calls for a final draft to be presented to the Commission in March 2006 for approval.

2. The objectives of the current revision process put high priority on a) improving the relevance of the classification, considering that in the 15 years since the last revision significant changes have taken place in the economies around the world, b) improving the comparability of the classification with other activity classifications, most notably the North American Industry Classification System (NAICS) and c) maintaining continuity of the classification, i.e. limit the impact of changes to the existing structure. The last of these factors has become more apparent over the past two years and changes required by the relevance and especially the comparability factors have been carefully weighed against their impact on the existing structure, and therefore existing time series.

3. As part of improving the relevance of the classification, some specific requests have been made from the beginning, namely to consider the introduction of an Information section, similar to the Information Sector in NAICS, and the introduction of additional detail in the services area of the classification. Changes in the structure, corresponding to these and other requests have increased to number of items at the top level of the classification from 17 to 21 and at the next level of the classification from 62 to 89. (This relates to the draft version that has been circulated for comment to all countries and a number of international organizations.)

4. As these numbers of categories are deemed to high for national accounts purposes, requests have been made to produce separate aggregations that are applicable for the National Accounts. These requests have been supported by the Statistical Commission, which also endorsed the proposal to develop these aggregations in cooperation with the Intersecretariat Working Group on National Accounts.

5. This paper solicits input from the ISWGNA into the creation of these aggregations.

2. Current ISIC proposal

6. The current draft proposal for ISIC Rev.4 has been circulated for comments to countries on 12 May 2004. The complete draft document is available on UNSD's website at <u>http://unstats.un.org/unsd/cr/isic-4.asp</u>. Comments on this draft should be received by 15 November 2004.

7. The two top levels of the draft classification are shown in Annex 1 and 2 of the present paper. The structure at these two levels is already the result of previous consultations in 2001 and 2003. This top structure (consisting of the two top levels) has been approved by the Statistical Commission in March 2004 to be used as the basis for further detailed work. While this still leaves to option of making changes to these two levels of the classification, if the work on the detailed categories proves the need to do so, no overall review of the top structure is expected. In this sense, discussions on additional aggregations for SNA purposes, based on these exiting top levels, can be carried out now.

8. Changes between the proposed draft structure for ISIC Rev.4 and the previous version of the classification take place at all levels. However, in many cases these will reflect boundary issues that do not significantly affect data at an aggregated level.

9. Changes at the highest level of the classification, which will invariably affect any discussions on top-level aggregates of the new draft ISIC include the following:

- a. The creation of an Information Section, which combines activities previously classified in ISIC Rev.3 sections for Manufacturing, Transportation and communications, Business services and Other services.
- b. The creation of a separate Section for water supply, waste management and remediation activities. This combines activities previously classified in the section for Utilities and the section on Other services.
- c. The creation of separate sections for Professional, scientific and technical activities, as well as for Administrative and support service activities. All of these activities have been previously classified in the section for Real Estate, renting and business activities. The growth of these activities has led to strong requests for elevating them in the classification.
- d. The creation of a separate section for Arts, entertainment and recreation, which was previously combined with Other services.

10. At the second level of the classification (the Division level), more categories have been introduced, which in most cases reflect only an elevation of a similar category in ISIC Rev.3 to a higher level. These cases should have no impact on aggregations that have been based on the

division level in the previous version of ISIC. Exceptions to this general situation are the few new divisions that combine activities from different divisions in the previous version of ISIC. Sometimes, the activities that have been grouped in these new ISIC Rev.4 divisions have not been separately identified at any level of the previous classification. This applies in particular to divisions 09 (Mining support activities), 33 (Repair, maintenance and installation of machinery and equipment), divisions 26-28, whose content has been reorganized, and some of the divisions in the new Information section.

11. Changes at lower levels in the draft classifications are not important, as they should not be used to define new aggregation structures in this context.

12. <u>Note:</u> The following discussion is based on the ISIC Rev.4 draft structure that includes the compromise solution on Repair and maintenance activities¹. This compromise solution has not been widely discussed yet and therefore the treatment of repair and maintenance may still change.

3. Aggregation structures suitable for National Accounts in ISIC Rev.3.1

13. The 1993 SNA publication does not explicitly define a default aggregate of ISIC categories (except for those shown in chapter 5 below). However, data collection at the international level is carried out at an aggregated level and provides therefore a de-facto standard aggregation for ISIC Rev.3.1. The aggregation currently used by UNSD, as recommended by the ISWGNA is the following:

ISIC Rev.3.1		Description	
code			
A+B		Agriculture, hunting, forestry; fishing	
	А	Agriculture, hunting and forestry	
	В	Fishing	
С		Mining and quarrying	
D		Manufacturing	
Е		Electricity, gas and water supply	
F		Construction	
G+H		Wholesale, retail trade, repair of motor vehicles, motorcycles and personal and household goods;	
		hotels and restaurants	
	G	Wholesale, retail trade; repair of motor vehicles, motorcycles and personal and household goods	
	Η	Hotels and restaurants	
Ι		Transport, storage and communications	
J+K		Financial intermediation; real estate, renting and business activities	
	J	Financial intermediation	
	Κ	Real estate, renting and business activities	

¹ Early versions of the ISIC Rev.4 draft structure included a separate section (i.e. top-level category) for all Repair and maintenance activities. This was considered as difficult to implement by a group of (mostly) European countries. To maintain the close link between ISIC and the European activity classification NACE, a compromise solution was agreed to at the last Expert Group meeting in December 2003. However, this compromise solution has not been widely discussed with other countries yet. The compromise solution splits repair and maintenance activities in the following portions: (a) repair of machinery – included as a separate division under manufacturing, (b) repair of automobiles, motorcycles – together with wholesale and retail sale of these goods in classes under Trade, maintaining the composition of ISIC Rev.3.1 division 50, (c) repair of computers and repair of household goods – in separate divisions under the section for Other services.

L		Public administration and defence; compulsory social security	
M+N+O		Education; health and social work; other community, social and personal service activities	
	Μ	Education	
	Ν	Health and social work	
	0	Other community, social and personal service activities	
P*		Private households with employed persons	
		Extraterritorial organizations and bodies	

* - Only Division 95 is included here

Section Q (Extraterritorial organizations) is not included in this aggregation

14. This list uses 11 top-level aggregates, but also includes additional data at the Section level of ISIC. Since data is therefore available at the Section-level of ISIC Rev.3.1, continuity issues concern only the Section level, not the aggregated level shown in the left-most column of the table above.

4. "Top-10" structure for ISIC Rev.4

15. At the last meeting of the Technical Subgroup on Classification, the issue of a top structure, limited to about 10 items, was discussed again in the light of the two-level ISIC draft structure endorsed by the Statistical Commission. A consensus position was reached on a draft for such a limited top structure of ISIC. This resulted in the goods portion of the classification basically remaining the same, while a number of new combinations are being put forward in the services portion. This structure is being put forward only to the ISWGNA as a suggestion. It is not part of the worldwide consultation process for ISIC Rev.4. Following are the recommendations in this regard:

ISIC Rev. 4	Titles	
Codes		
А	Agriculture, Forestry and Fishing	
B+C+D+E	Mining and quarrying + Manufacturing + Electricity, gas steam and air conditioning	
	supply + water supply; waste management	
F	Construction	
G+H+J	Trade+Transportation and Storage+Accommodation and Food Service activities	
K	Information and communication	
L	Financial and Insurance activities	
M+N+O	Real Estate, rental and leasing activities+ Professional, Scientific and Technical	
	Services+Administrative and support service activities	
P+Q	Education+Human Health and Social Work	
R+S+U	Arts, Entertainment and Recreation+Other Service Activities+Activities of Households	
	as employers; undifferentiated goods- and service- producing activities of households for	
	own use	
T+V	Public Administration and defence; compulsory social security+ Extraterritorial	
	organizations and bodies	

16. The corresponding ISIC Rev.3 categories are shown in Annex 4.

17. It is also proposed that this SNA aggregate not form part of the official ISIC structure and coding system, in conformity with past practices of ISIC or other classifications, such as NAICS. This SNA aggregate can however be shown as an alternate aggregation in the forthcoming ISIC manual.

18. The ISWGNA may wish to discuss whether such a single 10-category top structure should be explicitly recommended.

19. <u>Note:</u> This proposal is similar to the one discussed by $Eurostat^2$. This proposal includes the extraterritorial organizations and bodies, which are excluded from the Eurostat aggregate. As a consequence, Public Administration (Section T) is grouped in a different way. This seems more appropriate than the Eurostat proposal of grouping Public admin with education and health.

a. Comparability and continuity issues

20. Comparability and continuity, i.e. close links with other classifications and close links to the previous version of ISIC, are key factors in the revision process. These factors also need to be considered for the aggregations used in an SNA context.

NACE, NAICS, ANZSIC

21. Comparability with other major activity classifications is of great concern in the current ISIC revision process. At the current time, custodians of other classifications have indicated that a) NACE will maintain its strong link with ISIC, i.e. use an identical two-digit structure; b) NAICS will be able to produce 2-digit level data according to ISIC (but not adopt the ISIC structure as such); c) NAICS will line up with the 2-digit structure of ISIC.

22. Based on these developments, all users of the other major activity classifications will be able to produce required ISIC data for SNA aggregates. There is no need to consider additional restrictions linked to these classifications. It should be noted, that similar aggregations have been developed for other classifications, for instance for NAICS. However, different aggregates have been developed for NAICS-US and NAICS-Canada, based on perceived needs and uses in these countries. This underlines, that there is no need to consider links between high-level aggregation structures of different classifications. In the special case of NAICS the definition of top-level building blocks is not comparable to ISIC, which results in aggregations for SNA purposes that are not comparable to those based on ISIC. The differences between the aggregates in terms of actual reported data may be small in some cases, but that will not be investigated here.

ISIC Rev.3 / ISIC Rev.3.1

23. The other main concern for defining aggregates is comparability to previous versions of the classification and aggregates based upon them. It should be kept in mind however, that each revision of a classification necessarily breaks existing time series, a fact that simply has to be accepted.

24. Annex 3a shows the complete relationship between the ISIC Rev.4 sections and ISIC Rev.3.1 sections, which are used for defining the aggregates for SNA purposes. A number of links will have no impact on aggregated data, due to the size of these activities. Annex 3b shows the relationship between the two classifications at the section level, taking into account only substantial links.

² *New ISIC/NACE Top-top structure and subsections – State of play*, Paper by Eurostat C1/C2 for September 2004 Working Group on NACE/CPA, Doc. Class/04/27.

25. Based on this comparison, one can construct aggregates that follow closely the breakdown used in the 1993 SNA for ISIC Rev.3. It should be noted that some proposed changes in the classification would break existing series, but provide a better match for the intended purpose of such grouping.

26. As noted above, the current SNA aggregates for data collection include complete detail at the Section level of ISIC. Therefore continuity issues can be considered at this level and do not necessarily have to be applied to the top-level aggregates used.

5. "Top-30" structure for ISIC Rev.4

27. The discussion in the Technical Subgroup on aggregations suitable for the SNA also raised the issue of an aggregation level that would comprise about 30 categories for use in I/O tables. There seems to be no guidance by the 1993 SNA on such an aggregation based on ISIC Rev.3.

28. Nevertheless, countries report I/O tables to the OECD at a comparable level. Unfortunately, OECD still seems to be using categories defined in terms of ISIC Rev.2 (according to documents on the OECD website). The breakdown used can be expressed in terms of ISIC Rev.2 divisions as follows:

ISIC Rev.2 code	Description
1	Agriculture, forestry & fishing
2	Mining & quarrying
31	Food, beverages & tobacco
32	Textiles, apparel & leather
33	Wood products & furniture
34	Paper, paper products & printing
351+352-3522	Industrial chemicals
3522	Drugs & medicines
353+354	Petroleum & coal products
355+356	Rubber & plastic products
36	Non-metallic mineral products
371	Iron & steel
372	Non-ferrous metals
381	Metal products
382-3825	Non-electrical machinery
3825	Office & computing machinery
383-3832	Electrical apparatus, nec
3832	Radio, TV & communication equipment
3841	Shipbuilding & repairing
3842+3844+3849	Other transport
3843	Motor vehicles
3845	Aircraft
385	Professional goods
39	Other manufacturing
4	Electricity, gas & water
5	Construction
61+62	Wholesale & retail trade
63	Restaurants & hotels
71	Transport & storage

72	Communication
81+82	Finance & insurance
83	Real estate & business services
9	Community, social & personal services

29. Translating this into ISIC Rev.4 divisions, this could result in the following structure. This is based on categories at the 2-digit level (divisions) in the draft ISIC Rev.4, which has been proposed at the "world-wide comparison level", requesting that all countries make efforts to define their classifications in a way that is truly compatible with these categories. Data at lower levels may not be available for all countries.

30. While most categories would be comparable to those in the above table, i.e. expressed in terms of ISIC rev.2, the following differences should be noted:

- iron and steel:

Iron and steel and non-ferrous metals are combined at the two-digit level. To separate iron and steel from the others would require 3-digit categories and even 4-digit categories, if casting of metals should be allocated.

- radio, TV and comm.

The new division for Manufacture of computers and electronic products includes this old category, but it is no longer separately identified at any level of the classification. At the 3-digit level, communications equipment and consumer electronic are the relevant counterparts.

- Other transport equipment

At the division level, only the split between motor vehicles and other transport equipment is possible. At the 3-digit level, manufacture of ships (301), air- and spacecraft (303) and others (302+309) can still be identified.

- Business services

The provision of additional breakdown at the division level has substantially changed this area. It may be useful to create more categories pertaining to these activities in this aggregation. The grouping of real estate and renting with administrative services or professional services or their treatment as a separate category should be discussed. Veterinary activities (division level) have been added to this larger grouping.

- Information

This category is new in ISIC Rev.4 and cannot (and probably should not) be assigned to the origins of its components (manufacturing, communications, business services, other services). This will in turn affect the continuity of some of these components.

- Professional goods

This relates to measuring, testing and control equipment, which is now only identifiable at the 3-digit level.

- Community, social and personal services

The portions relating waste treatment and remediation, radio and TV activities als been removed from this grouping. It still comprises a large variety of activities that could be separated further.

- Water supply

This is grouped with sewerage and waste management in ISIC Rev.4, but was grouped with electricity and gas in previous versions of ISIC. Using the division level for this top-30 aggregate, consistency with previous aggregates could be preserved.

31. For the last item, among others, it should be considered that basing this top-30 aggregate, which uses divisions and building blocks, might not be compatible with a top-10 aggregate, which uses sections as building blocks, if too much emphasis is put on continuity. It should be noted in this respect that the aggregations shown here are based on the breakdown used by OECD and may not be representative for all countries.

32. Some adjustments have been made in the following proposal to account for explicit changes in the ISIC Rev.4 draft, which would be negated by following too closely the old OECD breakdown.

ISIC Rev.4 code	Description
01	Agriculture
02	Forestry
03	Fishing
05+06+07+08+09	Mining & quarrying
10+11+12	Food, beverages & tobacco
13+14+15	Textiles, apparel & leather
16	Wood products
17+18	Paper, paper products; printing and reproduction of recorded media
19	Petroleum products
20	Industrial chemicals
21	Drugs & medicines
22	Rubber & plastic products
23	Non-metallic mineral products
24	Iron, steel and non-ferrous metals
25	Metal products
26	Computers and electronic products
27	Electrical equipment
28	Non-electrical machinery
29	Motor vehicles
30	Other transport equipment
31	Furniture
32	Other manufacturing
33	Repair of machinery
34	Electricity & gas
35	Water
36+37+38	Sewerage, waste management and remediation
39+40+41	Construction
42+43+44	Wholesale & retail trade
45+46+47+48+49+50	Transport & storage
51+52	Restaurants & hotels
53+54+55+56+57	Information and communication
59+60+61	Finance & insurance
62+63	Real estate
64+65+66+67+68+69+70	Professional services
71+72+73+74+75	Administrative and support services
76+77+78+79+80+81+82+83	
+84+86	Community, social & personal services
85	Repair of household goods
87	Public administration and defence; compulsory social security
88	Activities of house holds as employers; undifferentiated goods-producing
	activities of households for own use

90 Extraterritorial organizations

33. This structure consists of 40 categories, exceeding the originally targeted number of 30. The still detailed categories for manufacturing activities could be further collapsed to reduce this number. The current detail reflects the old breakdown, which may be of interest for continuity reasons. The services detail should be kept, as more emphasis on the services was a major prerogative of the ISIC revision.

34. <u>Note:</u> The European proposal shows 65 categories for this detail. The detail shown in the European proposal is fully compatible with the aggregation structure shown in this paper. Each category shown here can be aggregated from categories in the European proposal.

35. The ISWGNA may wish to discuss whether such an aggregation should be recommended at the international level. The number of categories can be adjusted by reflecting the European detail in some (or all) areas.

6. Other aggregations used in the National Accounts

36. Aggregation structures for purposes of the National Accounts have been used in the past. The prime example is the aggregation used in the Supply and Use Tables (see for example, System of National Accounts 1993, Tables 15.1, 15.2, 15.3).

37. The 1993 SNA lists the following aggregates in the Supply and Use tables (see table 151. of 1993 SNA publication)³:

ISIC Rev.3.1	Description	
code		
A+B	Agric., hunting, forestry, fishing	
С	Mining and quarrying	
D+E	Manufacturing, electricity	
F	Construction	
G+H	Wholesale, retail trade, repair motor vehicles, household goods, hotels and restaurants	
Ι	Transport, storage, communication	
J+K	Financial intermediation, real estate, other business services	
M+N+O	Education, health, social services	

Market output:

Own final use:

ISIC Rev.3.1	Description
code	
A+B	Agric., hunting, forestry, fishing
F	Construction
K+P	Real estate, private household services

Other non-market:

ISIC Rev.3.1 code	Description
M+N+O	Education, health, social services
L	Public admin., defence, compulsory soc. Security, other public services

³ The titles are as shown in the SNA publication and do not always reflect correct ISIC titles.

38. In this single table, two different aggregations are used, grouping portions of ISIC section K with either J or P, based on the different use of the aggregation.

a. Continuity issues

39. As mentioned above, a main concern for defining aggregates is comparability to previous versions of the classification and aggregates based upon them. It should be kept in mind however, that each revision of a classification necessarily breaks existing time series, a fact that simply has to be accepted.

40. Based on the correspondence noted above, one can construct aggregates that follow closely the breakdown used in the 1993 SNA for ISIC Rev.3. It should be noted that some proposed changes in the classification would break existing series, but provide a better match for the intended purpose of such grouping.

ISIC	Description	Comments on change in scope
Rev.4 code		
А	Agric., hunting, forestry, fishing	
В	Mining and quarrying	
C+D+E	Manufacturing, electricity	Also includes the sanitation activities of
		former section O.
F	Construction	
G+J	Wholesale, retail trade, repair motor vehicles,	Excludes repair of household goods.
	household goods, hotels and restaurants	
Н	Transport, storage, communication	Excludes telecommunication.
K	Information and communication	
L+M+N+O	Financial intermediation, real estate, other	Excludes Internet publishing.
	business services	
P+Q+R+S	Education, health, social services	Excludes radio, tv activities and
		sanitation.

Market output:

Own final use:

ISIC	Description	Comments on change in scope
Rev.4		
code		
А	Agric., hunting, forestry, fishing	
F	Construction	
U+M	Real estate, private household services	This now includes ISIC Rev.3.1 divisions 96 and 97 ⁴ , which cover undifferentiated goods and services activities by households for own use.
		This now excludes publishing, professional activities and support activities, reflecting only Real estate as part of the old section K in this grouping. Is this the correct approach?

⁴ Division 97 is outside the scope of the SNA. Both ISIC Rev.3.1 divisions 96 and 97 are now combined in ISIC Rev.4 division 89. For SNA purposes, however, only group 891 should be included in section U.

Other non-market:

ISIC Rev.4 code	Description	Comments on change in scope
P+Q+R+S	Education, health, social services	Excludes veterinary activities, sanitation activities, motion picture, radio and tv activities. Includes repair of computers, personal and household goods.
Т	Public admin., defence, compulsory soc. Security, other public services	

41. Following this, a set of aggregations for market output, own final use and other non-market activities could be introduced.

7. Points for discussion

42. The ISWGNA is expected to provide recommendations for ISIC aggregates that are suitable for SNA purposes. The group can evaluate the structures shown in this paper or propose different approaches. In this context the ISWGNA may wish to discuss:

- (a) if a single aggregation structure, consisting of about 10 categories, should be recommended for general use in the SNA framework (see section 4);
- (b) whether an intermediate aggregation structure with about 30 (or more) categories should be recommend for use in SNA or not;

(b1) if yes, whether and/or to what degree such a structure should follow the list shown in section 5 below;

(c) if a group of individual aggregations, such as those for use in the supply and use tables of the SNA, as illustrated in section 6, should be recommended.

43. The level of detail in the top-30 structure is much higher for manufacturing activities than for services. The detail for services could be increased by either raising the number of categories used or by reducing the detail in the manufacturing area. Does the ISWGNA support any of these options?

44. The ISWGNA is also invited to provide feedback in terms of proposals for change of the ISIC Rev.4 draft to address the needs of such high-level aggregates.

Annex 1. Top-level structure of ISIC Rev.4 (draft)

- A Agriculture, Forestry and Fishing
- B Mining and quarrying
- C Manufacturing
- D Electricity, gas, steam and air conditioning supply
- E Water supply; sewerage, waste management and remediation activities
- F Construction
- G Trade
- H Transportation and storage
- J Accommodation and Food service activities
- K Information and communication
- L Financial and insurance activities
- M Real Estate, rental and leasing activities
- N Professional, Scientific and Technical Activities
- O Administrative and support service activities
- P Education
- Q Human health and social work
- R Arts, entertainment and recreation
- S Other Service Activities
- T Public administration and defence; compulsory social security
- U Activities of house holds as employers; undifferentiated goods- and services-producing activities of households for own use
- V Extraterritorial organizations and bodies

Annex 2. Second-level structure of ISIC Rev.4 (draft)

01	Crop and livestock production, hunting and related service activities
02	Forestry and logging
03	Fishing and aquaculture
05	Mining of coal and lignite
06	Extraction of crude petroleum and natural gas
07	Mining of metal ores
08	Other mining and quarrying
09	Mining support service activities
10	Manufacture of food products
11	Manufacture of beverages
12	Manufacture of tobacco products
13	Manufacture of textiles
14	Manufacture of wearing apparel
15	Manufacture of leather and related products
16	Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles
10	of straw and plaiting materials
17	Manufacture of paper and paper products
18	Printing and reproduction of recorded media
18	
20	Manufacture of coke and refined petroleum products
	Manufacture of chemicals and chemical products
21	Manufacture of pharmaceuticals
22	Manufacture of rubber and plastics products
23	Manufacture of other non-metallic mineral products
24	Manufacture of basic metals
25	Manufacture of fabricated metal products, except machinery and equipment
26	Computer and electronic product manufacturing
27	Manufacture of electrical equipment
28	Manufacture of machinery and equipment n.e.c.
29	Manufacture of motor vehicles
30	Manufacture of other transport equipment
31	Manufacture of furniture
32	Manufacturing n.e.c.
33	Repair, maintenance and installation of machinery and equipment
34	Electricity, gas, steam and air conditioning supply
35	Water collection and supply
36	Sewerage
37	Waste collection, treatment and disposal activities; materials recovery
38	Remediation activities and other waste management services
39	Construction of buildings
40	Civil engineering
41	Special trades
42	Wholesale and retail trade and repair of motor vehicles and motorcycles
43	Wholesale trade and commission trade, except of motor vehicles and motorcycles
44	Retail trade, except of motor vehicles and motorcycles
45	Land transport; transport via pipelines
46	Water transport
47	Air transport
48	Warehousing and support activities for transportation
50	Postal and courier activities
50	Accommodation
52	Food service activities
53	Publishing activities
53 54	Motion Picture and sound recording activities
54 55	Broadcasting
55 56	Telecommunications
50	

57 Information technology, internet service providers and web search portals and other information service activities 59 Financial intermediation, except insurance and pension funding 60 Insurance, reinsurance and pension funding, except compulsory social security Other financial activities 61 62 Real estate activities Rental and leasing 63 64 Legal and accounting activities 65 Activities of holding companies; management and management consultancy activities Architecture and engineering activities; technical testing and analysis 66 Scientific research and development 67 Advertising and market research 68 Photographic activities and other professional, scientific and technical activities 69 70 Veterinary activities Employment activities 71 72 Activities of travel agencies, tour operators and other reservation service activities 73 Investigation and security activities 74 Services to buildings and landscape activities 75 Office administrative, business support and other support service activities 76 Education 77 Human health activities 78 Residential care services 79 Social work activities without accommodation 80 Dramatic arts, music and other arts and entertainment activities 81 Museums activities, preservation of historical sites, botanical and zoological gardens and nature reserves activities 82 Gambling and betting activities Sports activities and amusement and recreation activities 83 Activities of membership organizations 84 Repair of computers and personal and household goods 85 86 Other service activities 87 Public administration and defence; compulsory social security Activities of households as employers of domestic personnel 88 89 Undifferentiated goods- and services-producing activities of private households for own use 90 Extraterritorial organizations and bodies

Annex 3a. Detailed relationship between Sections in ISIC Rev.4 (draft) and ISIC Rev.3.1

45. This table provides a complete link between the two classifications at the section level. Notes are provided for deviations from the apparent default link.

46. An asterisk (*) in the notes column identifies links that are insignificant at this level and can be ignored for a section level correspondence.

ISIC31 section	Description	ISIC4 section	Description	Comment
A	Agriculture, hunting and forestry	A	Agriculture, Forestry and Fishing	
A	Agriculture, hunting and forestry	0	Administrative and support service activities	* landscaping
Α	Agriculture, hunting and forestry	S	Other Service Activities	* service activities to promote commercial hunting
В	Fishing	A	Agriculture, Forestry and Fishing	
В	Fishing	N	Professional, Scientific and Technical Activities	* fish stock management
С	Mining and quarrying	В	Mining and quarrying	
С	Mining and quarrying	С	Manufacturing	* manufacturing of coal briquettes; manufacturing of table salt
D	Manufacturing	С	Manufacturing	
D	Manufacturing	Е	Water supply; sewerage, waste management and remediation activities	Materials recovery (former division 37)
D	Manufacturing	F	Construction	* bowling alley installation
D	Manufacturing	K	Information and communication	Publishing
D	Manufacturing	S	Other Service Activities	Repair of communications equipment; repair of office furniture, furniture restoration
Е	Electricity, gas and water supply	С	Manufacturing	* manufacture of ice for non-food purposes
Е	Electricity, gas and water supply	D	Electricity, gas, steam and air conditioning supply	
E	Electricity, gas and water supply	E	Water supply; sewerage, waste management and remediation activities	
F	Construction	F	Construction	
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	G	Trade	
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	Н	Transportation and storage	*towing and roadside assistance

ISIC31 section	Description	ISIC4 section	Description	Comment
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	0	Administrative and support service activities	* locksmith services
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	S	Other Service Activities	Repair of household goods
Н	Hotels and restaurants	J	Accommodation and Food service activities	
Ι	Transport, storage and communications	Н	Transportation and storage	
Ι	Transport, storage and communications	K	Information and communication	
Ι	Transport, storage and communications	Ν	Professional, Scientific and Technical Activities	* bill auditing and freight rate information
Ι	Transport, storage and communications	0	Administrative and support service activities	* travel agencies and tour operators
J	Financial intermediation	L	Financial and insurance activities	
J	Financial intermediation	М	Real Estate, rental and leasing activities	* leasing of intangible assets
J	Financial intermediation	Ν	Professional, Scientific and Technical Activities	* financial holding companies
К	Real estate, renting and business activities	С	Manufacturing	* filling of aerosols; repair of photocopiers etc.
К	Real estate, renting and business activities	K	Information and communication	Internet publishing etc.
К	Real estate, renting and business activities	М	Real Estate, rental and leasing activities	
K	Real estate, renting and business activities	N	Professional, Scientific and Technical Activities	
К	Real estate, renting and business activities	0	Administrative and support service activities	
K	Real estate, renting and business activities	Р	Education	* management services that support educational processes and systems
Κ	Real estate, renting and business activities	S	Other Service Activities	* repair of computers
L	Public administration and defence; compulsory social security	K	Information and communication	* government archives
L	Public administration and defence; compulsory social security	0	Administrative and support service activities	* operation of government owned buildings; tax collection etc. on a fee or contract basis
L	Public administration and defence; compulsory social security	Т	Public administration and defence; compulsory social security	
М	Education	Р	Education	
N	Health and social work	N	Professional, Scientific and Technical Activities	Veterinary activities
N	Health and social work	Q	Human health and social work	· · · ·
0	Other community, social and personal service activities	E	Water supply; sewerage, waste management and remediation activities	Sanitation activities (former division 90)
0	Other community, social and personal service activities	K	Information and communication	Motion picture, radio and TV activities

ISIC31 section	Description	ISIC4 section	Description	Comment
0	Other community, social and personal service activities	0	Administrative and support service activities	* street sweeping; casting agencies; ticket agencies
0	Other community, social and personal service activities	Р	Education	* sport instructors
0	Other community, social and personal service activities	R	Arts, entertainment and recreation	
0	Other community, social and personal service activities	S	Other Service Activities	
Р	Activities of private households as employers and undifferentiated production activities of private households	U	Activities of house holds as employers; undifferentiated goods- and services-producing activities of households for own use	Note: Although there is no difference between ISIC Rev.3.1 and ISIC Rev.4 for this section, the scope of this section has changed between ISIC Rev.3 and Rev.3.1. It now includes divisions for undifferentiated production activities of private households.
Q	Extraterritorial organizations and bodies	V	Extraterritorial organizations and bodies	

Annex 3b. Consolidated relationship between sections in ISIC Rev.4 (draft) and ISIC Rev.3.1

This table excludes insignificant links shown in Annex 3a.

ISIC31 section	Description	ISIC4 section	Description	Comment
А	Agriculture, hunting and forestry	А	Agriculture, Forestry and Fishing	
В	Fishing	А	Agriculture, Forestry and Fishing	
С	Mining and quarrying	В	Mining and quarrying	
D	Manufacturing	C	Manufacturing	
D	Manufacturing	E	Water supply; sewerage, waste management and remediation activities	Materials recovery (former division 37)
D	Manufacturing	K	Information and communication	Publishing
D	Manufacturing	S	Other Service Activities	Repair of communications equipment; repair of office furniture, furniture restoration
E	Electricity, gas and water supply	D	Electricity, gas, steam and air conditioning supply	
Е	Electricity, gas and water supply	Е	Water supply; sewerage, waste management and remediation activities	
F	Construction	F	Construction	
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	G	Trade	
G	Wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods	S	Other Service Activities	Repair of household goods
Н	Hotels and restaurants	J	Accommodation and Food service activities	
Ι	Transport, storage and communications	Н	Transportation and storage	
Ι	Transport, storage and communications	К	Information and communication	
J	Financial intermediation	L	Financial and insurance activities	
K	Real estate, renting and business activities	K	Information and communication	Internet publishing etc.

ISIC31 section	Description	ISIC4 section	Description	Comment
K	Real estate, renting and business activities	М	Real Estate, rental and leasing activities	
К	Real estate, renting and business activities	N	Professional, Scientific and Technical Activities	
К	Real estate, renting and business activities	0	Administrative and support service activities	
L	Public administration and defence; compulsory social security	Т	Public administration and defence; compulsory social security	
М	Education	Р	Education	
N	Health and social work	N	Professional, Scientific and Technical Activities	Veterinary activities
N	Health and social work	Q	Human health and social work	
0	Other community, social and personal service activities	Е	Water supply; sewerage, waste management and remediation activities	Sanitation activities (former division 90)
0	Other community, social and personal service activities	К	Information and communication	Motion picture, radio and TV activities
0	Other community, social and personal service activities	R	Arts, entertainment and recreation	
0	Other community, social and personal service activities	S	Other Service Activities	
Р	Activities of private households as employers and undifferentiated production activities of private households	U	Activities of house holds as employers; undifferentiated goods- and services-producing activities of households for own use	
Q	Extraterritorial organizations and bodies	V	Extraterritorial organizations and bodies	

Annex 4. Correspondence between the ISIC Rev.4 top-10 aggregate proposed by the TSG and ISIC Rev.3.1

47. The following table shows the relationship between the ISIC Rev.4-based aggregation structure proposed by the Technical Subgroup and the aggregation structure used for ISIC Rev.3.1.

ISIC Rev.	ISIC	Titles	Comments
4 codes	Rev.3.1		
	codes		
А	A+B	Agriculture, Forestry and Fishing	
B+C+D+E	C+D+E	Mining and quarrying + Manufacturing + Electricity, gas steam and air conditioning	Includes also the sanitation activities of former section O
		supply + water supply; waste management	(division 90).
F	F	Construction	
G+H+J	G+I+H	Trade+Transportation and Storage+Accommodation and Food Service activities	Excludes repair of household goods, telecommunication.
К	-	Information and communication	Includes components from old sections D (publishing), I (telecommunications), K (internet publishing, IT services) and O (motion picture, radio, tv activities).
L	J	Financial and Insurance activities	
M+N+O	K	Real Estate, rental and leasing activities+ Professional, Scientific and Technical Services+Administrative and support service activities	Includes also veterinary activities.
P+Q	M+N	Education+Human Health and Social Work	Excludes veterinary activities.
R+S+U	O+P	Arts, Entertainment and Recreation+Other Service Activities+Activities of Households as employers; undifferentiated goods- and service- producing activities of households for own use	Includes also repair of household goods, repair of computers and communications equipment. Excludes sanitation activities, motion picture, radio and tv activities.
T+V	L+Q	Public Administration and defence; compulsory social security+ Extraterritorial organizations and bodies	