



Revision of ISIC/NACE and consequences for national accounts

Report to the Advisory Expert Group on the meeting of EU National Accounts Working Group of 23-24 November 2004

Top-top structure

The UN Statistical Commission in March 2004 noted that, because the top level of the current proposal for ISIC rev. 4 contains 21 categories, a demand exists for a new aggregation level of around 10 items. The UNSC supported the proposal of developing a limited top-level structure for ISIC in conjunction with the ISWGNA. The top-top structure is intended to be a classification that could be used for broad international comparisons. It will therefore likely be included in ISIC.

Following on from earlier discussions in Europe and at the OECD in October, the meeting discussed a proposal from Eurostat for a top-top structure with 9 items, as well as a French proposal with 10 items. On several points the French proposal was clearly preferred. It is shown here:

Top-top structure	Comprises new ISIC sections
1A - agriculture, Hunting, Forestry & Fishing	A
1B - Mining, manufacturing and utilities	B, C, D and E
1C - Construction	F
1D - Trade, Transport, Food & accommodation services	G, H & J
1E - Information & Communication	K
1F - Financial & Insurance activities	L
1G - Real estate, Rental and Leasing activities	M
1H - Business services	N & O
1J - Personal services	P, Q, R, S & U ¹
1K - Public administration & extraterritorial organizations	T & V

¹ Requires a re-ordering of the sections of ISIC rev. 4 if hierarchy is to be maintained.

In the course of the discussion, a number of interesting points were made about the principles or requirements which should guide the construction of this top-top structure:

- Its use for economic analysis pleads for separating activities that have different dynamics, reactions to economic forces, productivity, etc.
- Keep manufacturing separate because of its analytical importance.

- The French proposal has a logic of grouping together all services to persons, whereas other participants wanted to separate out education and health as a step towards distinguishing non-market production.
- Is the classification only for national accounts, in which it could possibly be included in SNA but not ISIC, or would there be a use of this classification in other areas that would justify its incorporation in ISIC? (This point applies perhaps even more strongly to the sub-section level discussed below.)
- Consider what level of detail is feasible and reliable - in the EU, the OECD and elsewhere - now and in ten years time, for quarterly accounts, for annual national accounts and for input-output tables.

These considerations appear in respect of the specific headings discussed below.

This proposal separates ISIC M (Real estate, rental and leasing activities) because a large part of this section relates to dwelling services, which can distort productivity measures if aggregated with other services. The distinction between business and personal services is based on the main user of these services, i.e. businesses vs. households, intermediate consumption or final consumption.

Some countries said they would like to see P (Education) and Q (Human health) separately from the other personal services. This is the case for example in the UN proposal. If the number of items it to be limited to 10, a choice has to be made between separating M and separating P+Q (or grouping other sections).

Another issue discussed was the separation of ISIC C Manufacturing. Many countries and users expressed a strong wish to see this section separately in the top-top structure. There are a number of options available to achieve this:

- Aggregate ISIC B (Mining) with A (Agriculture etc), separate C and D+E, increasing the number of items in the top-top structure by one. This would on the one hand make it possible to create a breakdown into primary, secondary and tertiary sectors of the economy. On the other hand, many users may feel it important to have separate data on ISIC A, in view of the (political) importance of agriculture.
- A split could be made between B+C and D+E, again increasing the number of items by one. This would not entirely separate out C.
- Create an “of-which” item for ISIC C (as is done currently in the UN database and in the near future in the EU data transmission).

These options assume that the hierarchy of the system needs to be maintained. If this is not the case, there are of course more options, for example to aggregate B with D+E.

Ultimately, the choice between the various options depends on the use of this top-top structure for data collection, compilation and publication. If, for example, the structure is to be used for compilation of quarterly accounts (as is suggested by Eurostat for EU countries), the feasibility of obtaining reliable estimates for all branches on a quarterly basis needs to be taken into account.

Subsection level

Eurostat explained the following reasons for proposing a subsection level of around 65 items for inclusion into NACE:

- Currently the division level (60) of ISIC rev.3 and NACE rev. 1.1 is used for the transmission of final national accounts data (in particular supply, use & input-output tables). The number of divisions in the new ISIC/NACE is currently 87. Many countries said that it will not be feasible for them to use this new much more detailed level to submit national accounts data to Eurostat. Hence, an intermediate level between 21 (sections) and 87 (divisions) has to be defined.
- Eurostat proposes therefore a subsection level of currently 65 items, i.e. about the same level of detail as we have now (see annex 1 for the proposal). Although 65 is relatively close to 87, Eurostat does not want to lose the detailed information that we currently receive in the supply, use and input-output tables.
- If such a subsection level is to be used by national accounts only, it would suffice to include it in the future SNA and/or ESA. Eurostat has so far favoured however to include the subsection level in NACE, to maintain the current close relationship between NACE and ESA95. Eurostat does not feel strongly whether to include the subsection level also into ISIC. This depends on its possible use in national accounts outside Europe.

The NAWG supported the general approach by Eurostat, in particular that the proposed number of divisions in the new ISIC/NACE is too high for national accounts purposes. However, it was also recognised that to introduce an intermediate level of around 65 may not be sufficient:

- There may also be a need for a more aggregated level (30-40 items) for preliminary annual data (to replace the current A31).
- For comparisons with other OECD and UN countries 65 items may be too detailed.

France introduced a concrete proposal for an intermediate structure of 43 categories, which is included here in annex 2.

The NAWG agreed that the question of the subsection level (i.e. which level of aggregation to choose and whether to include it into ISIC and/or NACE or not) needs to be discussed first at the international level, starting with the Advisory Expert Group meeting.

Annex 1: Current draft of new NACE and Eurostat proposal for subsections

<i>Draft new NACE (from consultation document)</i>	<i>Proposed subsections</i>	<i>reference to A60</i>	<i>number of subsections</i>	<i>corresponding number of divisions in A60</i>
A Agriculture, forestry and fishing				
01 Crop and livestock production, hunting and related service activities	AA Crop and livestock production, hunting and related service activities	01		
02 Forestry and logging	AB Forestry and logging	02		
03 Fishing and aquaculture	AC Fishing and aquaculture	03	3	3
B Mining and quarrying				
05 Mining of coal and lignite	BA Mining and quarrying	10		
06 Extraction of crude petroleum and natural gas	"	11		
07 Mining of metal ores	"	13 (12 has disappeared)		
08 Other mining and quarrying	"	14		
09 Mining support service activities	"	new	1	5
C Manufacturing				
10 Manufacture of food products	CA Manufacture of food products, beverages and tobacco products	15		
11 Manufacture of beverages	"	15		
12 Manufacture of tobacco products	"	16		
13 Manufacture of textiles	CB Manufacture of textiles, wearing apparel and leather	17		
14 Manufacture of wearing apparel	"	18		

15 Manufacture of leather and related products	"	19			
16 Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw and plaiting materials	CC Manufacture of wood and of products of wood and cork, except furniture; manufacture of articles of straw	20			
17 Manufacture of paper and paper products	CD Manufacture of paper and paper products	21			
18 Printing and reproduction of recorded media	CE Printing and reproduction of recorded media	22	excl. publishing		
19 Manufacture of coke and refined petroleum products	CF Manufacture of coke and refined petroleum products	23			
20 Manufacture of chemicals and chemical products	CG Manufacture of chemicals and chemical products	24			
21 Manufacture of pharmaceuticals	CH Manufacture of pharmaceuticals	24			
22 Manufacture of rubber and plastics products	CI Manufacture of rubber and plastics products	25			
23 Manufacture of other non-metallic mineral products	CJ Manufacture of other non-metallic mineral products	26			
24 Manufacture of basic metals	CK Manufacture of basic metals	27			
25 Manufacture of fabricated metal products, except machinery and equipment	CL Manufacture of fabricated metal products, except machinery and equipment	28			
26 Manufacture of computers and electronic products	CM Manufacture of computers and electronic products	30	regrouping		
27 Manufacture of electrical equipment	CN Manufacture of electrical equipment	31	regrouping		
28 Manufacture of machinery and equipment n.e.c.	CO Manufacture of machinery and equipment n.e.c.	29	regrouping		
29 Manufacture of motor vehicles	CP Manufacture of transport equipment	34			
30 Manufacture of other transport equipment	"	35			
31 Manufacture of furniture	CQ Manufacturing n.e.c.	36			
32 Manufacturing n.e.c.	"	36			
33 Repair, maintenance and installation of machinery and equipment	CR Repair and maintenance and installation of machinery and equipment	new		18	22
D Electricity, gas, steam and air conditioning supply					
34 Electricity, gas, steam and air conditioning supply	DA Electricity, gas, steam and air conditioning supply	40		1	1
E Water supply; sewerage, waste management and remediation activities					
35 Water collection and supply	EA Water collection and supply	41			
36 Sewerage	EB Sewerage, waste management and remediation activities	90			

37 Waste collection, treatment and disposal activities; materials recovery	"	90+37			
38 Remediation activities and other waste management services	"	90		2	3
F Construction					
39 Construction of buildings	FA Construction of buildings and civil engineering	45			
40 Civil engineering	"	45			
41 Specialized trades	FB Specialized trades in construction	45		2	1
G Trade					
42 Wholesale and retail trade and repair of motor vehicles and motorcycles	GA Wholesale and retail trade and repair of motor vehicles and motorcy	50			
43 Wholesale trade and commission trade, except of motor vehicles and motorcycles	GB Wholesale trade and commission trade, except of motor vehicles and motorcycles	51			
44 Retail trade, except of motor vehicles and motorcycles	GC Retail trade, except of motor vehicles and motorcycles; repair of personal and household goods	52		3	3
H Transportation and storage					
45 Land transport; transport via pipelines	HA Land transport; transport via pipelines	60			
46 Water transport	HB Water transport	61			
47 Air transport	HC Air transport	62			
48 Warehousing and support activities for transportation	HD Warehousing and support activities for transportation	63			
50 Postal and courier activities	HE Postal and courier activities	64	excl telecommunicati on	5	5
J Accommodation and Food service activities					
51 Accommodation	JA Accommodation and food service activities	55			
52 Food service activities	"	55		1	1
K Information and communication					

53 Publishing activities	KA Publishing activities	22+	split from printing, incl software publishing		
54 Motion Picture and sound recording activities	KB Motion Picture and sound recording activities	92			
55 Broadcasting	KC Broadcasting	92			
56 Telecommunications	KD Telecommunications	64	excl post		
57 Information technology, internet service providers and web search portals and other information service activities	KE Information technology, internet service providers and web search portals and other information service activities	72+	mostly computer services	5	1
L Financial and insurance activities					
59 Financial intermediation, except insurance and pension funding	LA Financial intermediation, except insurance and pension funding	65			
60 Insurance, reinsurance and pension funding, except compulsory social security	LB Insurance and pension funding, except compulsory social security	66			
61 Other financial activities	LC Other financial activities	67		3	3
M Real Estate, rental and leasing activities					
62 Real estate activities	MA Real estate activities	70			
63 Rental and leasing	MB Rental and leasing	71		2	2
N Professional, Scientific and Technical Activities					
64 Legal and accounting activities	NA Legal, accounting and management consultancy activities; holding companies	74			
65 Activities of holding companies; management and management consultancy activities	"	74			
66 Architecture and Engineering activities; technical testing and analysis	NB Architecture and Engineering activities; technical testing and analysis	74			
67 Scientific research and development	NC Research and development	73			
68 Advertising and Market research	ND Advertising and Market research	74			
69 Photographic activities and other professional, scientific and technical activities	NE Photographic activities and other professional, scientific and technical activities	74			
70 Veterinary activities	"	80	split from health	5	2

O Administrative and support service activities					
71 Employment activities	OA Employment activities	74			
72 Activities of travel agencies, tour operators and other reservation service activities	OB Activities of travel agencies, tour operators and other reservation service activities	63	split from transport		
73 Investigation and security activities	OC Investigation and security, services to buildings and landscape and other support activities,	74			
74 Services to buildings and landscape activities	"	74			
75 Office administrative, business support and other support service activities	"	74		3	0
T Public administration and defence; compulsory social security (changed order!)					
87 Public administration and defence; compulsory social security	TA Public administration and defence; compulsory social security	75		1	1
P Education					
76 Education	PA Education	80		1	1
Q Human health and social work					
77 Human health activities	QA Human health activities	85			
78 Residential care services	QB Social work activities	85			
79 Social work activities without accommodation	"	85		2	1
R Arts, entertainment and recreation					
80 Dramatic arts, music and other arts and entertainment activities	RA Arts, entertainment and museum activities	92			
81 Museums activities, preservation of historical sites, botanical and zoological gardens and nature reserves	"	92			
82 Gambling and betting activities	RB Sports, amusement and recreation activities	92			
83 Sports activities and amusement and recreation activities	"	92		2	1

S Other service activities					
84 Activities of membership organizations	SA Activities of membership organizations	91			
85 Repair of computers and personal and household goods	SB Repair of computers and personal and household goods	new			
86 Other service activities	SC Other service activities	93		3	2
U Activities of house holds as employers; undifferentiated goods- and services-producing activities of households for own use					
88 Activities of households as employers of domestic personnel	UA Activities of households as employers of domestic personnel	95			
89 Undifferentiated goods- and services-producing activities of private households for own use	"	95		1	1
V Extraterritorial organizations and bodies					
90 Extraterritorial organizations and bodies	VA Extraterritorial organizations and bodies	99		1	1
				65	60

Annex 2: French proposal for an intermediate structure with 43 headings

		Corresponding future divisions
A	AZ Agriculture, Hunting, Forestry and Fishing	01, 02, 03
B	Mining and quarrying	
	BA Extraction of energetical products	05, 06
	BB Other mining & quarrying, mining support services	07, 08, 09
C	Manufacturing	
	CA Manufacture of food, beverages and tobacco products	10, 11, 12
	CB Manufacture of textiles, wearing apparel and leather products	13, 14, 15
	CC Manufacture of wood, products of wood, paper and paper products	16, 17
	CD Manufacture of coke, refined petroleum, chemical, rubber and plastic products	19, 20, 22
	CE Manufacture of pharmaceuticals	21
	CF Manufacture of other non-metallic mineral products	23
	CG Manufacture of basic metals and fabricated metal products	24, 25
	CH Computers and electronic products manufacturing	26
	CJ Manufacture of electrical equipment	27
	CK Manufacture of machinery and equipment n.e.c.	28
	CL Manufacture of motor vehicles	29
	CM Manufacture of other transport equipment	30
	CN Manufacturing n.e.c.	18, 31, 32
	CO Repair and installation of machinery and equipment	33
D	DZ Electricity, gas, steam and air conditioning supply	34
E	EZ Water supply; sewerage, waste management and remediation activities	35, 36, 37
F	FZ Construction	39, 40, 41
G	Trade	
	GA Wholesale, retail and repair of motor vehicles and motorcycles	42
	GB Wholesale trade	43
	GC Retail trade	44
H	HZ Transportation and storage	45, 46, 47, 48, 50
J	JZ Accommodation and Food service activities	51, 52
K	Information and communication	
	KA Publishing, audiovisual and broadcasting activities	53, 54, 55
	KB Telecommunications	56
	KC Information technology service activities	57
L	Financial and insurance activities (=LZ)	59, 60, 61
M	Real Estate, rental and leasing activities (=MZ)	62, 63
N	Scientific, professional and Technical Activities	
	NA Scientific research and development	67
	NC Operational services	64, 65, 66, 68, 69, 70
O	Administrative and support service activities	
	OA Employment activities	71
	OB Travel agencies, tour operators & other reservation	72
	OC Other administrative & support activities	73, 74, 75
P	PZ Education	76
Q	QZ Health and Social Work	77, 78, 79
R	RZ Arts, entertainment and recreation	80, 81, 82, 83
S	SZ Other Service Activities	84, 85, 86
U	Activities of households as employers and producers of undifferentiated goods and services for own use (=UZ)	87
T	TZ Public administration and defence; compulsory social security	88, 89
V	VZ Extraterritorial organizations and bodies	90