



# **Alternative aggregations for ISIC**

**United Nations Statistics Division**



# Scope of this presentation

- We will look at:
  - What are alternative aggregations?
  - Describe the four alternative aggregations published with ISIC Rev.4



# **Alternative aggregations for ISIC Rev.4**



# What are alternative aggregations

- ❑ Tools for reporting or analyzing statistical data
- ❑ Not all needs are served by the ISIC structure.
  - Analysis/presentation on specific subjects often require data grouped differently
  - But ISIC itself can have only one structure
- ❑ ISIC Rev. 4 comes with four internationally agreed/supported aggregations
  - ❑ SNA/ISIC aggregations for SNA data reporting
  - ❑ The information economy ('ICT' and 'content/media')
  - ❑ Non-profit institutions; *and*
  - ❑ Informal sector.



# The two SNA aggregations

- High-level SNA/ISIC aggregation "**A\*10**"
  - Aggregation *above* the section level (10 categories).
  - Used for summary data reporting by activity in the SNA
- Intermediate-level SNA/ISIC aggregation "**A\*38**"
  - Aggregation *between* section and division level (38 categories)
  - Used for international comparison of SNA data reporting at level of input/output tables



# A\*10 – the high level aggregation

A*10	ISIC Rev. 4 Sections	Descriptions
1	A	Agriculture, forestry and fishing
2	B, C, D & E	Manufacturing, mining and quarrying and other industrial activities
2a	C	<i>Of which: manufacturing</i>
3	F	Construction
4	G, H & I	Wholesale and retail trade, transportation and storage, accommodation and food service activities
5	J	Information and communication
6	K	Financial and insurance activities
7	L	Real estate activities (*)
8	M & N	Professional, scientific, technical, administrative and support service activities
9	O, P & Q	Public administration and defence, education, human health and social work activities
10	R, S, T & U	Other service activities



## A\*38 – the intermediate-level aggregation

A*38	Descriptions	ISIC Rev. 4 Division
A	Agriculture, forestry and fishing	01 to 03
B	Mining and quarrying	05 to 09
CA	Manufacture of food products, beverages and tobacco products	10 to 12
CB	Manufacture of textiles, wearing apparel, leather and related products	13 to 15
CC	Manufacture of wood and paper products, printing and reproduction of recorded media	16 to 18
CD	Manufacture of coke and refined petroleum products	19
CE	Manufacture of chemicals and chemical products	20

This is just a selection of the intermediate aggregations – there are 38 in total.



# Alternative aggregation for the Information Economy

- In recent years: a growing demand for data on the **information economy**:
  - the '**ICT sector**'
  - the '**Content and media sector**'
- the **boundary** of the information economy has been subject to debate.
- The Organisation for Economic Cooperation and Development (OECD) has taken a lead role in **defining** the ICT and Content and media sectors in terms of ISIC Revision 4.





# Defining the ICT sector

- ❑ Principle used in identifying ICT industries:

“The production (goods and services) of a candidate industry must primarily be intended to fulfill or enable the function of information processing and communication by electronic means, including transmission and display.”

- ❑ Includes manufacturing industries, trade industries and other services industries (also including repair).



# Altern. aggregation: ICT Sector

ICT manufacturing industries	
ICT trade industries	
ICT services industries	
5820	Software publishing
<b>61</b>	<b>Telecommunications</b>
6110	Wired telecommunications activities
6120	Wireless telecommunications activities
6130	Satellite telecommunications activities
6190	Other telecommunications activities
<b>62</b>	<b>Computer programming, consultancy and related activities</b>
6201	Computer programming activities
6202	Computer consultancy and computer facilities management activities
6209	Other information technology and computer service activities
<b>631</b>	<b>Data processing, hosting and related activities; web portals</b>
6311	Data processing, hosting and related activities
6312	Web portals
<b>951</b>	<b>Repair of computers and communications equipment</b>
9511	Repair of computers and peripheral equipment
9512	Repair of communications equipment



# Defining the content/media sector

- Principle used in identifying content and media industries

“The production (goods and services) of a candidate industry must primarily be intended to inform, educate and/or entertain humans through mass communication media. These industries are engaged in the production, publishing and/or the distribution of content (information, cultural and entertainment products), where content corresponds to an organized message intended for human beings.”



# Altern. aggregation: Content and media sector

Content and media sector	
<b>581</b>	<b>Publishing of books, periodicals and other publishing activities</b>
5811	Book publishing
5812	Publishing of directories and mailing lists
5813	Publishing of newspapers, journals and periodicals
5819	Other publishing activities
<b>591</b>	<b>Motion picture, video and television programme activities</b>
5911	Motion picture, video and television programme production activities
5912	Motion picture, video and television programme post-production activities
5913	Motion picture, video and television programme distribution activities
5914	Motion picture projection activities
<b>592</b>	<b>Sound recording and music publishing activities</b>
<b>60</b>	<b>Programming and broadcasting activities</b>
6010	Radio programming
6020	Television programming and broadcasting activities
<b>639</b>	<b>Other information service activities</b>
6391	News agency activities
6399	Other information service activities n.e.c.



# Alternative aggregation for NPIs (non-profit institutions)

- NPIs are defined by legal and other criteria that are not used in ISIC
  - Not possible to define the NPI sector by aggregating certain ISIC classes
- A separate classification exists for disaggregating the NPI sector along activity lines:
  - International Classification of Non-profit Institutions (ICNPO)
- ISIC Rev. 4 maps well to ICNPO (1-1 links), *except* for two groups:
  - 889 – “Other social work activities without accommodation”
  - 949 – “Activities of other member organizations”
- Therefore, a more detailed version of these two groups are presented as an “alternative aggregation” in ISIC Rev.4.



# Alternative aggregation for NPIs: additional categories for ISIC 889

Group	Class	Title
889		Other social work activities without accommodation
	8891	Child and youth service activities
	8892	Other individual and family service activities
	8893	Community food and housing service activities
	8894	Temporary shelters
	8895	Emergency and relief activities
	8896	Vocational rehabilitation and habilitation activities
	8897	Child day care services activities
	8898	Charitable or other supporting activities aimed at social work
	8899	Other social work activities without accommodation n.e.c.



# Alternative aggregation for NPIs: additional categories for ISIC 949

Group	Class	Title
949		Activities of other membership organizations
	9491	Activities of religious organizations
	9492	Activities of political organizations
	9493	Grantmaking and giving activities
	9494	Activities of human rights organizations
	9495	Activities of environmental, conservation and wildlife organizations
	9496	Activities of other social advocacy organizations
	9497	Activities of cultural or recreational associations (other than sports or games)
	9498	Activities of other civic and social organizations
	9499	Activities of other membership organizations n.e.c.



# Alternative aggregation for the informal sector

- ❑ Purpose: To provide an analytically useful grouping of ISIC categories when reporting/analysing statistics on the informal sector.
- ❑ Important components of the informal sector:
  - manufacturing
  - repair services
  - trade
- ❑ Economic activity not a criterion by which to define the sector, but still an important variable by which to describe its characteristics.
- ❑ The ISIC Rev.4 alternative aggregation for the informal sector is a high-level regrouping of those sections/division that are relevant for the sector





Category	Title	ISIC sections	ISIC divisions
I	Agriculture, forestry and fishing	A	01-03
II	Mining and quarrying, manufacturing, electricity, gas and water supply, waste management	B, C, D, E	05-39
IIa	<i>Of which: Manufacturing</i>	C	10-33
III	Construction	F	41-43
IV	Wholesale and retail trade	G*	45*, 46, 47
Iva	<i>Of which: Retail trade not in stores</i>	G*	47*
V	Repair of motor vehicles and motorcycles; repair of computers and personal and household goods	G*, S*	45*, 95
VI	Transportation and storage	H	49-53
VII	Accommodation and food service activities	I	55-56
VIIa	<i>Of which: Restaurants, mobile food service activities and event catering</i>	I*	56*
VIII	Professional, scientific and technical activities; administrative and support service activities; arts, entertainment and recreation	M, N, R	69-82, 90-93
IX	Education; human health and social work activities	P, Q	85-88
X	Other personal service activities	S*	96
XI	Other activities	J, K, L, S*	56-68, 94



# Different kinds of aggregations

- ❑ Aggregations can be of different types
  - 1) Define agreed data levels
    - ❑ no rearrangement of structure, just aggregate categories of present structure
    - ❑ Examples: **SNA/ISIC aggregations** (A\*10, A\*38); **informal sector**
  - 2) Define new concepts
    - ❑ used to define concepts (in terms of existing classes) that cannot be served by default structure
    - ❑ Example: **Alternative aggregation for the information economy** (defines what the ICT and content/media sector *is*)
  - 3) Define additional detail to existing structure for specific narrow purposes
    - ❑ Example: **Alternative aggregation for NPIs**



# Alternative aggregations

- ❑ These aggregations are defined for ISIC Rev.4
- ❑ Complementary aggregations exist for the Central Product Classification (CPC)
  - e.g. for products of the information economy
- ❑ Additional aggregations can be defined based on countries' needs