# Update on the ISIC and CPC revision

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## Aims of this presentation

- Address specific classification issues related to the guidance notes of the SNA revision
  - Digital supply and use tables (DZ.5)
  - Recording of Data in National Accounts (DZ. 6)
  - Artificial Intelligence (DZ. 7)
  - Cloud computing (DZ. 8)
  - Digital Intermediary Platforms (DZ. 9)
  - Treatment of Crypto Assets in Macroeconomic Statistics (F.18)
  - Merchanting and factoryless producers; clarifying negative exports in merchanting; Merchanting of services (C.4)
  - Treatment of travel packages, health-related travel, and taxes and fees on passengers' tickets (C.7)
- Provide an overview of the revision process for ISIC and CPC
- Collect feedback from the AEG on National Accounts

# **Digital supply and use tables**

There was the request to provide an update on the treatment of digitalization in ISIC and CPC

• In general, the classification criteria for the revised ISIC do not differ from those in ISIC Rev. 4.

"...The principles and criteria ....are based on <u>the inputs of goods, services and factors of production; the process and technology of production; the characteristics of outputs;</u> and the <u>use to which the outputs are put</u>. 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." (para 9 of ISIC rev. 4)

- Updates in ISIC related to digitalization:
  - Retail trade
  - ISIC Rev.4 Section J "Information and Communication"
  - Cloud computing
  - Intermediation service activities and products

#### **Retail trade**

#### ISIC Rev. 4 Division 47

47			Retail trade, except of motor vehicles and motorcycles
	471		Retail sale in non-specialized stores
		4711	Retail sale in non-specialized stores with food, beverages or tobacco predominating
		4719	Other retail sale in non-specialized stores
	472	Retail sale of food, beverages and tobacco in specialized stores	
		4721	Retail sale of food in specialized stores
	478		Retail sale via stalls and markets
		4781	Retail sale via stalls and markets of food, beverages and tobacco products
		4782	Retail sale via stalls and markets of textiles, clothing and footwear
		4789	Retail sale via stalls and markets of other goods
	479	$\subset$	Retail trade not in stores, stalls or markets
		4791	Retail sale via mail order houses or via Internet
		4799	Other retail sale not in stores, stalls or markets

- The distinction between in-store and nonstore retail is eliminated
  - Most retail activities take place both in-store and online (as well as through other non-store distribution channels) and it is increasingly difficult to differentiate between distribution/sale channels based on the primary sales methods
  - The share of online and in-store sales (and the types of products sold via the various channels) can vary over time, affecting the stability of the classification
  - Industries classified by their predominant product sold will result in more accurate measurement of product data and increased consistency between activity and product classifications.
- The distinction between specialized and non- specialized retail trade is maintained

#### **ISIC Rev.4 Section J "Information and Communication" and Cloud computing**

- The rapid development of information and communication technologies prompted a major review and update of the structure of Section J - "Information and communication" to reflect the new activities and terminologies in ISIC
- The TT-ISIC review of the structure of Section J (section through class levels) aimed to reflect:
  - (a) the classification of new audio and video distribution activities;

(b) clear definitions of concepts such as publishing, programming, data processing, content distribution, facilities management, consultancy, communication, transmission, display, media, etc.;

(c) improved alignment with other industry classifications such as NACE and NAICS; and

(d) updated terminology

Division	Group	Class	Description	ſ
Division 58			Publishing activities	
	581		Publishing of books, periodicals and other publishing activities	
		5811	Book publishing	C
		5812	Publishing of directories and mailing lists	C
		5813	Publishing of newspapers, journals and periodicals	
		5819	Other publishing activities	
	582	5820	Software publishing	
Division 59			Motion picture, video and television programme production, sound recording and music publishing activities	
	591		Motion picture, video and television programme activities	
		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	
	592	5920	Sound recording and music publishing activities	
Division 60			Programming and broadcasting activities	
	601	6010	Radio broadcasting	r
	602	6020	Television programming and broadcasting activities	p
Division 61			Telecommunications	i
	611	6110	Wired telecommunications activities	9
	612	6120	Wireless telecommunications activities	0
	613	6130	Satellite telecommunications activities	
	619	6190	Other telecommunications activities	
Division 62			Computer programming, consultancy and related activities	
		6201	Computer programming activities	
		6202	Computer consultancy and computer facilities management activities	
		6209	Other information technology and computer service activities	
Division 63			Information service activities	
	631		Data processing, hosting and related activities; web portals	
		6311	Data processing, hosting and related activities	
		6312	Web portals	
	639		Other information service activities	
		6391	News agency activities	
		6399	Other information service activities n.e.c.	

#### Main changes to ISIC rev. 4 Section

New Section J – "Publishing, broadcasting, and content production and distribution activities"

- Division 58 "Publishing activities"
- Division 59 "Motion picture, video and television programme production, sound recording and music publishing activities"

 Division 60 – "Programming, broadcasting, and distribution activities"

New Section K - "Telecommunications, computer programming, consultancy, computing infrastructure, and other information service activities

- Division 61 "Telecommunications"
  - Division 62 "Computer programming, consultancy and related activities"
  - Division 63 "Computing infrastructure, data processing, hosting, and other information service activities"

61	Telecommunications			
611	Wired, wireless, and satellite telecommunications activities	Merged 'wired' , 'wireless', and		
6110	Wired, wireless, and satellite telecommunications activities	'satellite' telecommunication		
612	Intermediation services for telecommunications activities	activities		
6120	Intermediation services for telecommunications activities	Creation of a class for intermediation service activities		
619	Other telecommunications activities			
6190	Other telecommunications activities			

62	Computer programming, consultancy and related activities	services, artificial in vision application de		
621	Computer programming activities	cybersecurity applic		
6211	Development of video games, video game software, and video game software tools	services, and provision ledgers (e.g. for the r register or generally		
6219	Other computer programming activities	contracts)		
622	Computer consultancy and computer facilities management activities	Excludes publishers		
6220	Computer consultancy and computer facilities management activities	content and third-par (Section J)		
629	Other information technology and computer service activities	Excludes distributed technology data proc		
6290	Other information technology and computer service activities			

Includes video game development services, machine learning application development services, artificial intelligence/machine vision application development services, cybersecurity application development services, and provision of distributed ledgers (e.g. for the maintenance of a land register or generally for contracts; smart contracts)

Excludes publishers of own produced content and third-party online gaming sites (Section J)

Excludes distributed ledger (blockchain) technology data processing activities

- 63 Computing infrastructure, data processing, hosting, and other information service activities
- **631** Computing infrastructure, data processing, hosting and related activities
- **6310** Computing infrastructure, data processing, hosting and related activities
- 639 Web search portals and other information service activities6390 Web search portals and other information service activities

Includes web sites that use a search engine to generate and maintain extensive databases of Internet addresses and content in an easily searchable format (and known as Web search portals)

Excludes digital intermediaries facilitating services transactions on a fee basis

Includes cloud infrastructure and platform provision (laaS, PaaS), and cloud computing (except software publishing and computer systems design), whether or not in combination with infrastructure provision.

Includes distributed ledger (blockchain) technology data processing activities

Includes technical infrastructure provisioning services related to streaming

Excludes postproduction audio and video services to convert content into streaming formats and streaming distribution services, software publishing (Section J), and computer systems design (Group 622)

The TT-CPC will discuss whether changes in the CPC have to be made based on the revised structure of new ISIC Section J and K

### **Intermediation service activities and products**

- Intermediation service activities (through digital platforms) have increased substantially due to technological advances and the identification of these activities is of great importance from the policy perspective
- Some intermediation services activities are already identified in ISIC reflecting the intermediation activities prevalent at the time of writing ISIC Rev. 4
- Intermediation service activities have since spread across many more industries due to technological development, i.e. digitalization, and should therefore, be reflected in the new ISIC structure.

The TT-ISIC agreed to define intermediation service activities, other than financial intermediation services, as follows:

"Non-financial intermediation service activities are 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 and taking ownership of the goods and services that are intermediated. These activities can be carried out on digital platforms or through non-digital channels. The fee or commission can be received directly from either the buyers or sellers, or revenues for intermediation activities can include other sources of income, such as third-party revenues from advertising." The following new groups were created:

354 Activities of brokers and agents for electric power and natural gas

434 Intermediation services for specialised construction services

479 Intermediation service activities for retail trade

523 Intermediation services activities for transportation

533 Intermediation services for postal and courier activities

612 Intermediation services for telecommunications activities

775 Intermediation services for rental and leasing of tangible goods and non-financial intangible assets

824 Intermediation services for business support activities (except financial intermediation), n.e.c.

954 Intermediation services for repair and maintenance of computers, personal and household goods, and motor vehicles and motorcycles

964 Intermediation services for other personal services

The TT-CPC will discuss whether changes in the CPC have to be made and whether or not to distinguish between intermediation services provided through digital means.

### **Recording of Data in National Accounts**

- The TT-CPC is reviewing the definition of 'products', 'good' and 'services'
- In the CPC Ver. 2.1 another category of products, called "other products" is recognized. This category is to some extent related the 2008 SNA concepts of "knowledge capturing products", but the concepts are not the same
- The intent is to clarify these concepts and provide guidance on their classification in CPC (including the classification of data as a product)
- This issue has to be addressed in close consultation with the SNA-, Trade Statistics- and Balance of Payment community as the impact of the classification of the "other products" may affect the compilation of these statistics and accounts
- It is expected that an initial draft issue paper be available for a broader discussion in July

# **Artificial Intelligence**

- Within the revision of ISIC, a discussion took place on the classification of activities related to robotics and AI
- In general, the TT-ISIC agreed to treat the manufacture/application of robotics/AI as a new technology to provide same/existing services/activities more efficiently and effectively.
- This decision is in line with the general ISIC principle that technology is not usually a major classification criterion.
- Therefore, no structural change were proposed in ISIC and the explanatory notes of the existing categories in the new ISIC will be adjusted to make reference to robotic/AI when relevant

The TT-CPC will discuss whether changes in the CPC have to be made based to reflect the explanatory notes in the new ISIC

#### **Treatment of Crypto Assets in Macroeconomic Statistics**

- At the time of finalization of the structure of the new ISCI up to the group level (3-digit) the issue of the classification of crypto assets was discussed but was considered pending for the discussion on crypto asset in the SNA research.
- No additional Sections, Divisions nor groups were created as these activities are considered already existing in ISIC (whether in the new Section K or L). The TT-ISIC will develop guidance on the classification of activities related to the mining, exchange, storage, and transfer of crypto assets during this year taking into consideration the decisions in SNA.
- The TT-CPC is currently discussing the classification of services related to crypto assets. It is expected that a guidance note on this issue will be available in June for consultation with the AEG.

#### Merchanting and FGP; clarifying negative exports in merchanting; Merchanting of services

- Criteria for the identification of FGPs
  - The TT-ISIC agreed that the criteria for the definition of FGPs should be extended to include the ownership of the intellectual property products (IPP) and not be solely based on the ownership of the input materials in a manufacturing activity
  - In addition, the control criteria for defining FGPs should cover some aspects of the control of the transformation process, including quality control and oversight of the production process.
- Classification of FGPs
  - The TT-ISIC agreed to classify FGPs in Section C 'Manufacturing' in the same class where they would be classified if they carried out the manufacturing process themselves

#### Treatment of travel packages, health-related travel, and taxes and fees on passengers' tickets

- Two options are being considered by the AEG:
  - Treat the bundle created by tour operators as a new product
  - Consider the different components of the bundle as separate products.
- The TT-CPC has not discussed this specific issue, but can address it as part of the review of the definition of 'products', 'goods', 'services' and 'other products'
- It is expected that an initial draft issue paper be available for a broader discussion in July

## **Revision process for ISIC and CPC**

- The revised ISIC and CPC are expected to be submitted to the UNSC in March 2023
- During 2022, the TT-ISIC is tasked to:
  - Finalize the structure of SICI at the class level (4-digit codes)
  - Finalize the explanatory notes
- During 2022, the TT-CPC is tasked to:
  - Address the issues in its issue list and prepare a revised CPC
- Global consultations on ISIC and CPC are expected to take place prior to their finalization.
- Consultation with the AEG will take place on the deliberations of the TT-ISIC and TT-CPC as they become available

#### **Questions**?