



# 6th meeting of the UN Committee of Experts on Business and Trade Statistics 18-21 September 2023

## Session 4: Task team on Globalization and Digitalization

- Measuring digitalisation in the European Statistical System

# Background – Digital transformation

- The ongoing digitalisation is profoundly affecting **society**, **businesses** and the **economy**.
- The Covid-19 pandemic has accelerated the digital transformation and emphasised its potential.
- It is necessary to ensure synergies between digital and green transitions.

Need for a **sound and holistic measurement framework** for monitoring the digital transformation and its impact on society, businesses and economy.

# EU policy context

- Digital transformation is one of the main political priorities of the EC for the coming years: making [Europe fit for the digital age](#) and empowering its citizens and businesses with a new generation of technologies
- 9 March 2021: the **Digital Decade Communication**

**Vision: empower people and businesses to seize a human centred, sustainable and prosperous digital future in a global context**

- 2030 Digital Compass: the European way for the Digital Decade
- 15 September 2021: the Path to the Digital Decade, which introduces a governance framework to reach the targets set out by the 2030 Digital Compass.

# The proposed targets of the Digital Decade

## Skills

**ICT Specialists:** 20 millions + Gender convergence

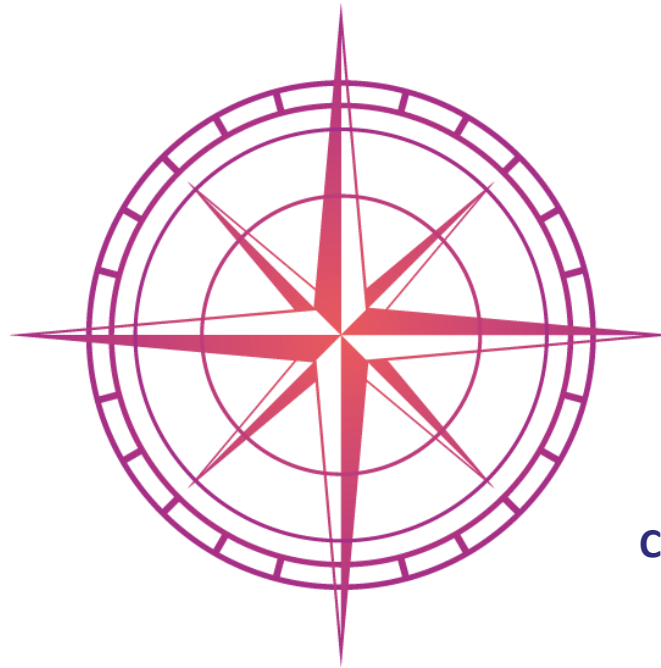
**Basic Digital Skills:** min 80% of population

## Government

**Key Public Services:** 100% online

**e-Health:** 100% availability medical records

**Digital Identity:** 80% citizens using digital ID



## Infrastructures

**Connectivity:** Gigabit for everyone, 5G in all populated areas

**Cutting edge Semiconductors:** double EU share in global production

**Data – Edge & Cloud:** 10,000 climate neutral highly secure edge nodes

**Computing:** first computer with quantum acceleration

## Business

**Tech up-take:** 75% of EU companies using Cloud/AI/Big Data

**Innovators:** grow scale ups & finance to double EU Unicorns

**Late adopters:** more than 90% of European SMEs reach at least a basic level of digital intensity

# Action plan – priorities

The Action Plan evolves around three work strands:

- **Advancing the measurement agenda:** statistical initiatives, which are set to meet the identified data needs and gaps, aiming at building a sound measurement framework, crucial for monitoring the digital transformation and its impact.
- **The ESS contribution to the Digital Decade:** to allow monitoring the progress towards the successful digital transformation of Europe by 2030 and facilitate further development of evidence-based policy initiatives.
- **Enhancing the communication and coordination** of the ESS measurement of digitalisation; entail a comprehensive communication of the existing and newly developed statistics, as well as continued contribution of the ESS to the international dialogue on measurement of digitalisation in various inter-institutional and international fora.

# State of play

## 1. Advancing the measurement agenda

Data need / gap	Statistical initiative	Timing	Status
<b>Keeping the relevance of statistics by adapting to the evolving nature of digitalisation</b>	Updating the surveys on the use of information and communication technologies in households and by individuals and on the ICT usage and e-commerce in enterprises for producing relevant statistics on the uptake on ICT.	Continuous work	<ul style="list-style-type: none"><li>- Countries' experiences on the extended age scope of the ICT HH/IND survey were collected.</li><li>- Policy needs were identified.</li><li>- Technical discussion on the implementation started in the June 2023 Task Force meeting.</li></ul>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Keeping the relevance of statistics by adapting to the evolving nature of digitalisation</b>	Analysing possible statistical instruments (including new data sources) for capturing digitalisation in sectors like agriculture, financial, mining, etc.	2024	<ul style="list-style-type: none"><li>- Countries' experiences collected</li><li>- Policy needs identified</li><li>- Mapping of the digital technologies' relevance in the additional NACE sections is ongoing</li><li>- Discussion with the Task Force on possible technical implementation started in September 2023.</li></ul>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Keeping the relevance of statistics by adapting to the evolving nature of digitalisation</b>	Exploring new sources for deriving indicators that cannot be derived from ICT surveys, such as usage of e-government services or network coverage indicators	Continuous work	Data on broadband coverage acquired from DG CNECT and published in Eurostat dissemination database in August 2022
	Assessing the feasibility and instruments needed for capturing statistics on digitalisation at regional level.	2026	



# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Measuring the impact of digitalisation on the environment</b>	Developing statistics on the impact of ICT uptake on the environment	2022	Data collected by the MS, transmitted to Eurostat and disseminated in December 2022
	Producing statistics on environmental footprint of the ICT sector, e.g. data on energy consumption by data centres	2024	<ul style="list-style-type: none"><li>- Work on developing the methodology is ongoing.</li><li>- Planned dissemination in April/May 2026, for reference year 2024</li></ul>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Filling in the data gaps related to the measurement of the size and activity of the collaborative economy and the platform employment</b>	Producing statistics on Digital Platform Employment (DPE) based on LFS	2022 data collection, 2023 results	Dissemination foreseen by the end of 2023
	Assessing possibility of extending statistics on collaborative economy to other sectors by leveraging the experience in tourism statistics	2022-23	<ul style="list-style-type: none"><li>- A list of collaborative platforms in Europe is being compiled (with the help of the ISS WG)</li><li>- Feasibility study is under preparation</li></ul>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Measuring the impact of digitalisation on the demand for digital skills on labour market</b>	Developing statistics on job vacancies obtained by web scraping of online job advertisements, including the profile of skills in demand.	2022	<ul style="list-style-type: none"><li>- Work is ongoing on producing indicators on the labour market demand for ICT specialists from the big data on the OJAs.</li><li>- Dissemination of the experimental statistics is planned for the end of 2023</li><li>- Indicators on the demand for digital skills will be produced on a later stage, once the data quality is sufficient.</li></ul>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Filling in the data gaps on the magnitude of the digital economy</b>	Developing digital economy supply and use tables and satellite accounts	First experimental statistics on digital supply and use tables for some countries in 2023-25	<p>3 countries with Eurostat grants working on digital SUTs: NL (already second grant for two reference years), FI and SE + SI applied.</p> <p>Due to very low coverage it is uncertain at this stage if the data will be published.</p> <p>Additionally, according to a survey done in 2020 within the National Accounts Working Group 5 other countries (IT, AT, SK, LU, NO) are working on digital economy SUTs on their own initiative.</p>

# State of play – cont.

## 1. Advancing the measurement agenda – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Filling in the data gaps on the magnitude of the digital economy</b>	Recording of the economic value of data in the national accounts, price and volume measurement of goods and services affected by digitalisation, cloud computing, AI, valuation of free assets and free services, crypto assets.	Implementation next update of the SNA in 2025 and subsequently in updated ESA.	

# State of play – cont.

## 2. ESS contribution to the Digital Decade

Data need / gap	Statistical initiative	Timing	Status
<b>Monitoring of the Digital Decade target related to Skills.</b>	Revising methodology for the Digital Skills Indicator (DSI) to keep the indicator up to date with technological developments and to fully reflect the dimensions of the Digital Competence framework <a href="#">DigComp 2.0</a> .	2021/2022	New methodology developed.  2021 data derived according to the new methodology published in March 2022
	Providing the DSI on a regular frequency	Continuous - until 2030	

# State of play – cont.

## 2. ESS contribution to the Digital Decade – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Monitoring of the Digital Decade target related to Digitalisation of public services.</b>	Developing indicators on the use of electronic identification (eIDs) by individuals	2023	New module on eID in the ICT HH/IND survey was finalised in February 2022. Data is being collected and will be disseminated in 2023
	Exploring potential sources for producing indicators on uptake of e-health services.	2024	

# State of play – cont.

## 2. ESS contribution to the Digital Decade – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Monitoring of the Digital Decade target related to Digital transformation of businesses.</b>	Producing annual update of Digital Intensity Indicator (DII) to keep it up to date with technological developments and trends in uptake of digital technologies by enterprises.	Continuous - until 2030	2021 data according to a revised methodology released in December 2021.
	Developing revised indicators on the use of data analytics, incl. big data, by enterprises.	2023	New module on data use and data analytics for the ICT ENT survey was finalised in February 2022. The data is collected and will be disseminated in 2023.
<b>Monitoring of the Digital Decade target related to Digital infrastructures</b>	Collecting statistics on broadband connectivity and internet penetration	2023	Data on broadband coverage obtained from DG CNECT



# State of play – cont.

## 3. Enhancing the communication and coordination

Data need / gap	Statistical initiative	Timing	Status
<b>Enhanced communication of statistics on digitalisation and its impact</b>	Developing new flagship publications looking at digitalisation from the perspective of businesses, economy and society	2023	<ul style="list-style-type: none"><li>- Publications (including digital publication) already planned for 2023.</li><li>- Dashboard on digitalisation foreseen in early 2024.</li></ul>
	Publication of developed methodologies and manuals for data compilers and users	Continuous	Comprehensive compilers' manuals for ICT Enterprises and ICT households published in early 2023.

# State of play – cont.

## 3. Enhancing the communication and coordination – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Enhanced communication of statistics on digitalisation and its impact</b>	Disseminating all data relevant for measuring digitalisation in a complete database in a way that users can easily access the information and link the different related aspects of digitalisation.	2023 and onwards	<p>Work on adding additional relevant indicators is ongoing (e.g. new data on recorded cyber-crime released in May 2023 within Crime statistics).</p> <p>Data on broadband coverage (DG CNECT) added to Eurostat's dissemination database.</p>

# State of play – cont.

## 3. Enhancing the communication and coordination – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Communication of statistics monitoring the ambitions set in the Digital Decade</b>	Regular dissemination of statistics for monitoring the targets and milestones of the Digital Decade	2021-2030	New SE article with an overview of the Digital Decade targets released in August 2022 – to be updated annually
<b>Contribution to the international agenda of measuring digitalisation</b>	Contributing to ongoing discussions on measurement frameworks in different stakeholders' fora and organisations, including communication of the ESS work on measuring the digitalisation and its impact on the society, businesses and the economy.	Continuous	Continuous work, incl. discussions on the revision of the OECD Handbook on measuring digital trade

# State of play – cont.

## 4. Additional initiatives

Data need / gap	Statistical initiative	Timing	Status
<b>Digital economy statistics</b>	Digital trade statistics		<ul style="list-style-type: none"><li>- Discussions started to extend the e-commerce module in the ICT ENT survey, to produce data on the digitally ordered products.</li><li>- Trade statisticians work is ongoing - data on the international supply of services broken down by the four modes of supply (MoS) will be available from reference year 2023 onwards, including Mode 1 (cross-border supply), which will provide an estimate for digitally delivered services.</li></ul>

# State of play – cont.

## 4. Additional initiatives – cont.

Data need / gap	Statistical initiative	Timing	Status
<b>Digital economy statistics</b>	Monetary values of e-commerce sales		Work has started towards disseminating the monetary values of e-commerce sales. Dissemination planned by the end of 2023, for volunteering countries.
	Enterprises' expenditure on cloud computing services		<ul style="list-style-type: none"><li>- Discussion on technical implementation in the ICT ENT survey will take place in June 2023</li><li>- Dissemination of potential new data in 2025</li></ul>

# Thank you



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