

BUCHAREST MEMORANDUM

on Official Statistics in a Datafied Society (Trusted Smart Statistics)

104th DGINS Conference, Bucharest, 10th and 11th October 2018

As adopted by the European Statistical System Committee (ESSC) meeting
on the 12th October 2018

Considering

1. That society and economy are being rapidly and fundamentally transformed by pervasive digital technologies and the process of datafication.
2. That official statistics need to remain relevant in the future and continue to satisfy users with high quality statistics.
3. The progress made in implementing the ESS Vision 2020 and the [Scheveningen Memorandum on big data and official statistics](#).
4. The ESSC's adoption on 8 February 2018 of the [smart statistics and big data business case](#), which describes the main achievements and sets out the strategic orientations for big data and smart statistics for the period 2018-2020.
5. That joining forces and developing expertise within the ESS has resulted in synergies and achievements that would not have been possible at an individual level.
6. That the integration of multi-source and heterogeneous data serving multiple statistical domains provides opportunities to produce new relevant statistics and make efficiency gains by sharing sources, methods, software and services.
7. That new data sources represent a unique opportunity to produce new and improve existing statistics within a collective collaborative framework.
8. The development of smart systems based on the expansion of the world-wide network of interconnected devices (Internet of Things), which embed smart technologies enhanced by artificial intelligence.
9. That evidence-based policymaking requires trusted statistics based on the principles of official statistics as set out in the [European Statistics Code of Practice](#), maintaining high quality and sound methodology is of utmost importance in this process.
10. The [General Data Protection Regulation](#), which sets out new principles and lays down requirements, such as privacy by default and privacy by design.
11. That addressing global statistical challenges and opportunities in a digital world requires effective cooperation with the UN and other international statistical bodies, and partnerships with national, European and global stakeholders.

The Directors-General of national statistical institutes and of Eurostat

1. Welcome and embrace the opportunity for official statistics in a datafied society and economy.
2. Encourage the ESS to implement practical and mature cases of using 'big data-enhanced' statistical products and develop experimental statistics on new phenomena.

3. Agree that the variety of new data sources, computational paradigms and tools will require amendments to the statistical business architecture, processes, production models, IT infrastructures, methodological and quality frameworks, and the corresponding governance structures, and therefore invite the ESS to formally outline and assess such amendments.
4. Recognise the need to further develop the legal framework at European and national level to reduce obstacles to the access, use and integration of heterogeneous data for sustainably producing Trusted Smart Statistics.
5. Recognise the importance of privacy by design approaches and encourage the ESS to explore the potential of privacy-preserving computation technologies, such as secure multiparty computation, within a wider framework of Trusted Smart Statistics.
6. Encourage the creation of dedicated smart statistics communities to ensure that knowledge and skills are shared, and that achievements and further developments are implemented in a sustainable way. These communities could be organised within specific application and subject domains, e.g. smart cities, m-health, smart agriculture, citizen science, etc.
7. Acknowledge that exploring the application of artificial intelligence to official statistics and the use of smart technologies require that new standards be adopted, which can ensure interoperability between various data systems and adherence by design to ethical, legal, transparency, and quality principles.
8. Assign high priority to developing and maintaining the necessary skills to cover technical, scientific, organisational, communication and change-management capabilities.
9. Agree on the need to engage in partnerships with key stakeholders, such as citizens, data protection authorities, central banks, industry, private data holders, relevant interest groups, standardisation bodies and the scientific and academic community.
10. Underline the need for European and international coordination, and invite national statistical institutes, Eurostat, the UN and other international statistical bodies to develop effective collaborative platforms to ensure synergies, alignment, streamlining of activities and communication initiatives at European and global levels.
11. Agree on the importance of following up the implementation of this memorandum by adopting ESS action plans and roadmaps (by mid-2019) that should be further integrated into the European Statistical Program (ESP) and the Annual Planning and Monitoring procedure of Eurostat.