

Warsaw, 29.10.2021

## **WARSAW MEMORANDUM**

## 2021 DGINS Conference on Earth observation for official statistics

Warsaw, Poland 27-28 October 2021

## **Considering:**

- 1. Increasing needs of statistical information users, mainly resulting from issues that have been escalating in recent years, like climate change and growing devastation of the environment.
- Support needed for monitoring and reporting the SDGs indicators at national, regional and local levels, especially for those goals related to the environment and the environmental economic and ecosystem accounts.
- 3. The necessity of data for data space initiatives in various fields, particularly the "Green Deal data space", the "Common European agricultural data space", the "Common European industrial (manufacturing) data space", the "Common European mobility data space" and the "Common European energy data space". This also applies to supporting the public administration in decision-making processes such as urban planning, emergency mapping and early warning systems, border and maritime surveillance.
- 4. Further improving granularity and quality of statistical information and providing the up-to-date aggregations at the lowest possible levels and ad hoc estimations.
- 5. The need to further reduce the burden on respondents and survey costs by incorporating innovative data collection methods and new sources.
- 6. The availability of, which is not equal to unlimited access to, big data, earth observation (including from the Copernicus program), geospatial information etc. allowing producing new and improved statistics.
- 7. Strategic orientation of various statistical domains such as the Strategy on Agricultural Statistics 2020 and beyond, which promote new innovative techniques and data sources.
- 8. The aim of the Single Market Programme<sup>1</sup> (including European statistics) 2021-2027 to provide timely and comprehensive statistical indicators on regions, including the Union outermost regions, cities and rural areas, and to increasingly use geospatial data and systematically integrate and mainstream geospatial information management into statistical production.
- The opportunity of using Earth Observation techniques in various statistical domains, enforcing to expand
  the knowledge and competence of statisticians, who will contribute to the development of innovative
  methods in statistics.

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<sup>&</sup>lt;sup>1</sup> https://eur-lex.europa.eu/eli/reg/2021/690

- 10. Dynamic development of satellite remote sensing techniques, which is already used by many government and scientific institutions.
- 11. The need to exploit the full potential of remote sensing data, which engenders the necessity to have access to frequently updated high-resolution data.
- 12. That many Member States have already been using satellite data for statistical purposes and see the need for close cooperation and exchange of experiences.

## The Directors General of National Statistical Institutes and of Eurostat:

- 1. Acknowledge the urgent needs and the ongoing efforts to make extensive use of Earth Observation data in official statistics.
- 2. Recognize the ESS's need to take part in the development of the Green Deal Data Space, the Common Agricultural Data Space, Environmental Ecosystem Accounts and similar initiatives.
- 3. Appreciate the relevance of Earth Observation for the monitoring and reporting of SDG indicators, for agriculture and maritime statistics, and for other relevant domains.
- 4. Call for the introduction of training for statisticians, including methodology as well as IT issues, to develop the use of Earth Observation in statistics and gain skills in the use of new technologies.
- 5. Acknowledge the relevance of sound ground truth and core reference geospatial data to fully exploit Earth Observation at the required level of quality.
- 6. Agree to prepare and implement an integrated European strategy for using Earth Observation in different statistical domains.
- 7. Recommend the enhancement of cooperation between Eurostat, National Statistical Institutions, the European Space Agency, international organisations, national space research centres, state agencies, mapping agencies, policy makers, scientists, and companies to make full use of Earth Observation for official statistics purposes.
- 8. See the need to develop a standard methodology for processing, analysing and validating Earth Observation data, including common tools and shared spaces ('sandbox') for testing them.
- 9. Acknowledge the importance of having open, sustainable and interoperable infrastructures for analysis-ready EO data for multipurpose use at local, regional, national and European level.
- 10. Support the development of standardised statistical methods combining different sources such as Earth Observation, administrative data, statistical surveys and geospatial information for the compilation of harmonised national, cross-national and pan-European datasets.
- 11. Support the use of high-resolution and frequently updated remote sensing data via satellites for official statistics purposes.
- 12. See the need to strengthen the use of Artificial intelligence and ontology of AI in terms of Earth Observation.
- 13. Agree to identify and prioritise areas where further work is needed, including preparation of the road map.