Network of national COVID-19 data hubs

6th International Conference on Big Data for Official Statistics
Role of the National Statistical Systems and Geospatial Community

An adequate response to the COVID-19 crisis has to draw on the entire National Statistical System and National Spatial Data Infrastructure, involving all relevant ministries and government agencies.
Vision

Integrating statistics and geospatial information from multiple sources, and across systems, needed to inform the response to the COVID-19 pandemic, where data is open, accessible, and used to the fullest extent possible in to save people’s lives and protect their livelihoods in the face of the pandemic

- A global network of national COVID-19 Data Hubs, enabled by Web technologies and open standards
- Supporting national partnerships around data and policy initiatives
- Providing an inclusive and enabling environment for all stakeholders
- Allowing to share experiences and best practices that help ensure continuity of statistical operations and to learn from each other
Interoperability and Open Data

It’s difficult to share, integrate and work with the wealth of data that is available in today’s digital era:

• Divergent needs and capabilities of multiple internal and external constituencies
• Disparate protocols, technologies and standards
• Fragmented data production and dissemination systems

• Many national statistical organizations are now adopting open data policies that authorize and facilitate the reuse of their data assets
• Open data requires data to be interoperable not only from a technical perspective, but also from a legal and institutional perspective
Decentralized data ecosystem

There is no single, integrated database containing all the information needed for the 2030 Agenda or to address global challenges like the COVID-19 Pandemic

- Databases tend to proliferate within and across sectors, organizations and countries
- For the most part, these platforms have independently evolved

There is need for substantial information management flexibility, partial integration, sharing and autonomy
Statistics COVID-19 response website and network of national COVID data hubs

• The Statistics Division of DESA, in partnership with esri, launched an initiative to give access to software and tools for developing countries wishing to join a **federated network of COVID-19 data hubs**.

• It leverages **web GIS technologies** for sharing available data resources and web services in an open and interoperable environment.

• It also provides ready-to-use templates helping national statistical offices get quickly up to speed in building their own **COVID-19 open data sites**, and allowing them to focus on responding to the urgent demand for data and insights from their constituencies.
Collaborative data innovation

Data innovation is the result of bringing together ideas contributed by many independent participants.
Why a Federated Network of COVID-19 Data Hubs?

To respond to the information needs of policy makers and the public at large, through the effective **dissemination and use of integrated statistical and geospatial data**

Build on the Federated Information System for the SDGs, leveraging existing technologies that facilitate data sharing and interoperability and collaboration across local, national and global data hubs.
Implementation steps

1. Kick-off training workshop
2. Assess data needs and data sources
3. Define roles and workflows
4. Procure hardware
5. Identify boundary data
6. Condition statistical data
7. Configure portal and open data
8. Configure online organization
9. Install software
10. Integrate stats and geo data
11. Publish data as feature layers
12. Create web maps and apps
13. Share content with UNSD and other FIS4SDG participants
Links to relevant resources

Dashboards and visualizations
Statistics COVID-19 response website and data hub

United Nations Department of Economic and Social Affairs
Statistics • UN COVID-19 Data Hub

Data
This section makes data relevant to COVID-19 response readily available as geospatial data web services, suitable for the production of maps and other data visualizations and analyses, and easy to download in multiple formats. If your organization is interested in federating authoritative data services through this global COVID-19 data hub, please contact us.
Thank You!