Federated Information System for the SDGs

A platform for the sharing of national and global statistical and geospatial data for the 2030 Agenda

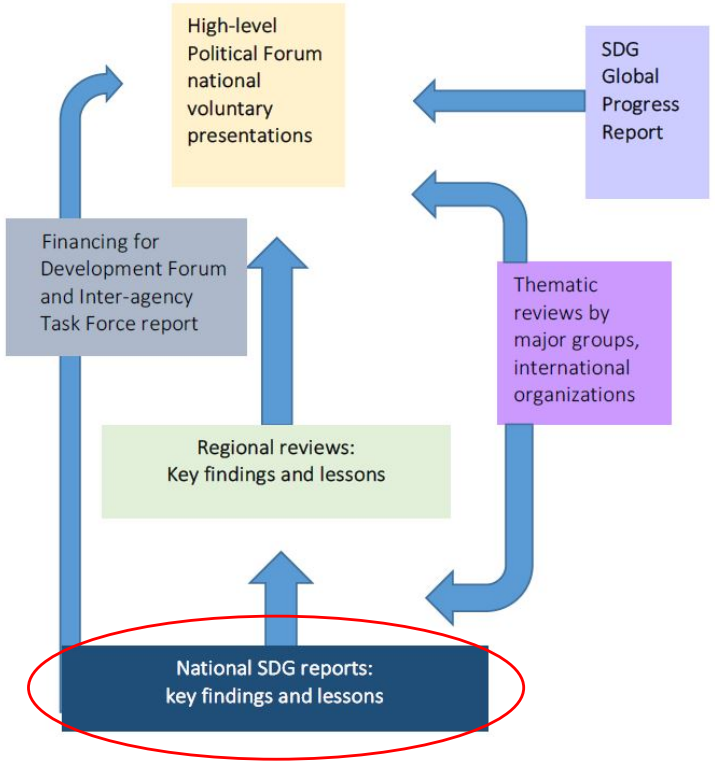
Department of Economic and Social Affairs
Statistics

Global SDG Indicator Framework

17 GOALS, 169 TARGETS, 232 INDICATORS

Tracking progress on SDGs requires an unprecedented amount of high-quality, open, timely and disaggregated data and statistics!

SDG data reporting



National and subnational reporting are the most significant levels of the SDG review process

The global SDG monitoring system should **build on national data reporting**

- Data derived from **national sources** is the foundation for SDG reviews at all levels
- It is crucial to create opportunities for countries to directly contribute to **global reporting**

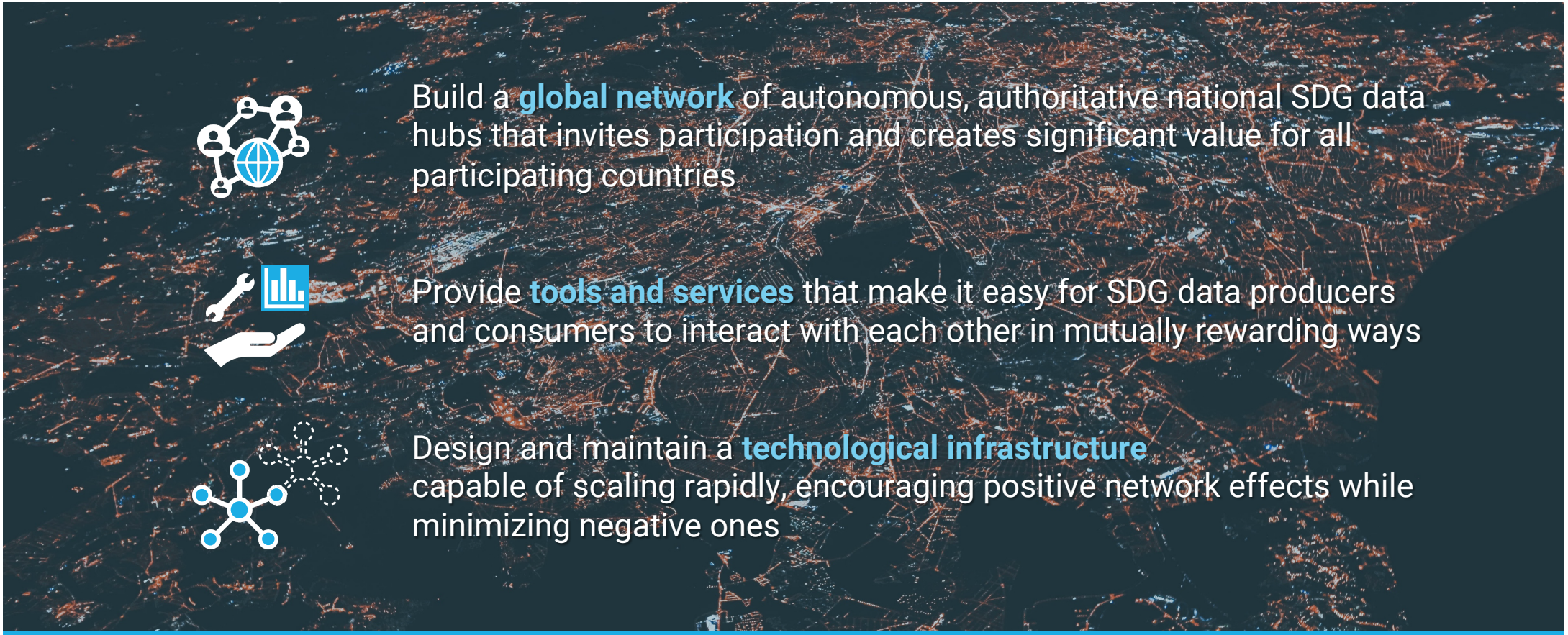
Why a Federated Information System for the SDGs?

Implement the 2030 Agenda through the effective **dissemination and use of integrated statistical and geospatial data**, supported by technologies that facilitate data sharing and interoperability and collaboration to **report on the SDGs across local, national and global data hubs**.

Federated Architecture

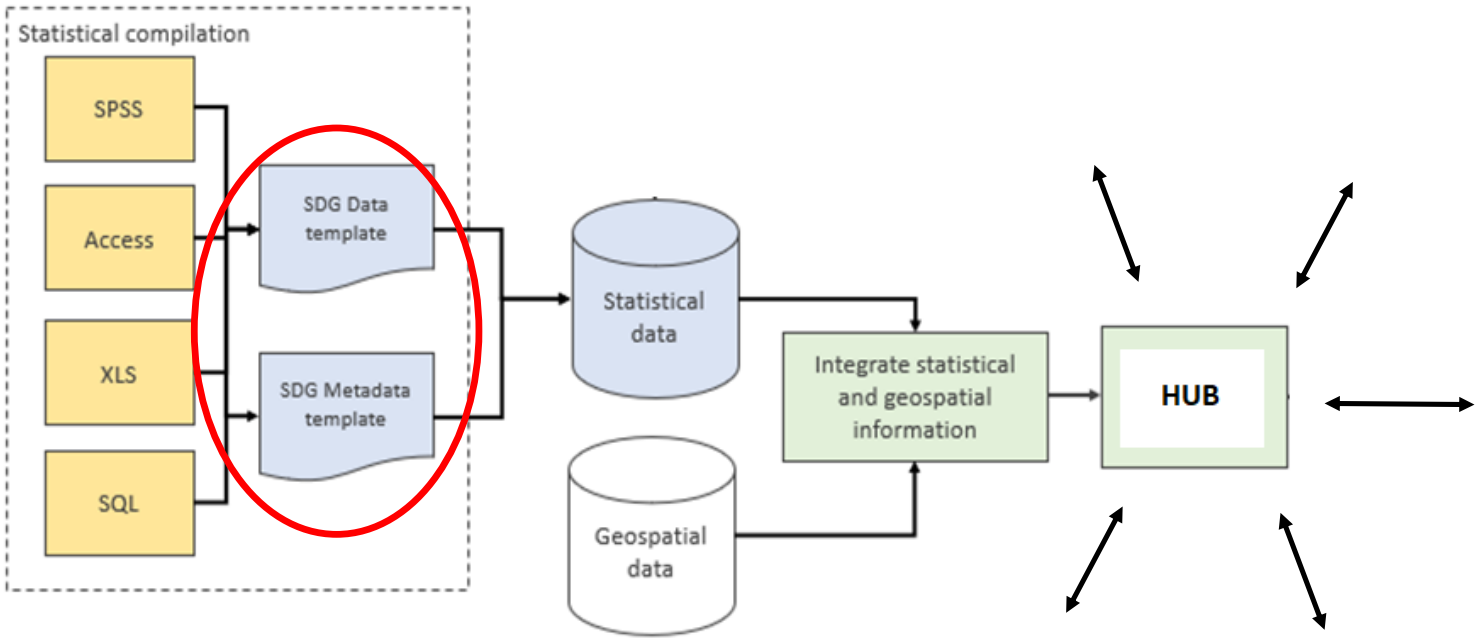
An approach for the coordinated interchange of information among independent data hubs that allows for data sharing while maintaining control over own data resources:

- **Autonomy:** Each hub is free to join or leave the federated system, sharing new data and withdrawing access to previously shared data
- **Equality:** No data hub has authority over another
- **Access control:** Each hub decides what content to share, who can access that content, and how can that content be accessed
- **Traceability:** Data assets remain at the source, but references to them may be passed to other hubs

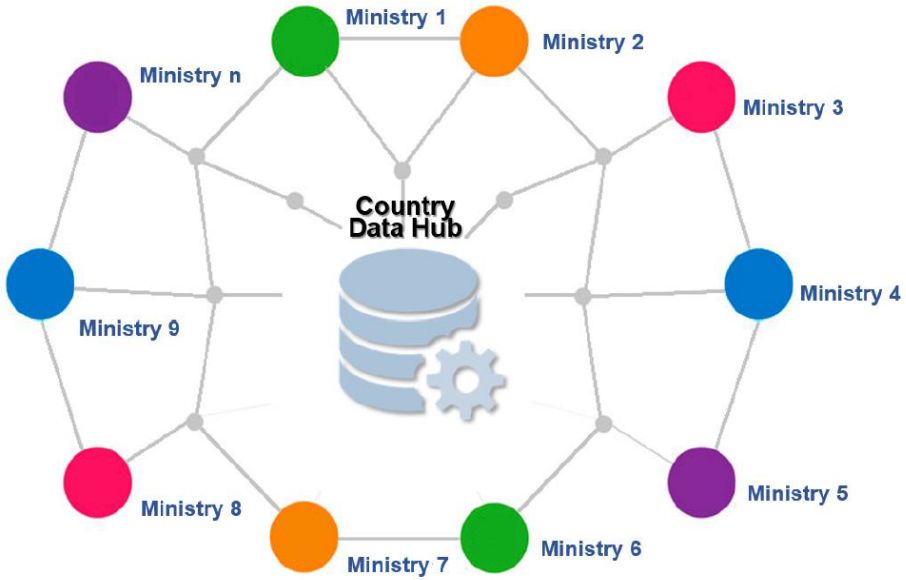


The FIS4SDG challenge

SDG compilation process

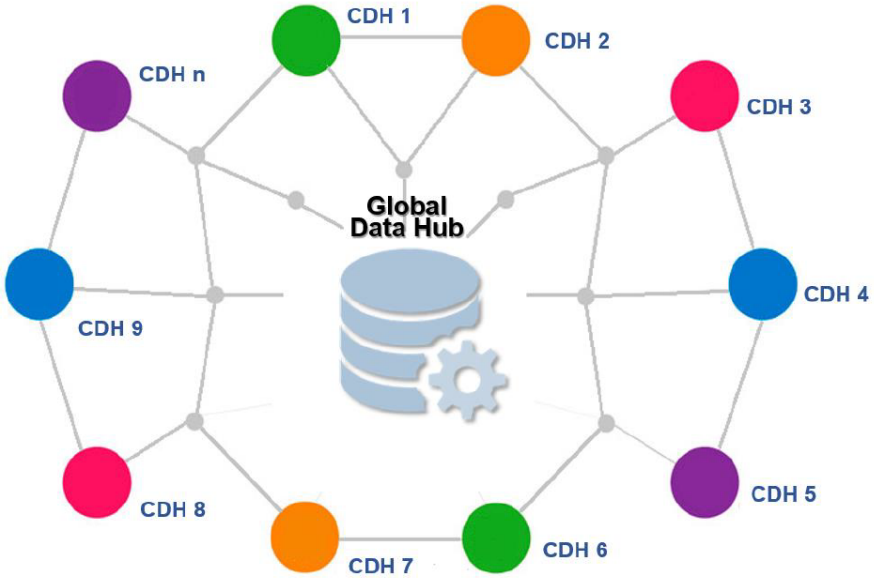


Country data hub



Source: INEGI

Global data hub



Source: INEGI

Technology as enabler

The FIS4SDGs is enabled by digital technology and software and web-based tools that allow data producers and data users to connect more precisely, speedily and easily

Leadership of national statistical organizations and geospatial information authorities

Role of the National Statistical System

SDG Review process has to draw on the entire National Statistical System, involving all relevant ministries and government agencies that regularly collect data

The National Statistical Office has a crucial role to play

- Coordinating the NSS and improving cooperation between data producers
- Supporting statistical work of line ministries and other entities
- Validating data from different sources for consistency, accuracy and reliability (in line with Fundamental Principles of Official Statistics)

Data Hub curation

Curation: Process of validating and selecting:

(1) the type of **content** a data hub can share or access, and

(2) the **connections** hubs can form with one another

Effective curation helps decision makers find useful, high-quality data

National data hub

- Provides and manages the **technological infrastructure** within which valuable data content and data services can be exchanged
- Fosters **quality control**, encouraging national data producers to share content and services that are accurate, useful, relevant and interesting to data users
- Creates filters designed to **help users find high-value data**

Linking data producers with data users

A data hub

- Connects data producers with data consumers
- Allows them to engage in mutually rewarding exchange of valuable data and information assets

Every item exchanged among users of the FIS4SDGs platform is a “value unit”

- Data users find the information they need
- Data producers become more visible and build reputation through source attribution

How does the FIS4SDGs work?

Country ownership: Owned, led and managed by each participating country

Standards driven: Publication and sharing of SDG data following open standards and principles for data interoperability

Human-centered: Tools for collaboration, story-telling and user engagement

Capacity building objectives

Support…	Enable…	Empower…
… NSOs in **managing statistical and geospatial data** for sustainable development	…national and local decision makers to access, **understand, and use data** for SDG implementation	… **Member States** to directly contribute to global **SDG reporting** through innovative data applications

01

National Statistical Office coordinates the implementation at the country level

02

Common data models, data definitions and data flows allow for **data interoperability**

03

Each hub independently when and how to publish and share **authoritative data** with other hubs

04

Users can access the data they need while the **traceability and accountability** of the originating data sources is ensured

Decisions by UN Statistical Commission

At its 49th session in March 2018, the Statistical Commission welcomed the efforts to **establish a federated system of national and global data hubs for the SDGs** to:

- facilitate **integration** of different data sources,
- promote data **interoperability**
- foster **collaboration** among partners from different stakeholder groups, including the geospatial community and other data providers,
- improve data flows and **global reporting** of the SDGs.

Decisions by UN Statistical Commission

At its 50th session in March 2019, the Statistical Commission welcomed the progress in the implementation of the Federated Information System of national and global data hubs to

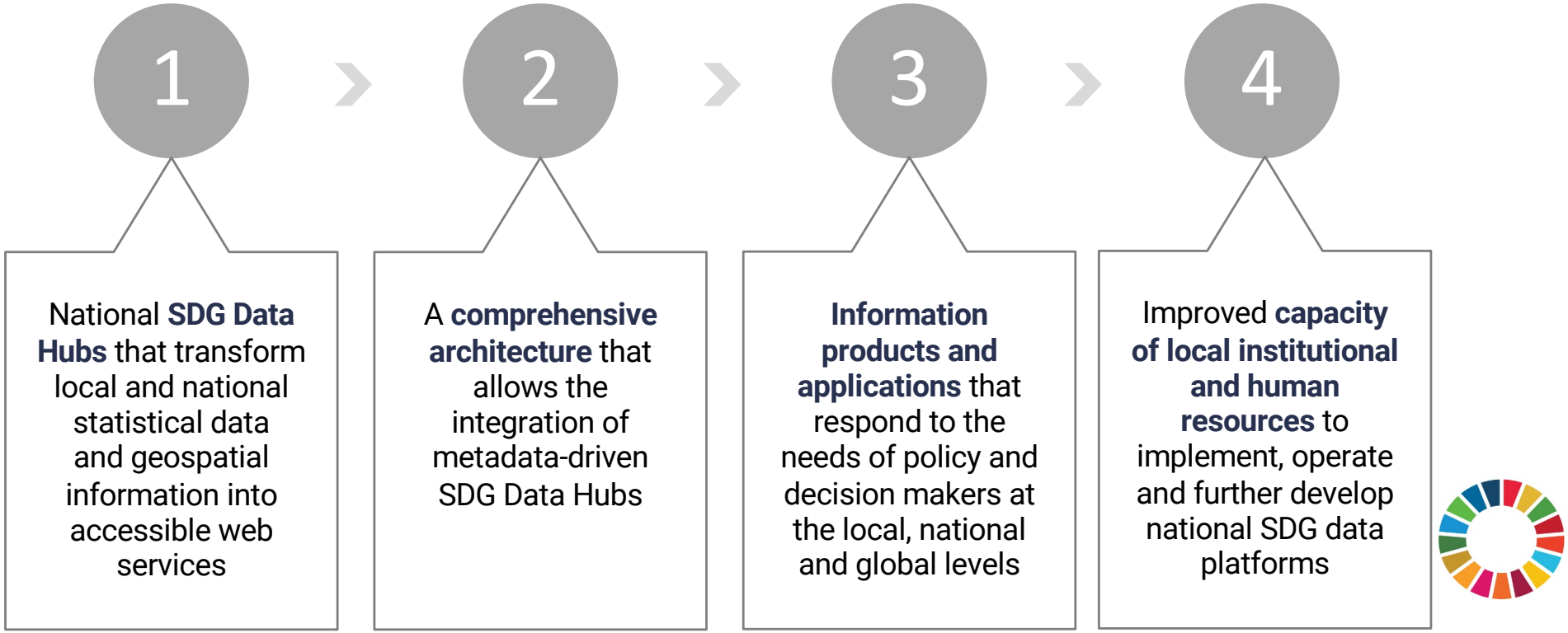
- ✓facilitate **integration of different data sources**
- ✓promote data **interoperability** and
- ✓foster **collaboration** among partners from different stakeholder groups

and stressed the need to **mobilize resources** and provide the necessary **technical support to all countries** wishing to join the Federated System

Key activities

- Establish **internal teams** and dedicated **infrastructure**
- Determine **roles and levels of access** granted to internal and external stakeholders and partners
- Create small **teams** to facilitate sharing of experiences and lessons learned
- Document **standard procedures and best practices**
- Share **data and statistics** on a selected number of indicators

Deliverables



Welcome to the Open SDG Data Hub

To fully implement and monitor progress on the Sustainable Development Goals, decision makers everywhere need data and statistics that are accurate, timely, sufficiently disaggregated, relevant, accessible and easy to use. The Open SDG Data Hub promotes the exploration, analysis, and use of authoritative SDG data sources for evidence-based decision-making and advocacy. Its goal is to enable data providers, managers and users to discover, understand, and communicate patterns and interrelationships in the wealth of SDG data and statistics that are now available.