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# Big Data for Official Statistics

## The 2030 Agenda for Sustainable Development

**Ronald Jansen**  
Assistant Director  
United Nations Statistics Division

# Overview

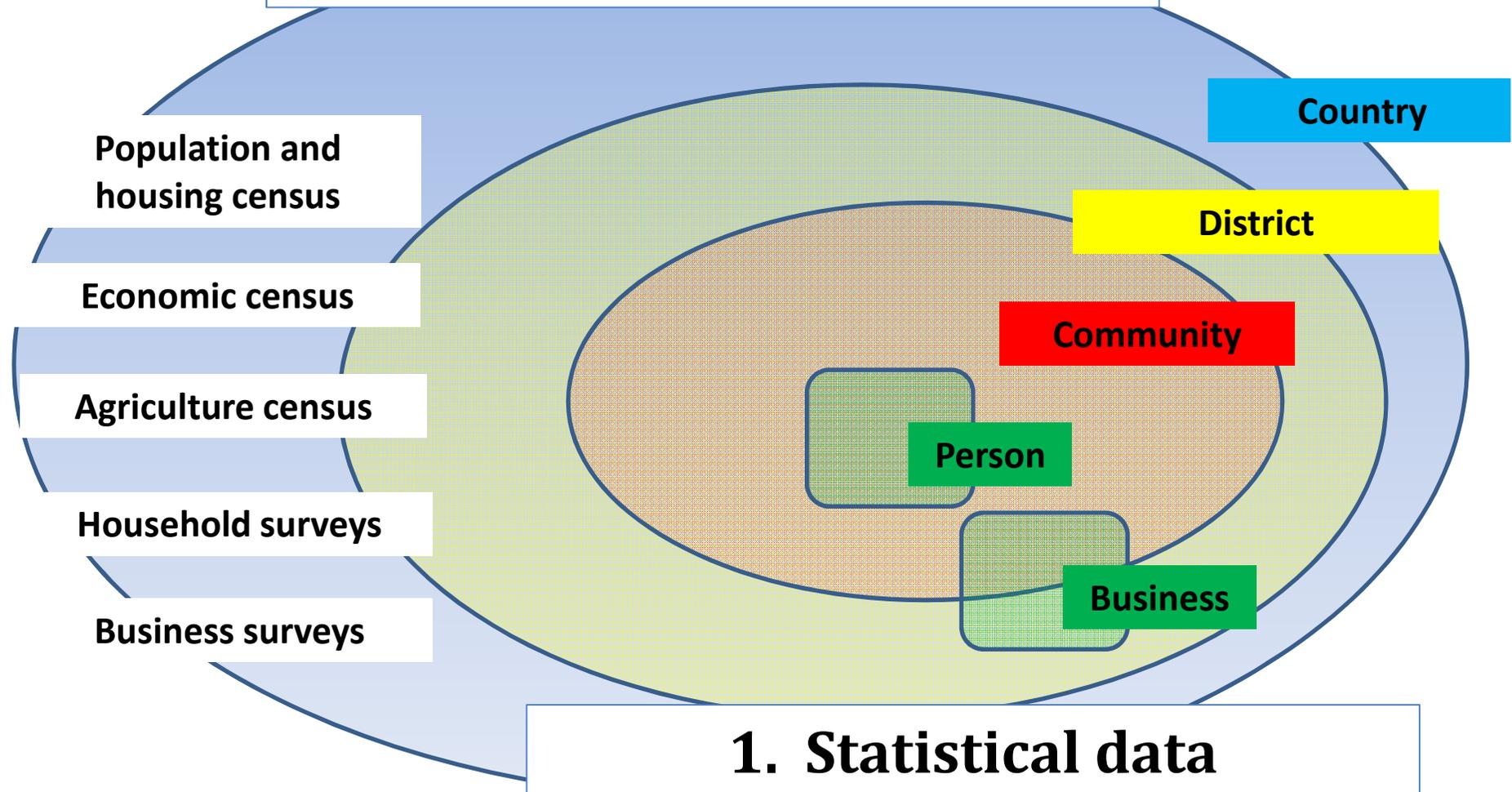
- Statistical Data Infrastructure
- Why use Big Data?
- Key messages
- Access to Big Data and privacy issues

# Fundamental Principles of Official Statistics

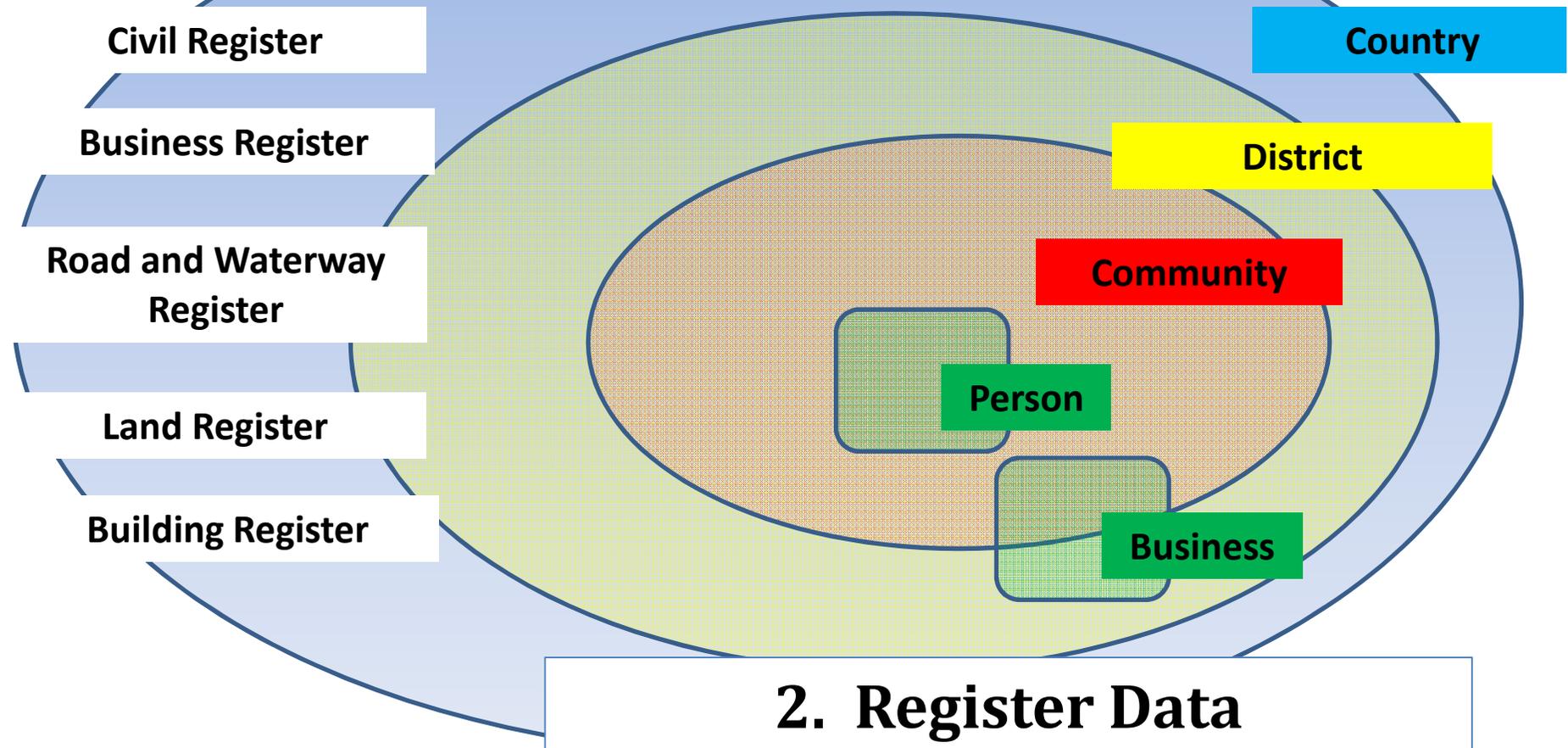
(adopted by the GA on 29 Jan 2014)

**Principle 1.** Official statistics provide an indispensable element in the information system of a democratic society, serving the Government, the economy and the public with data about the economic, demographic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information.

# Statistical Data Infrastructure

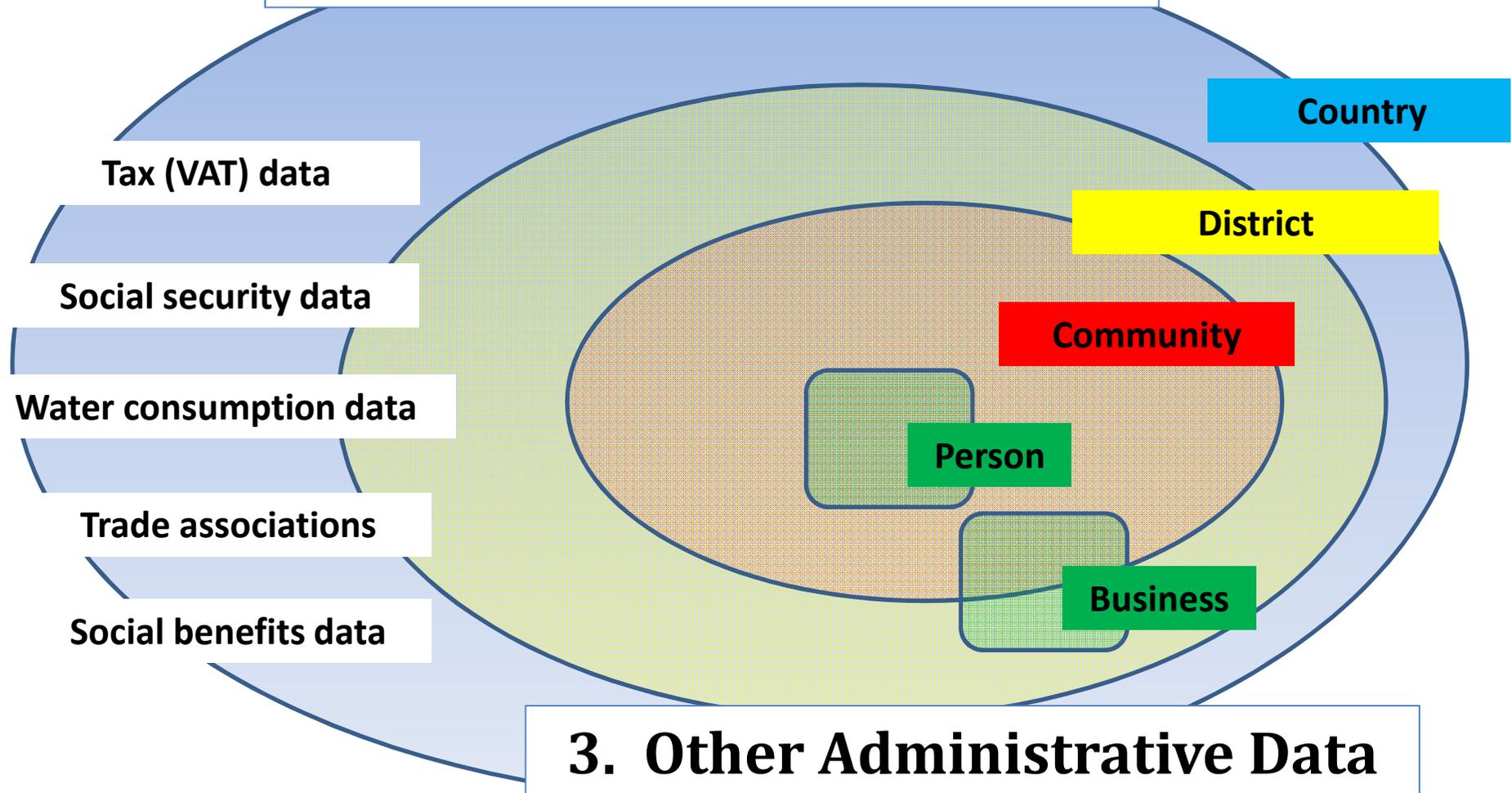


# Statistical Data Infrastructure

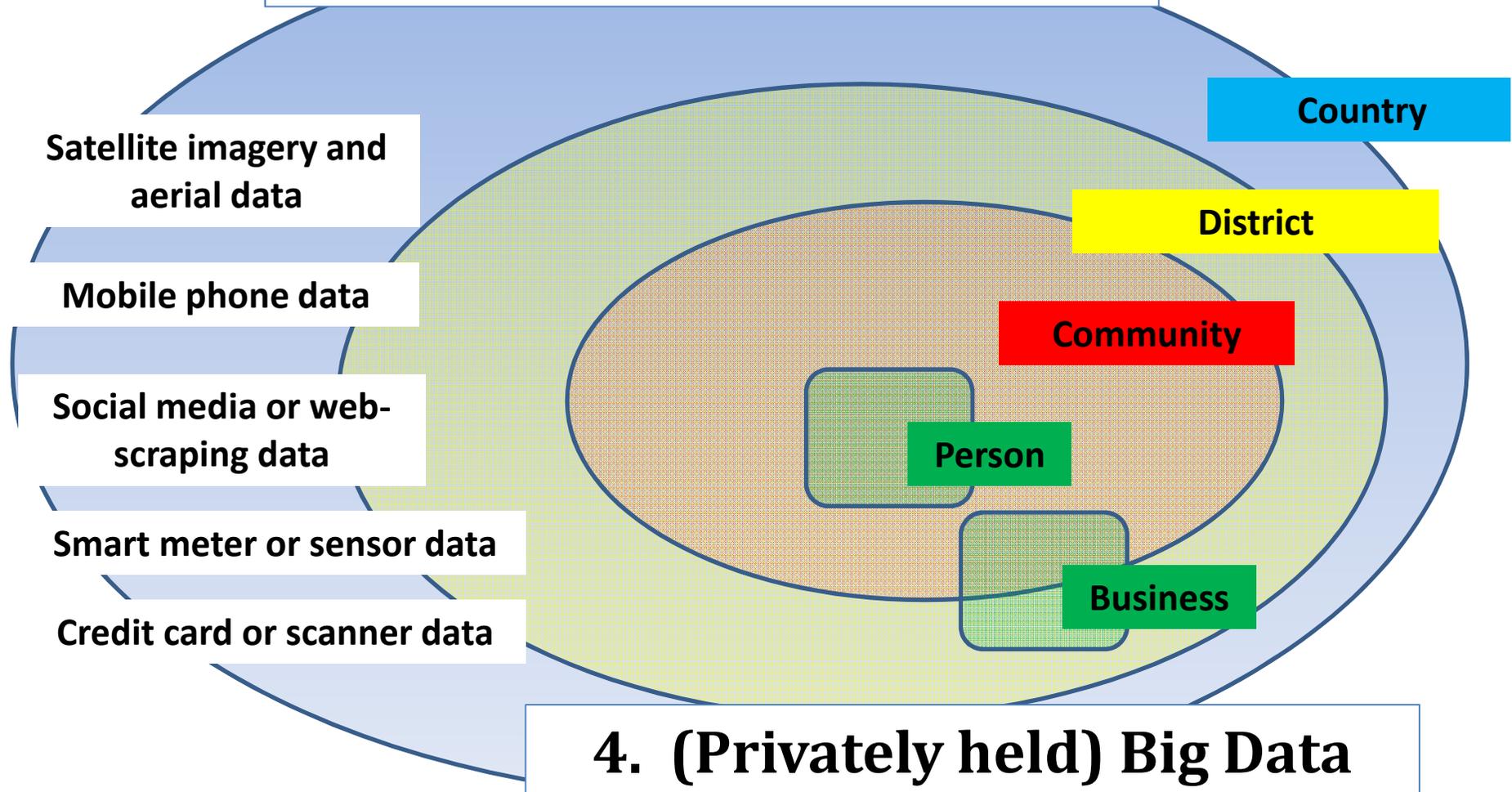


## 2. Register Data

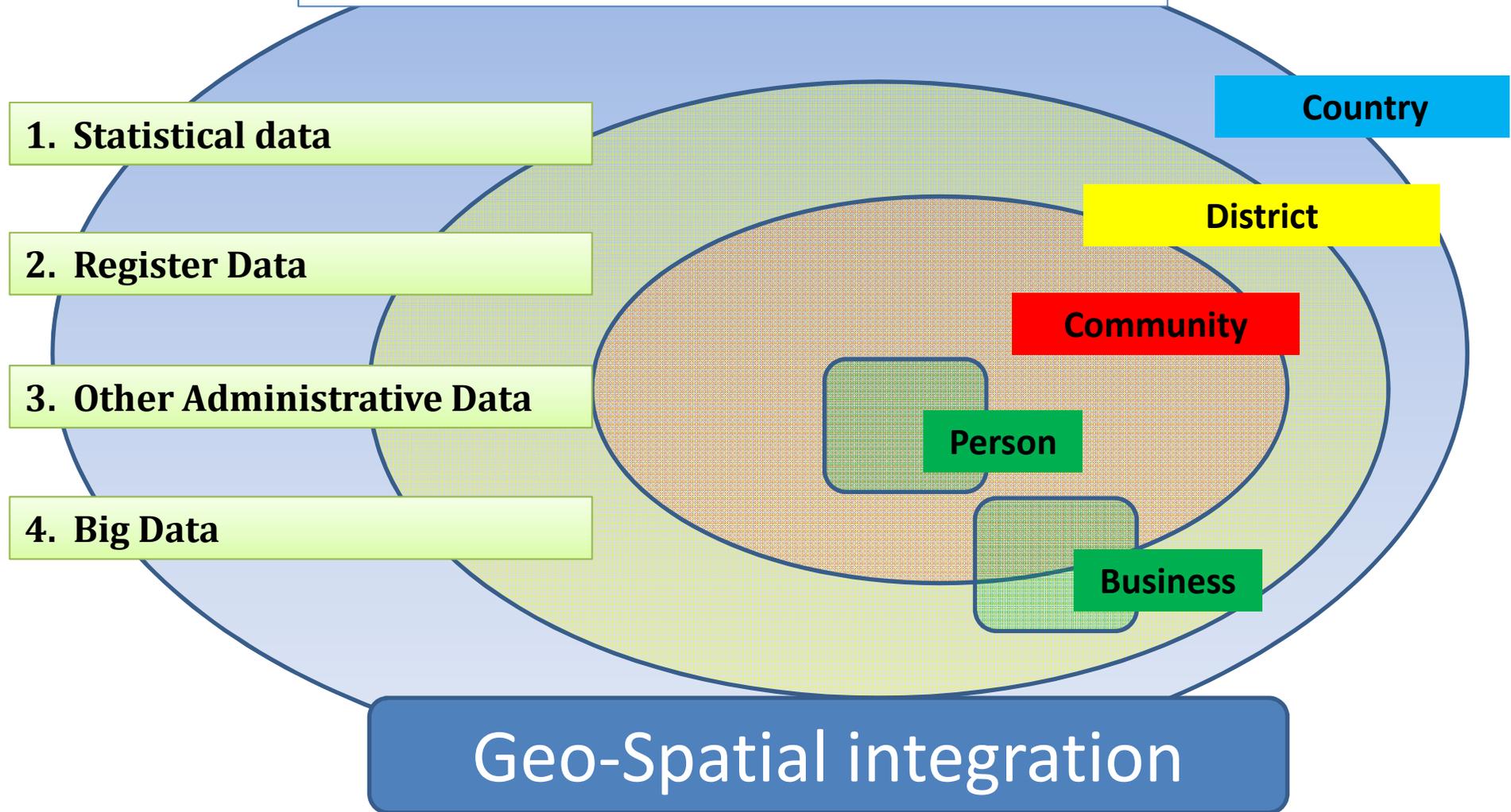
# Statistical Data Infrastructure



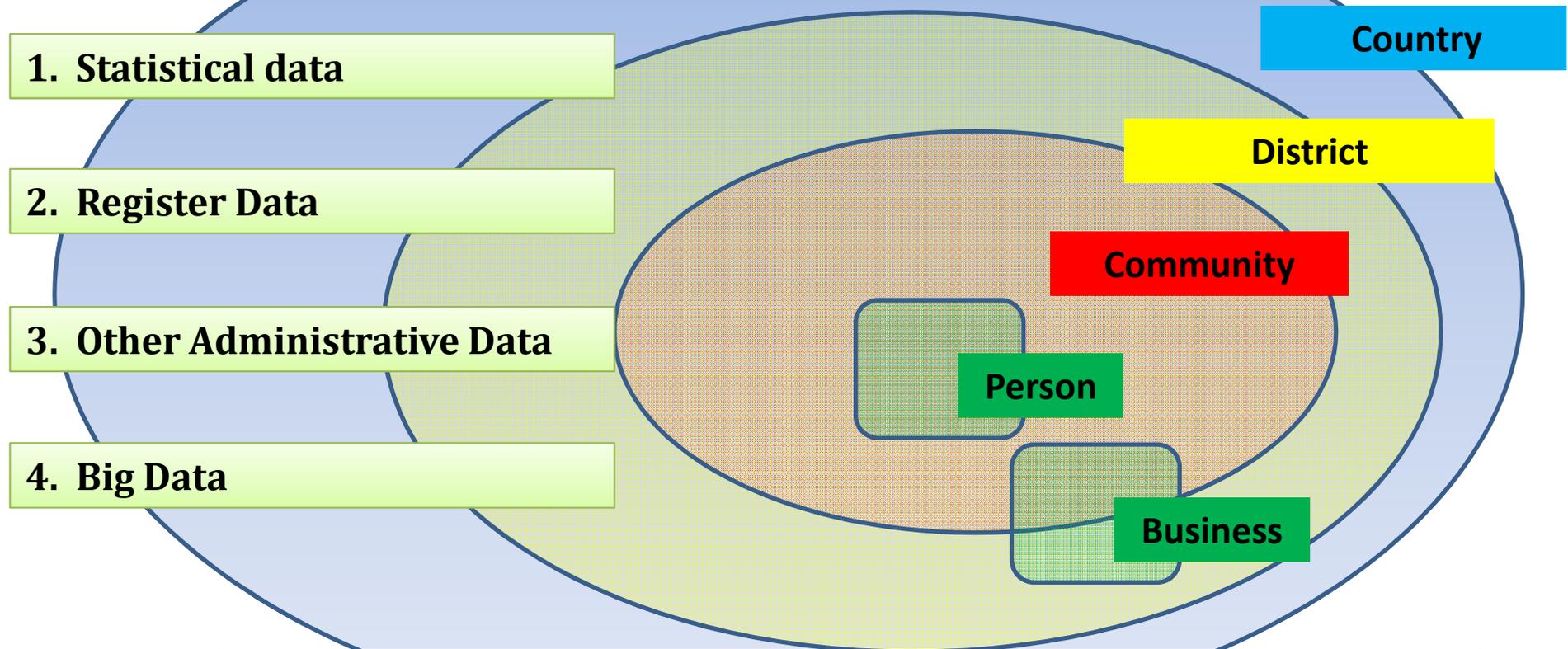
# Statistical Data Infrastructure



# Statistical Data Infrastructure



# Statistical Data Infrastructure



Statistical integration: SNA and SEEA

- Why use Big Data?
  - Fundamental principles of official statistics
    - ✓ “that data may be drawn from all types of sources to honor citizens’ entitlement to public information (based on quality, timeliness, cost)”
  - Modernization of statistical production and services
    - ✓ Ongoing developments led from Europe
    - ✓ Expectation from society of better products
  - The 2030 agenda for sustainable development
    - ✓ “This agenda is a plan of action for people, planet and prosperity. All countries and all stakeholders, acting in collaborative partnership, will implement this agenda.”

- Why use Big Data?
  - The 2030 agenda for sustainable development (cont.)
    - ✓ “Quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind. Such data is key to decision-making”
    - ✓ “We will promote transparent and accountable scaling-up of appropriate public-private cooperation to exploit the contribution to be made by a wide range of data, including earth observation and geospatial information, while ensuring national ownership in supporting and tracking progress”

## Key messages

- ✓ **Big Data for core national statistics** – for integrated economic, social and environmental policies
- ✓ **Big Data for agile statistics** – for emergency issues
- ✓ **Big Data to keep official statistics relevant** – private sector moves fast
- ✓ **Big Data as part of modernization of statistical systems** – new production processes and partnerships
- ✓ **Big Data to meet the data demand of the 2030 agenda** – monitoring policies – “leave no one behind”

## Why is access to Administrative Data different from access to Big Data (privately held)?

- ✓ **Canada** – Smart meter data
- ✓ **Netherlands** – Road sensor and Mobile Phone Data
- ✓ **USA** – Web-scraping and partnerships
- ✓ **Ireland** – Mobile Phone data
- ✓ **Mexico** – Twitter



- Access to Big Data and privacy issues
  - Use of Administrative Data
    - ✓ Existing legal frameworks
  - Use of Company Data
    - ✓ National council on privacy protection
    - ✓ “National stakeholder group on data access”?
      - **Corporate social responsibility**
      - **Data as a public good**
  - Partnerships (at international level)
    - ✓ ITU members
    - ✓ UN Global Compact
      - **Corporate social responsibility**
    - ✓ Extension of Fundamental Principles
      - **Principles of Data Access**



## United Nations Global Working Group on Big Data for Official Statistics

- Created in March 2014
- 32 Members –
  - 22 Countries and 10 International Agencies
- 8 Task Teams
  - **Advocacy and Communications**
  - **Access and Partnerships**
  - **Big Data and the SDGs**
  - **Training and Skills**
  - **Cross-cutting issues**
  - **Mobile Phone data**
  - **Social Media data**
  - **Satellite Imagery Data**

# UN GWG on Big Data for Official Statistics

## ○ **Global Conferences**

- ❖ Beijing, China, Oct 2014



- ❖ Abu Dhabi, UAE, Oct 2015
- ❖ Dublin, Ireland, 2016