Global Statistical Geospatial Framework – interoperability challenges

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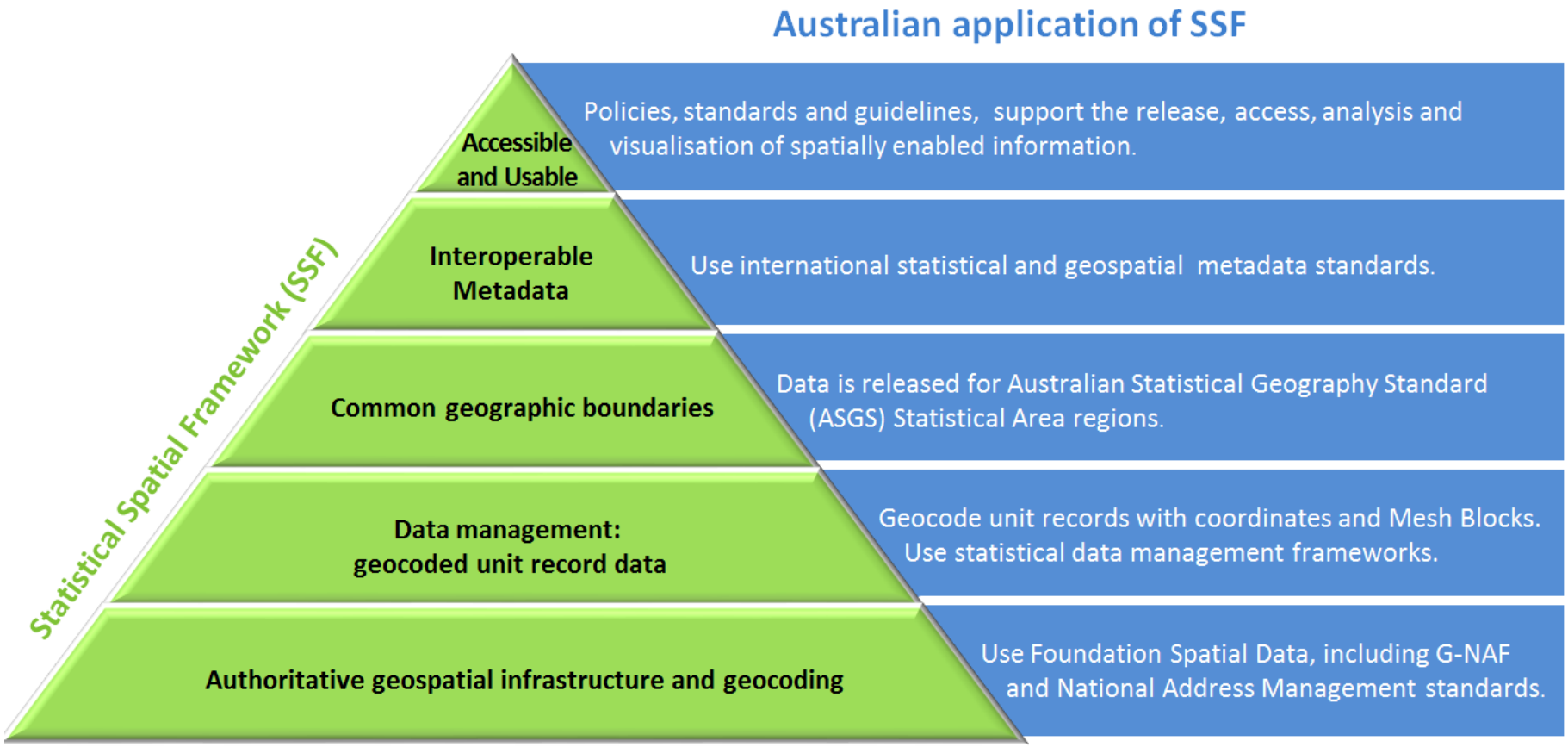
Outline

1. Origins of the Global Statistical Geospatial Framework

2. Purpose for the Global Statistical Geospatial Framework

3. Data interactions and interoperability challenges

Australian development of SSF



International Mandate

UN Economic and Social Council (ECOSOC)

UN Statistical Commission (UNSC)

- Endorsed the Global Framework - March 2017

UN Committee of Experts on Global Geospatial Information Management (UN-GGIM)

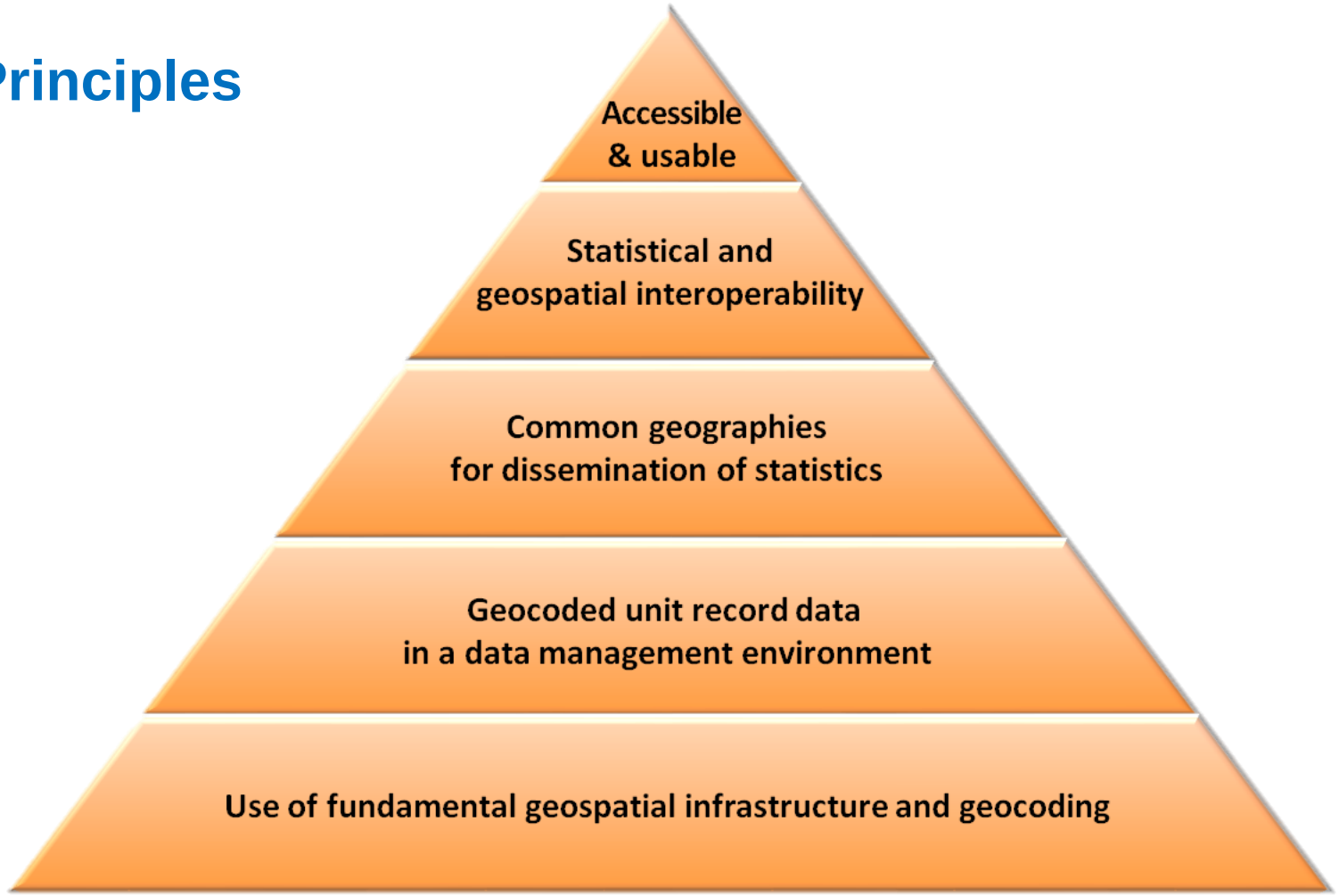
- Adopted the Global Framework - August 2016

UN Expert Group – Integration of Statistical Geospatial Information

…. both communities

Global Statistical Geospatial Framework

5 Principles



UN-GGIM | United Nations Commitee of Experts on Global Geospatial Information Management

BETTER DATA
BETTER LIVES
unstats.un.org
@UNStats #UNStatCom

GSGF Purpose

"The Global Statistical Geospatial Framework will provide:

- a common method for geospatially enabling statistical and administrative data,
- ensure that this data can be integrated with geospatial information."

Proposal for a Global Statistical Geospatial Framework, UN-GGIM 6, 2016 New York

Bridging between two communities

Statistical Community

Socio-Economic Datasets

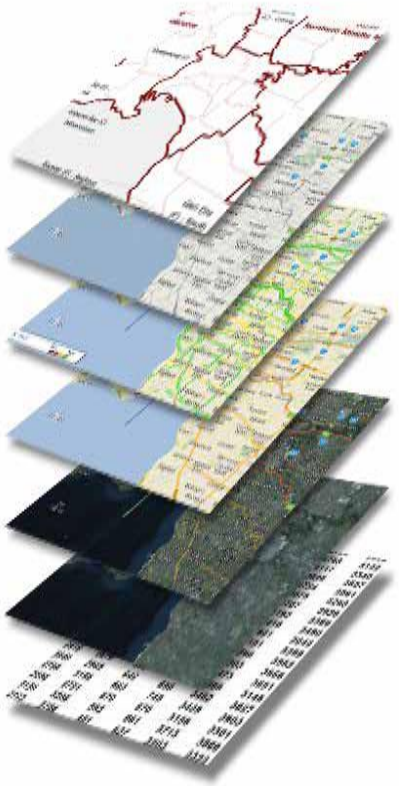
- **Core Statistical** — Census, Demographics, Agriculture, Building, Labour Force, etc.
- **Tax** — Income and Business Tax
- **Immigration**
- **Health** — Medicare, Pharmaceuticals, Workforce
- **Land** — Valuation and Use
- **Social Welfare** — Unemployment, Disability, Family Support
- **Others …**

GSGF bridge

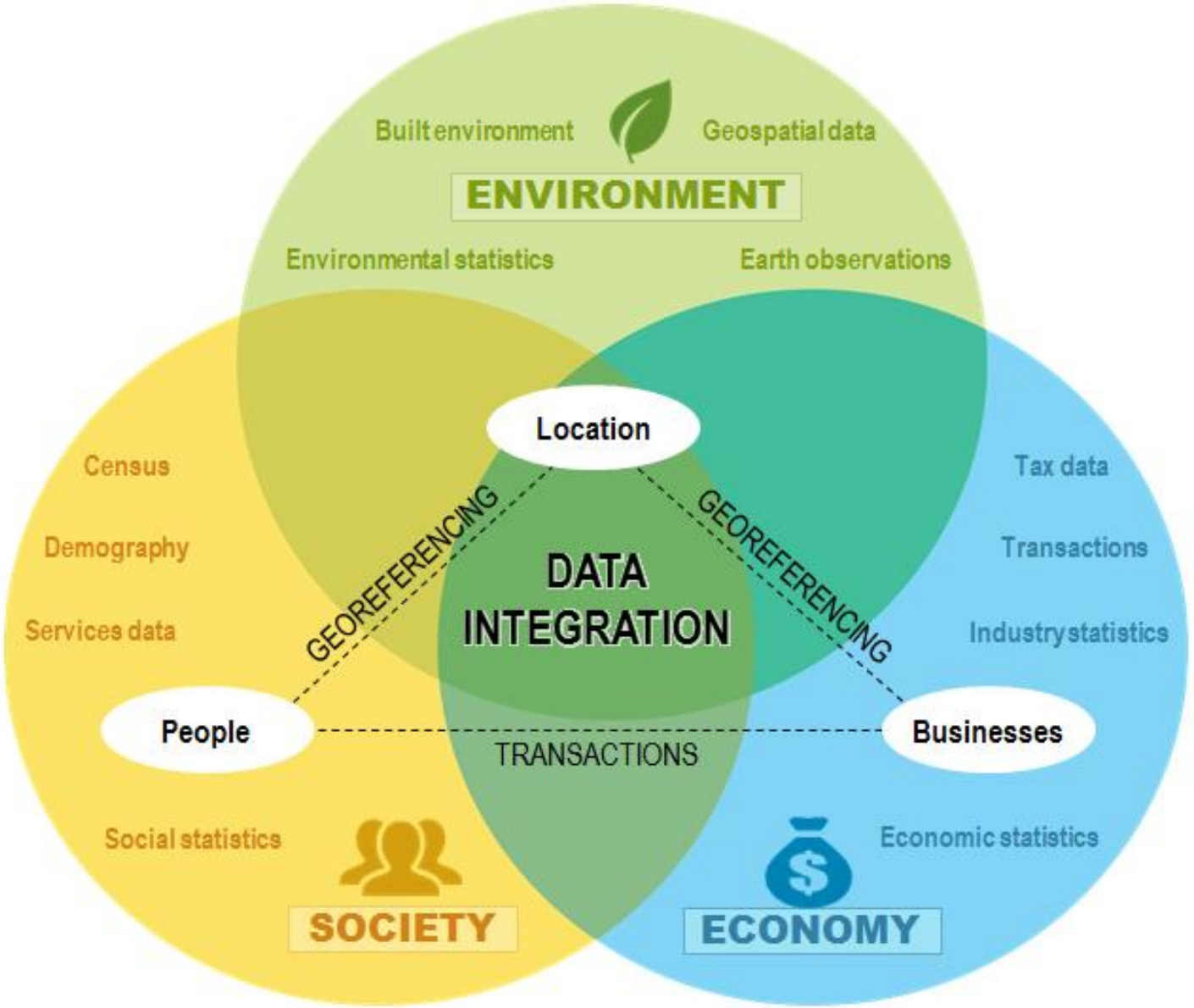
Spatial Community

Fundamental Geospatial Datasets

- Admin. & statistical boundaries
- Addressing, Place Names
- Transport, Water
- Land and Property
- Elevation and Depth
- Imagery
- Positioning

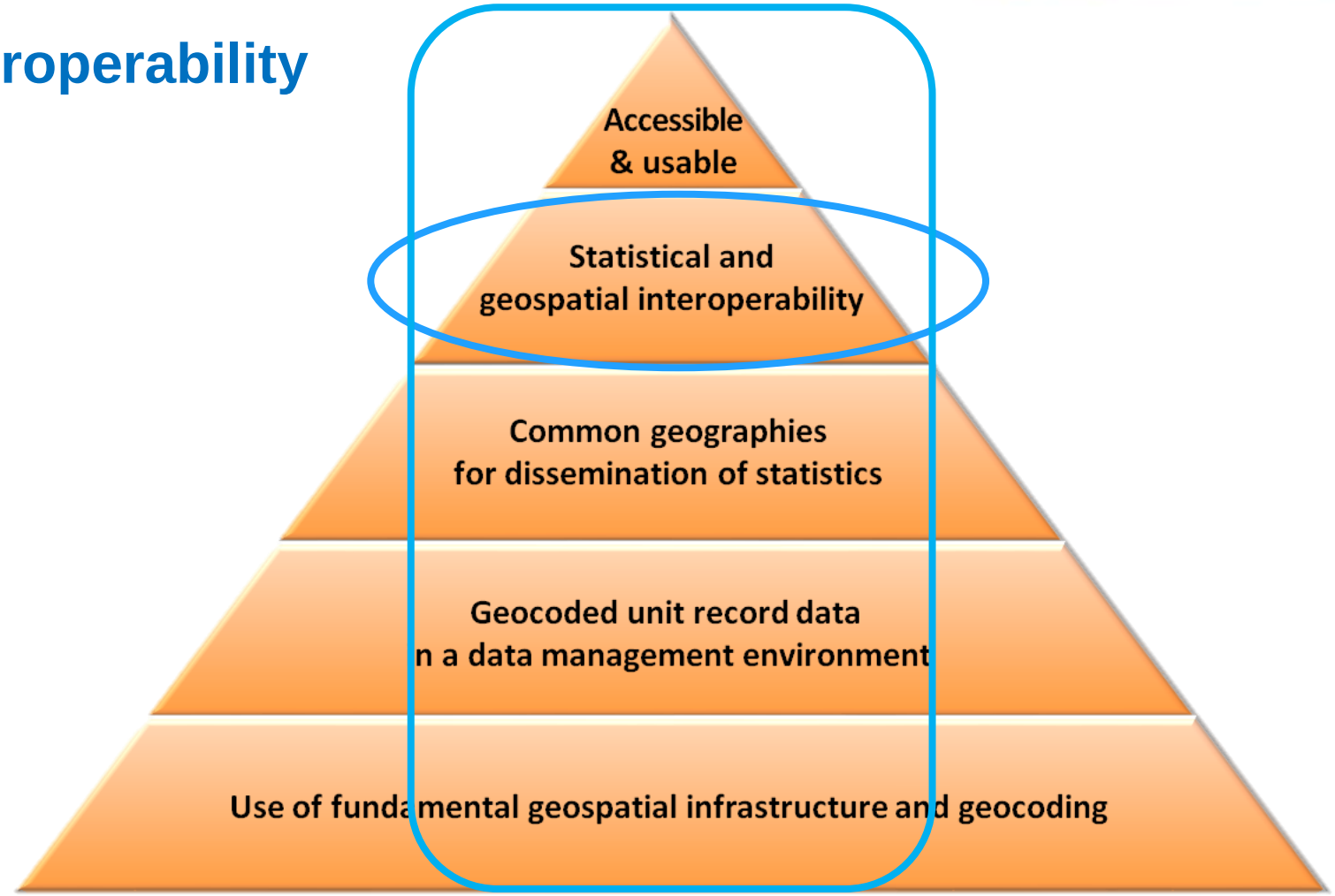


Location – bridging the 3 domains



Global Statistical Geospatial Framework

Interoperability

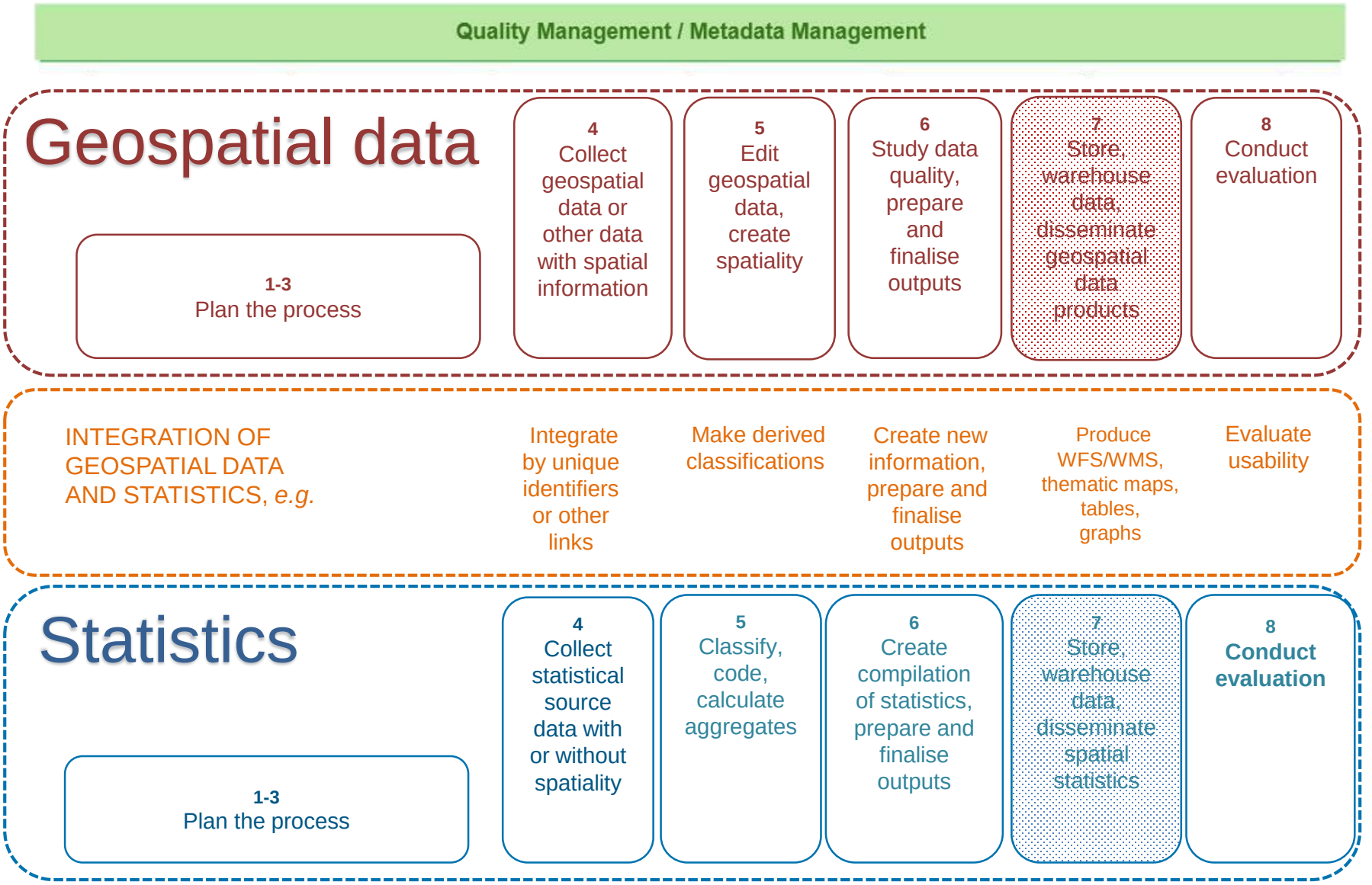


Geospatial data processes in a Statistical context

Production of Spatial Statistics, an applied sketch of GSBPM

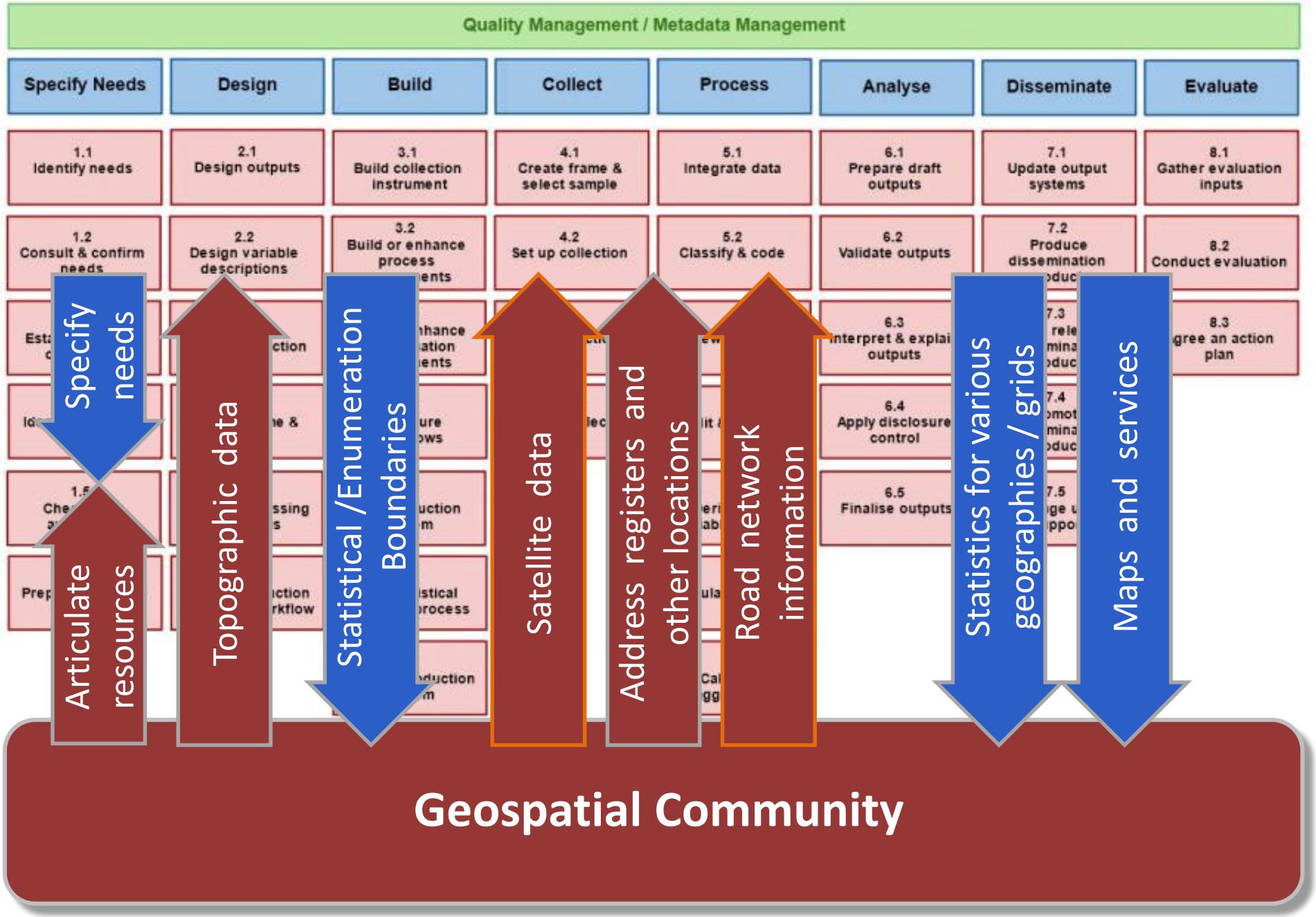
Terms used:
Geospatial data: Data with direct reference to a specific location on the surface of the Earth (points, areas, lines)
Spatial statistics: Geospatial data with statistics or table data with location information.

General Statistical Business Process Model: http://www1.unece.org/stat/platform/display/GSBPM/GSBPM+v5.0

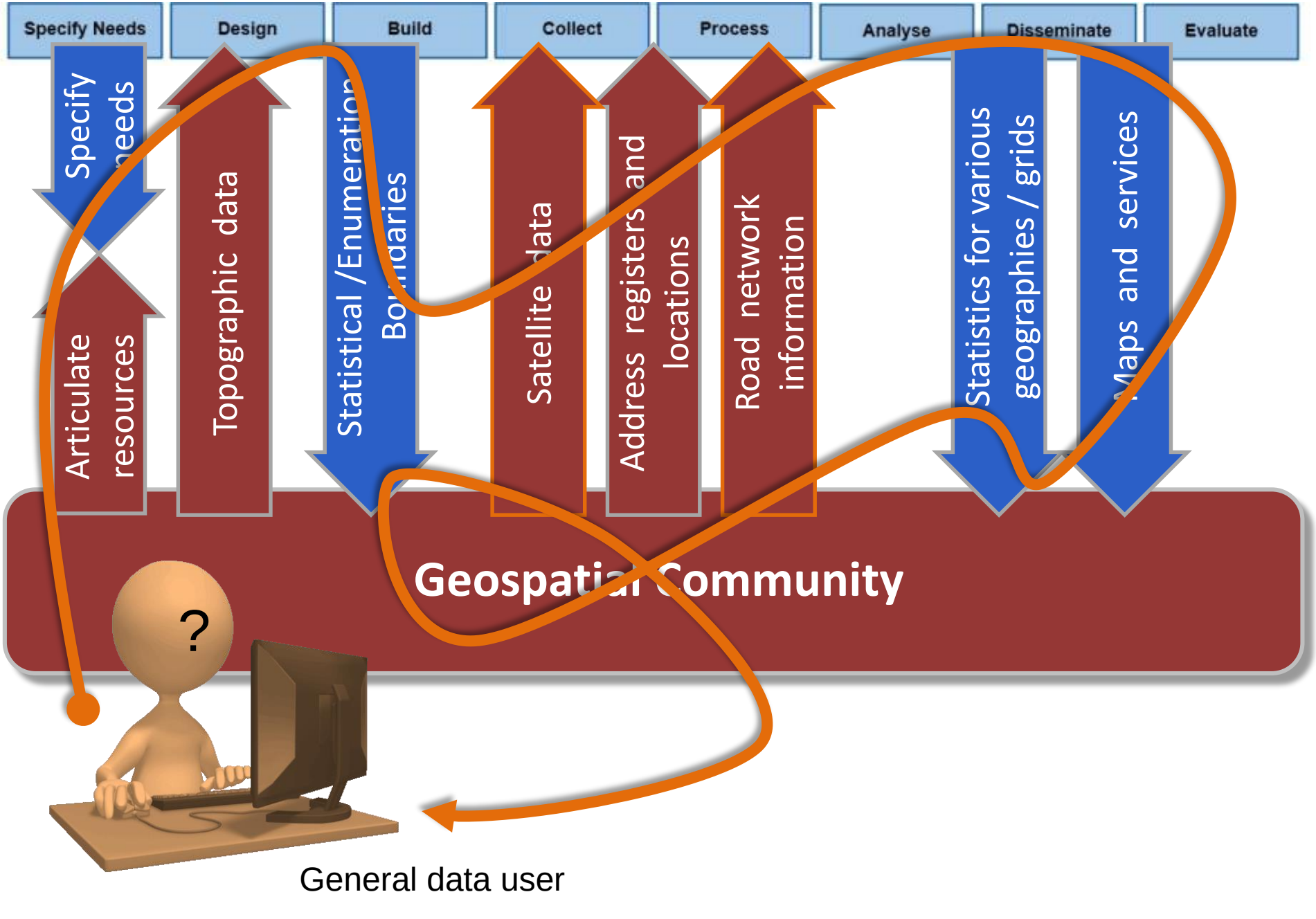


Interactions between statistical and geospatial data processes

The Generic Statistical Business Process Model



The Generic Statistical Business Process Model



Key interoperability challenges

- Commonly understood language - human and machine
- Shared understanding of business processes and methods
- Shared understanding of data models, metadata and standards
- Mapping and interoperability between two community's data models, metadata and standards
- Engage with other data group (e.g. W3C)
- Use of relevant communities standards