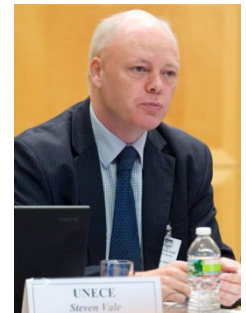




**United Nations Economic Commission for Europe
Statistical Division**

Bridging the Communities, Developing the Architecture for Integrating Statistical and Geospatial Information: Introducing the GSGF

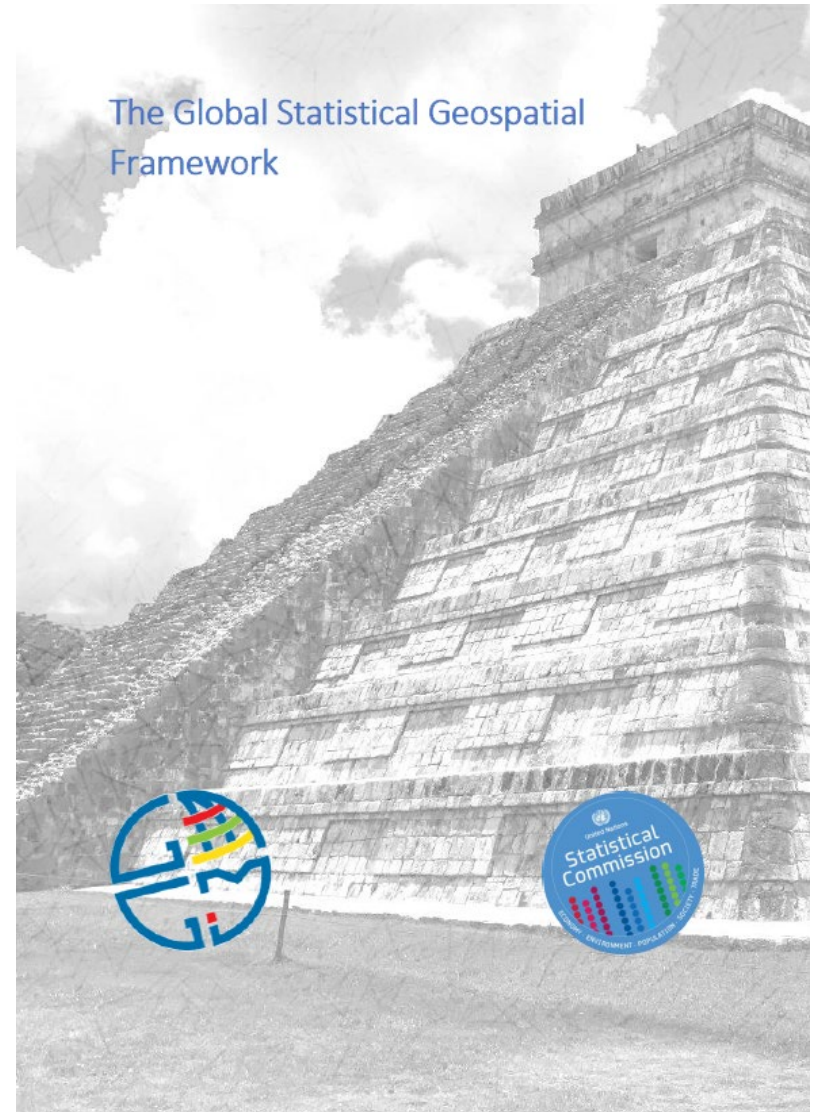
Steven Vale
UNECE
steven.vale@un.org



Introducing the GSGF



- ❖ Context
- ❖ Mandate
- ❖ Framework
- ❖ Resources

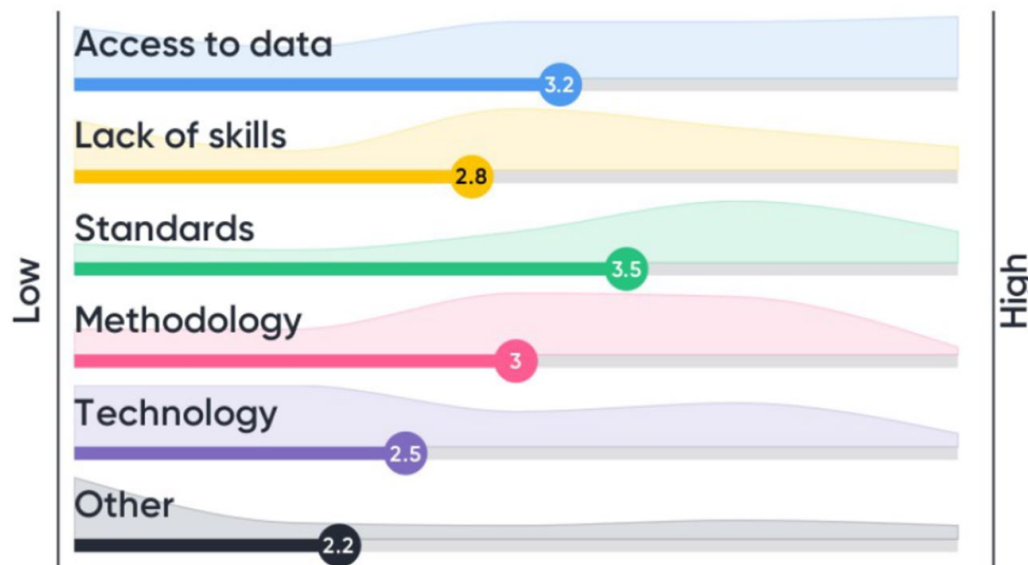


Context

- ❖ Strengthening partnerships

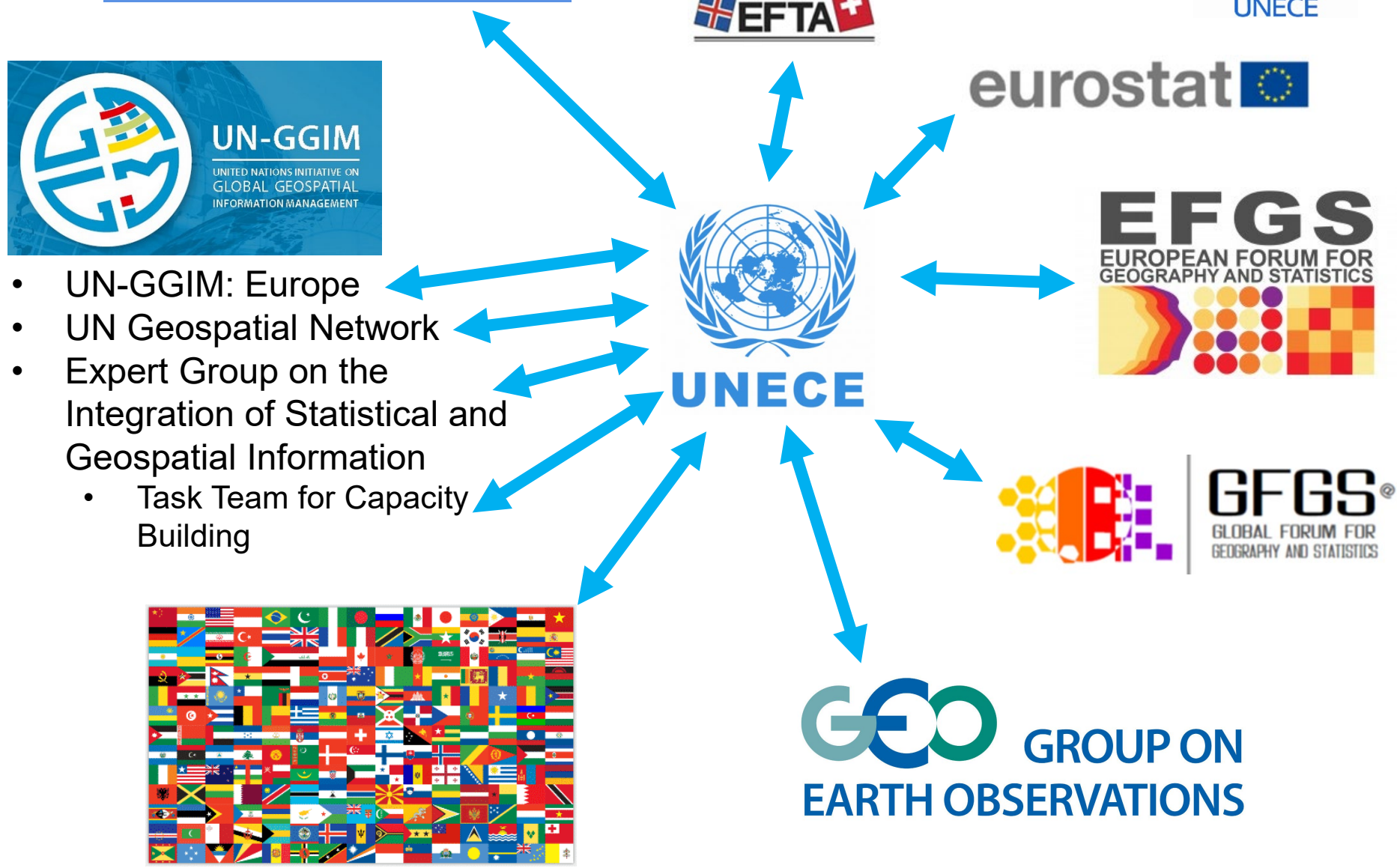


- ❖ Overcoming challenges to interoperability





- UN-GGIM: Europe
- UN Geospatial Network
- Expert Group on the Integration of Statistical and Geospatial Information
 - Task Team for Capacity Building



Developing the architecture

❖ Geospatial view of GSBPM



Overarching Processes							
Specify needs	Design	Build	Collect	Process	Analyse	Disseminate	Evaluate
1.1 Identify needs	2.1 Design outputs	3.1 Reuse or build collection instruments	4.1 Create frame and select sample	5.1 Integrate data	6.1 Prepare draft outputs	7.1 Update output systems	8.1 Gather evaluation inputs
1.2 Consult and confirm needs	2.2 Design variable descriptions	3.2 Reuse or build processing and analysis components	4.2 Set up collection	5.2 Classify and code	6.2 Validate outputs	7.2 Produce dissemination products	8.2 Conduct evaluation
1.3 Establish output objectives	2.3 Design collection	3.3 Reuse or build dissemination components	4.3 Run collection	5.3 Review and validate	6.3 Interpret and explain outputs	7.3 Manage release of dissemination products	8.3 Agree an action plan
1.4 Identify concepts	2.4 Design frame and sample	3.4 Configure workflows	4.4 Finalise collection	5.4 Edit and impute	6.4 Apply disclosure control	7.4 Promote dissemination products	
1.5 Check data availability	2.5 Design processing and analysis	3.5 Test production systems		5.5 Devise new variables and units	6.5 Finalise outputs	7.5 Manage user support	
1.6 Prepare and submit business case	2.6 Design production systems and workflow	3.6 Test statistical business process		5.6 Calculate weights			
		3.7 Finalise production systems		5.7 Calculate aggregates			
				5.8 Finalise data files			

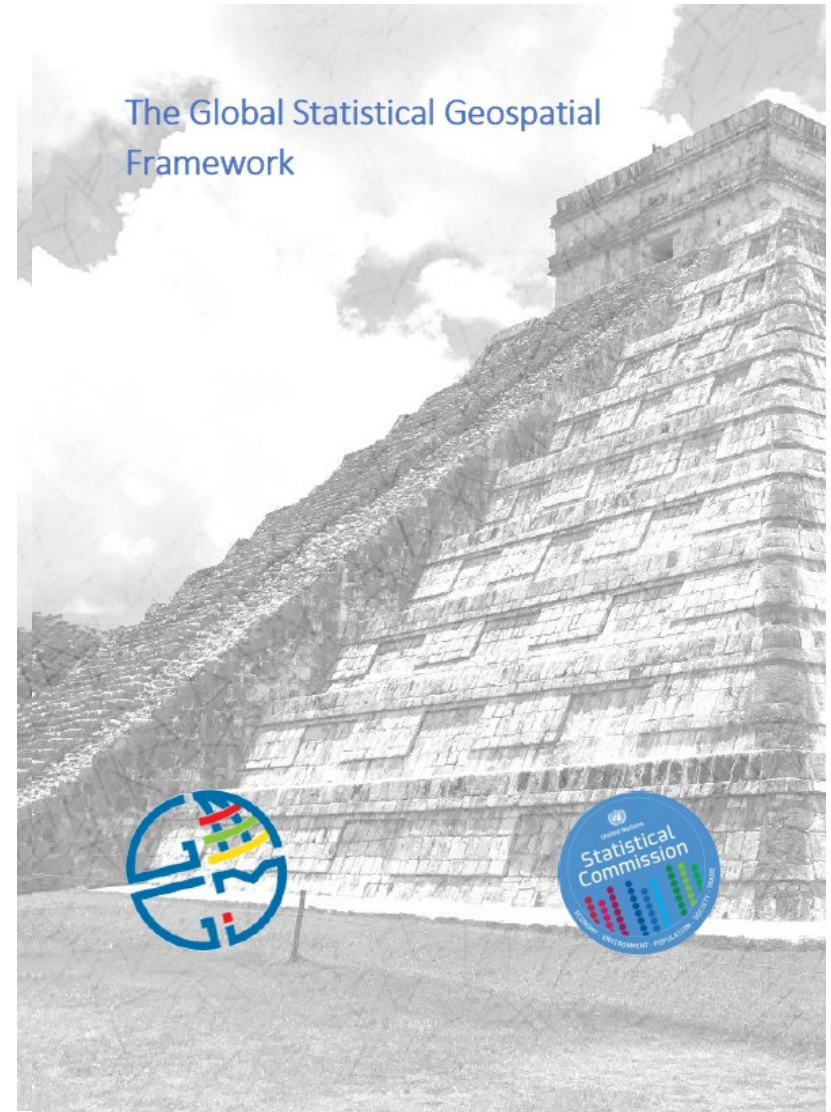
Bringing it all together



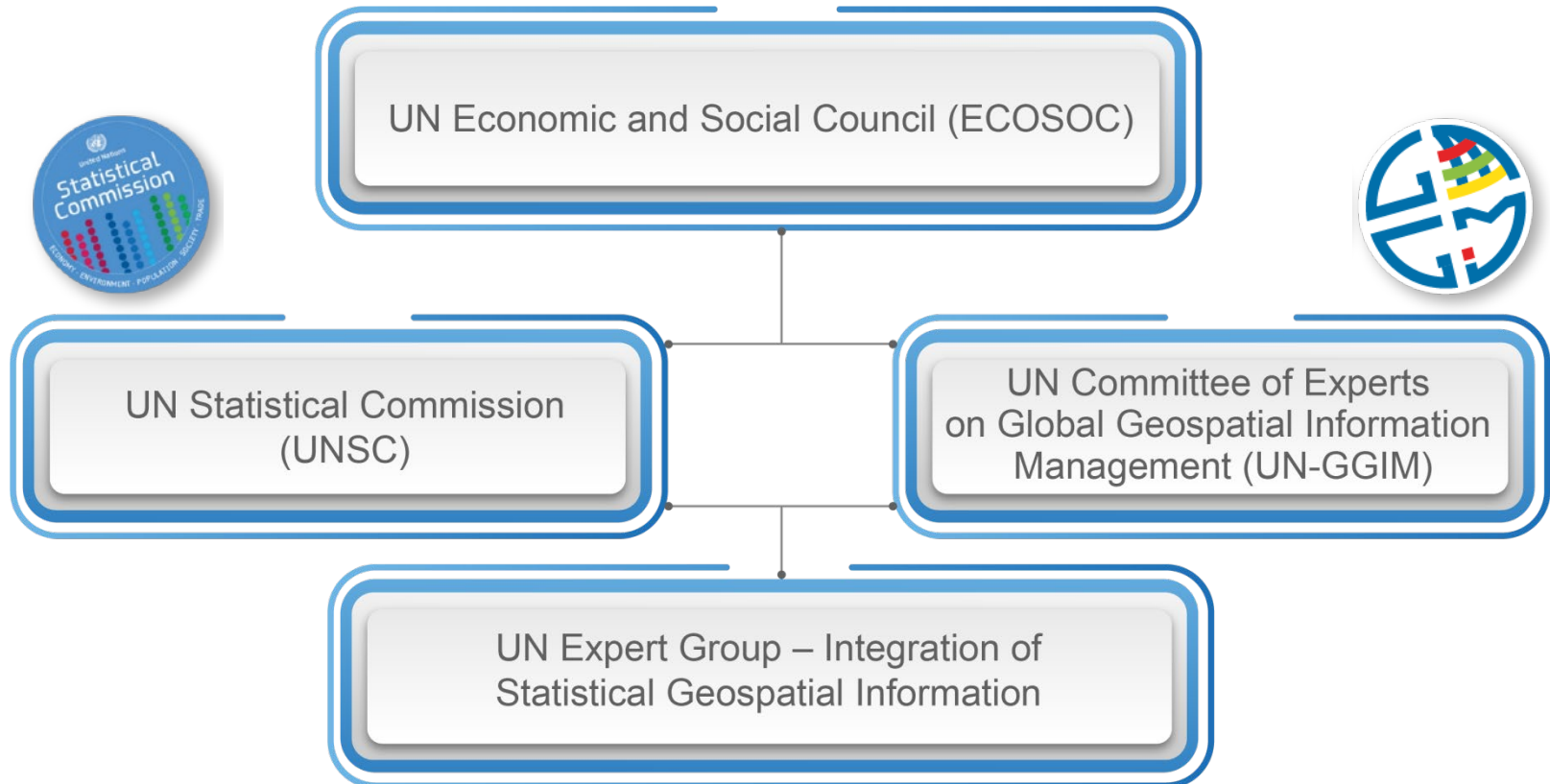
We need an overarching framework!



Solution =

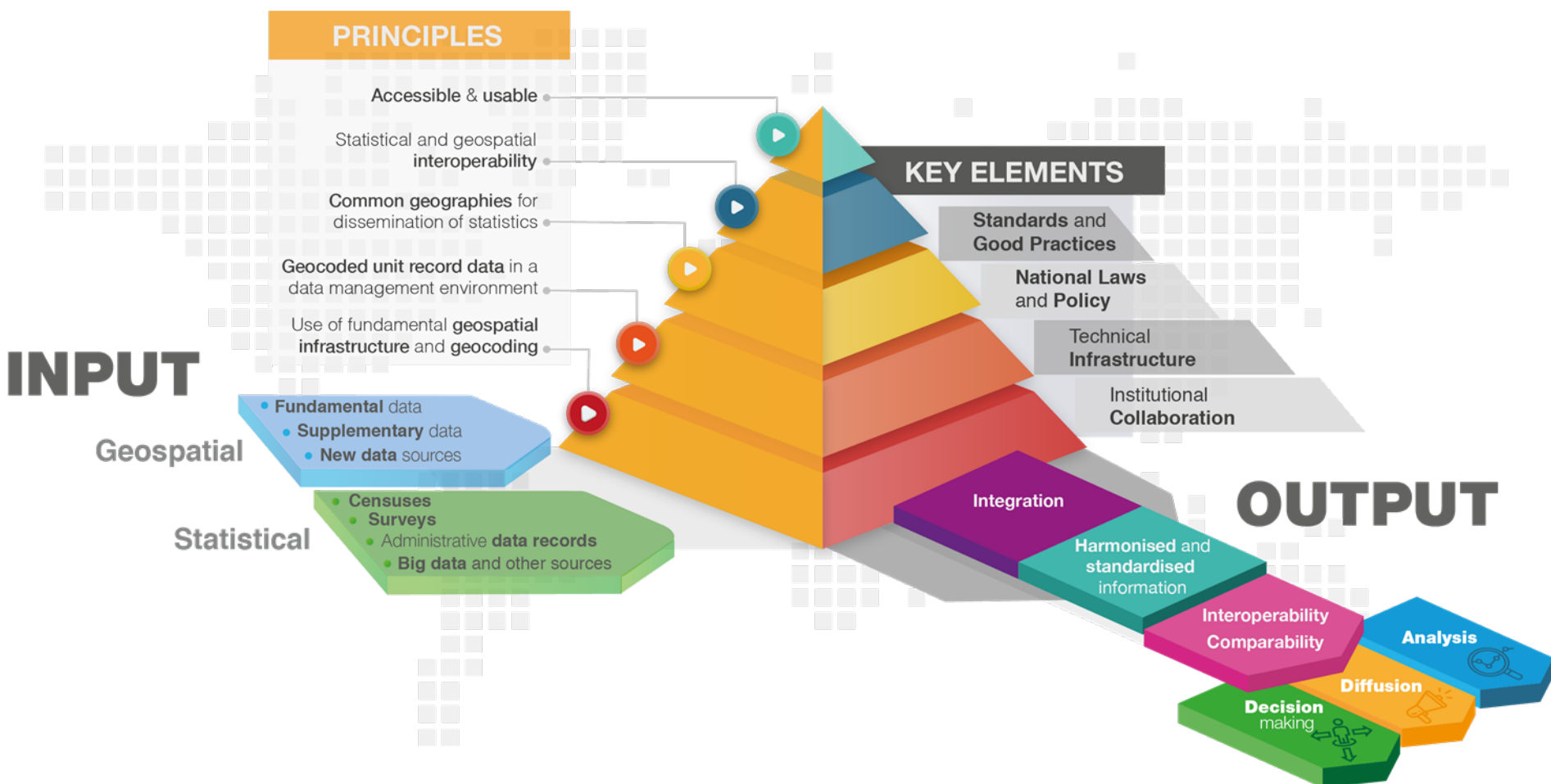


International mandate

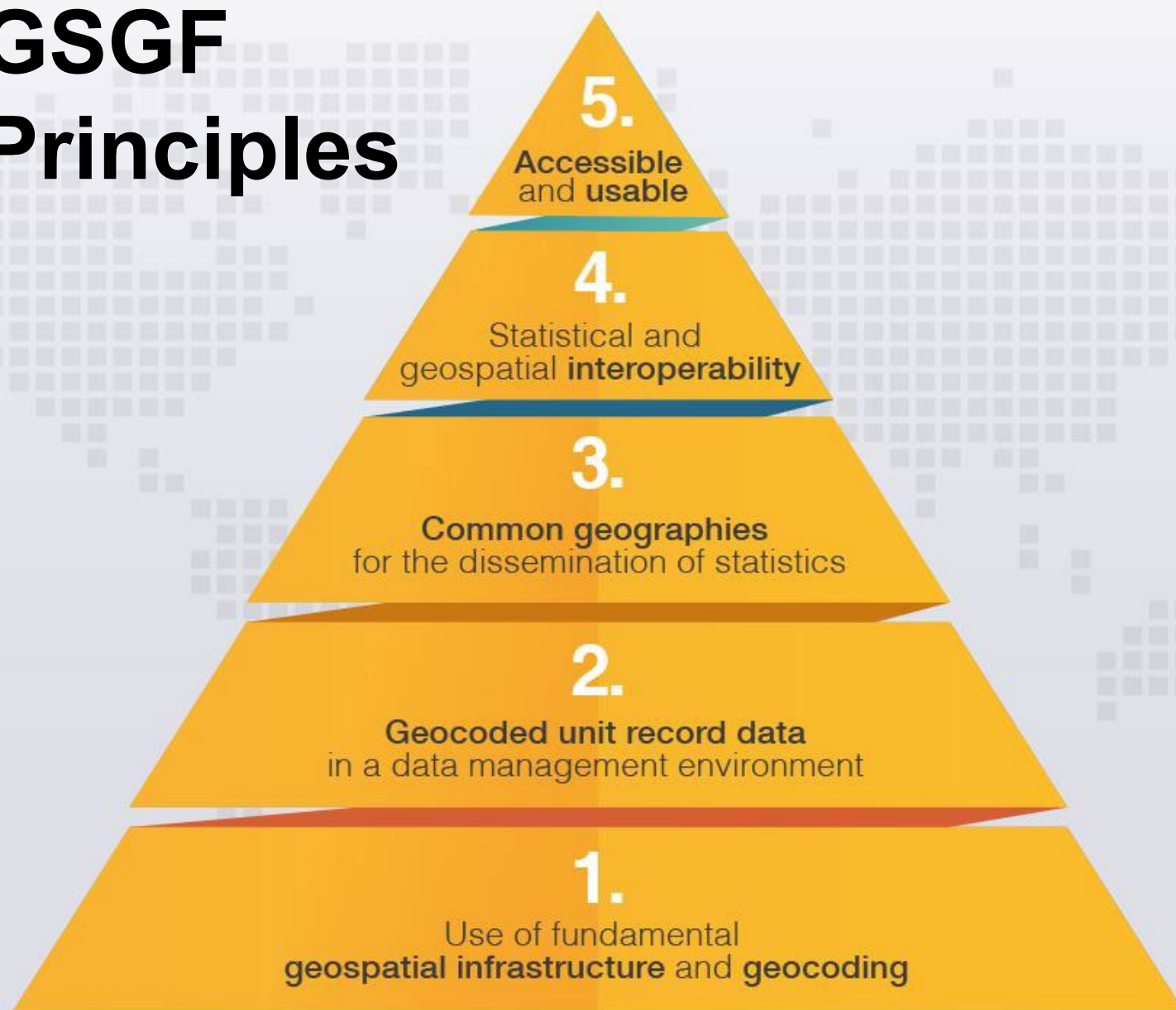


... both communities

GSGF: Full framework

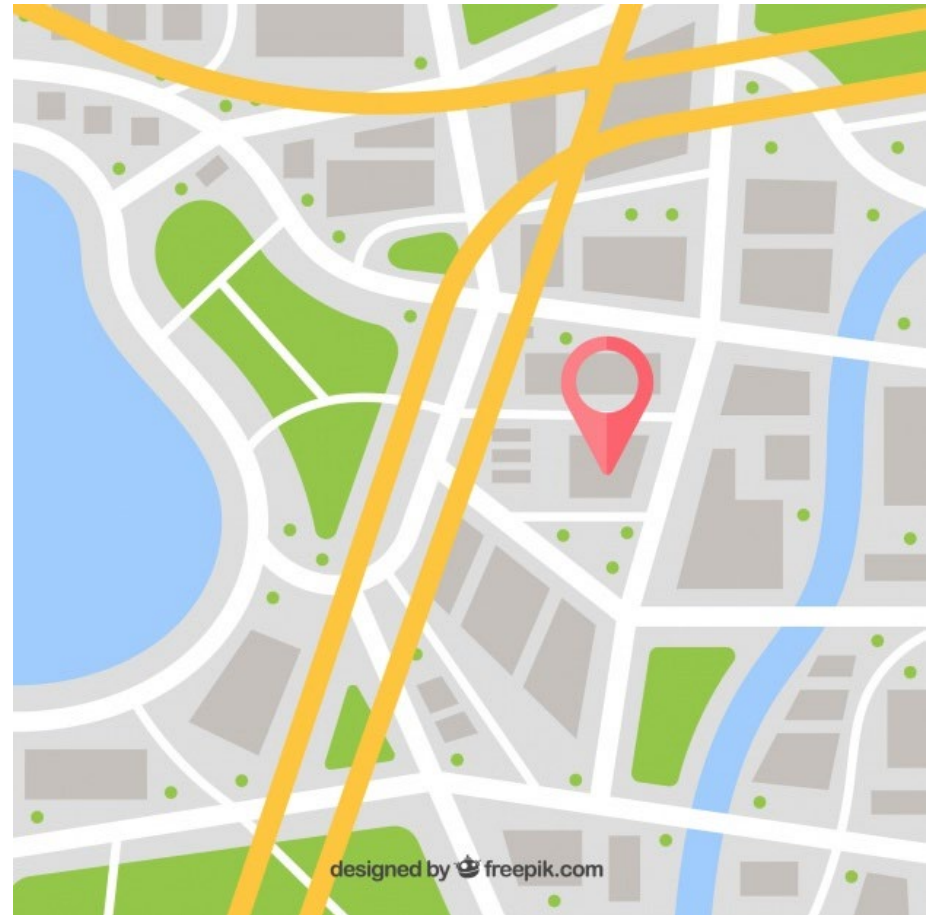


GSGF Principles



Starting point

- ❖ **Geocode all units**
- ❖ **Ideally with X / Y coordinates**
- ❖ Define areas
- ❖ Get or create boundary files



Starting point

- ❖ Geocode all units
- ❖ Ideally with X / Y coordinates
- ❖ **Define areas**
- ❖ **Get or create boundary files**



External Environment

Regional data / Map visualisations



Diagram legend

Data type

Data states

Preferred transitions

Other transitions

Data Processes

Internal Environment

Statistical/
GIS Tools

Statistical
Regions

Other
Regions

Correspondence tables

Aggregate regional
data geocodes

Unit record geocodes

Allocation
tables

Base geographic
unit (block)

Point-in-
polygon

Co-ordinates

Address
Geocoding

Small area
statistical region

Locality
Coding

Aggregate regional data
[area code/label]
- from administrative records
(e.g. postcodes, school zones)

Location information

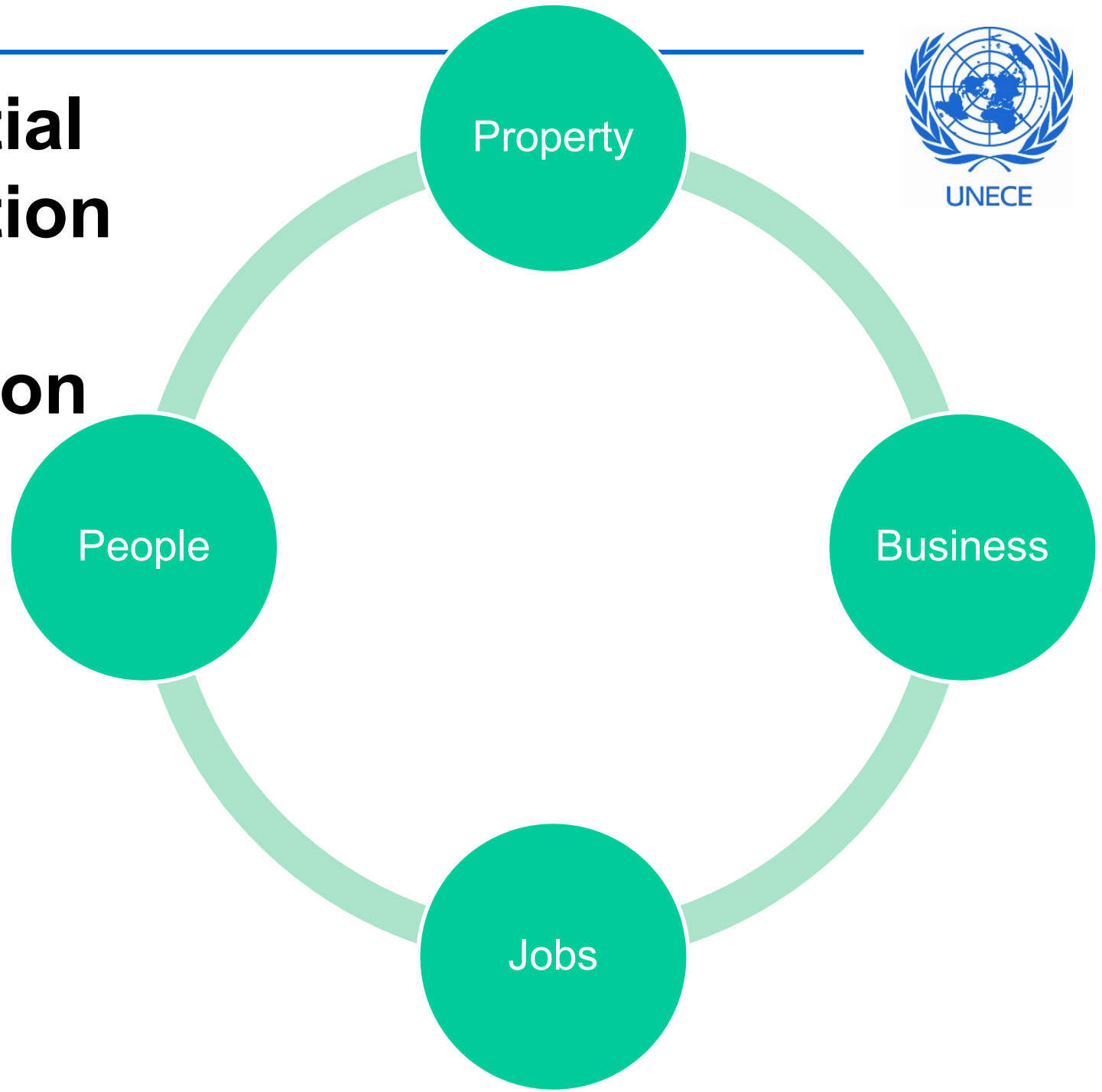
Co-ordinates
[latitude, longitude]
- from field data
collection or
administrative records

Physical Address
[address description]
- from forms or
administrative records

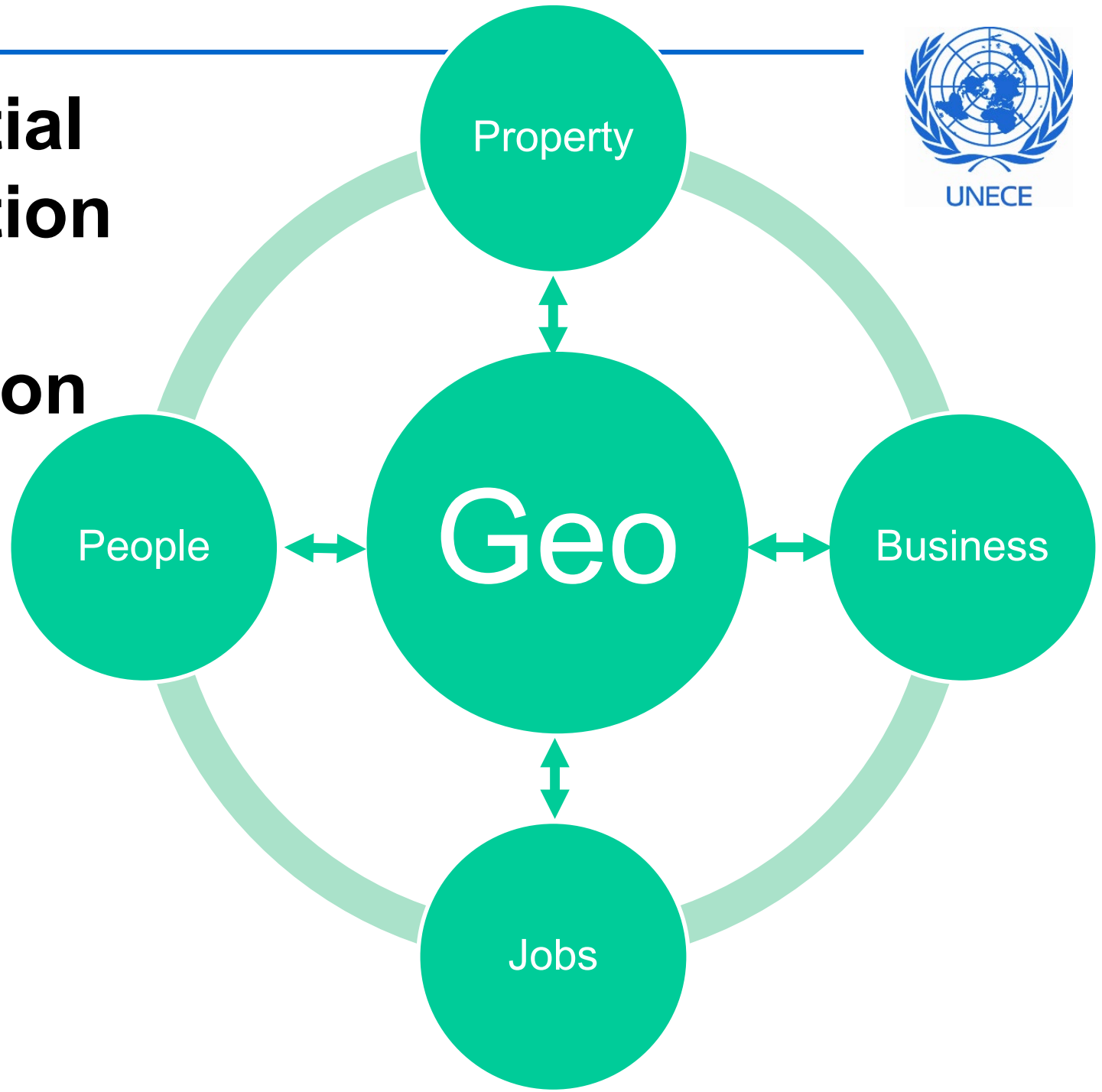
Locality
[Suburb/town/village,
and/or postcode,
state/region]
- from forms or admin.

Enumeration regions
[area code/label]
- from field data
collection

Geospatial Information for Data Integration



Geospatial Information for Data Integration





Resources

❖ GSGF Wiki:

- <https://unstats.un.org/wiki/display/GSGF>
- GSGF document
- Supporting materials
- Implementation information



On-going work

- ❖ Communication strategy
- ❖ Guidance material for implementing the GSGF
- ❖ Privacy and confidentiality
- ❖ Capacity building
 - Survey of needs



Session outline

- ❖ Country presentations
 - Belize
 - Ireland
 - South Africa
 - France
- ❖ Discussion
 - Post your questions in “Chat”