

United Nations GGIM National Institutional Arrangements (NIA)

TG1: Geospatial Information (GI) production systems analysis

United Nations Committee of Experts on Global Geospatial Information Management
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United Nations Committee of Experts on
Global Geospatial Information Management

Positioning geospatial information to address global challenges

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1. Task Group members

Task Group 1
Spain
France
Italy
South Korea
Singapore



2. NIA Work Plan: TG1

TG1	1.1 GI production systems analysis
	• Real user needs in GI and Geospatial Reference Information (GRI).
	• Review and description of existing data capture and creation systems.
	• Review and description of current geographic data management systems: maintenance, analysis, transformation, storage.
	• Analysis of geographic data life cycle. How production systems deal with information update.
	• Identification of inefficient gaps in current production systems.
	• Ways of changing to best practices on GI and GRI production.
	• Impacts of change in production systems.
	• Definition of GRI and Core Geospatial Reference Information (C-GRI).



3. Selection of Themes for Analysis phase

– The final GI selected themes in this first approach were (GI/Geospatial Reference Information-GRI):

- Geographical names
- Administrative units
- Cadastral parcels
- Transport networks
- Hydrography
- Elevation
- Land Cover
- Imagery
- Settlements



4. Eight questions related to production systems (for every 9 Themes)

8 questions related to **production systems** (for each 9 Themes)



"Taken into account to design it "The Status of Topographic Mapping in the World" (UN-GGIM / ISPRS)"

Q1.- Which are the methods applied for GRI data creation/update?

Q2.- Who does the creation/update of GRI?

Q3.- Which is the approach used in creation/update of GRI?

Q4.- Which is the production scale?

Q5.- The GRI data update is done continuously or periodically?

Q5b.- In case it is periodical, which is the update period?

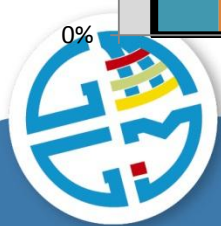
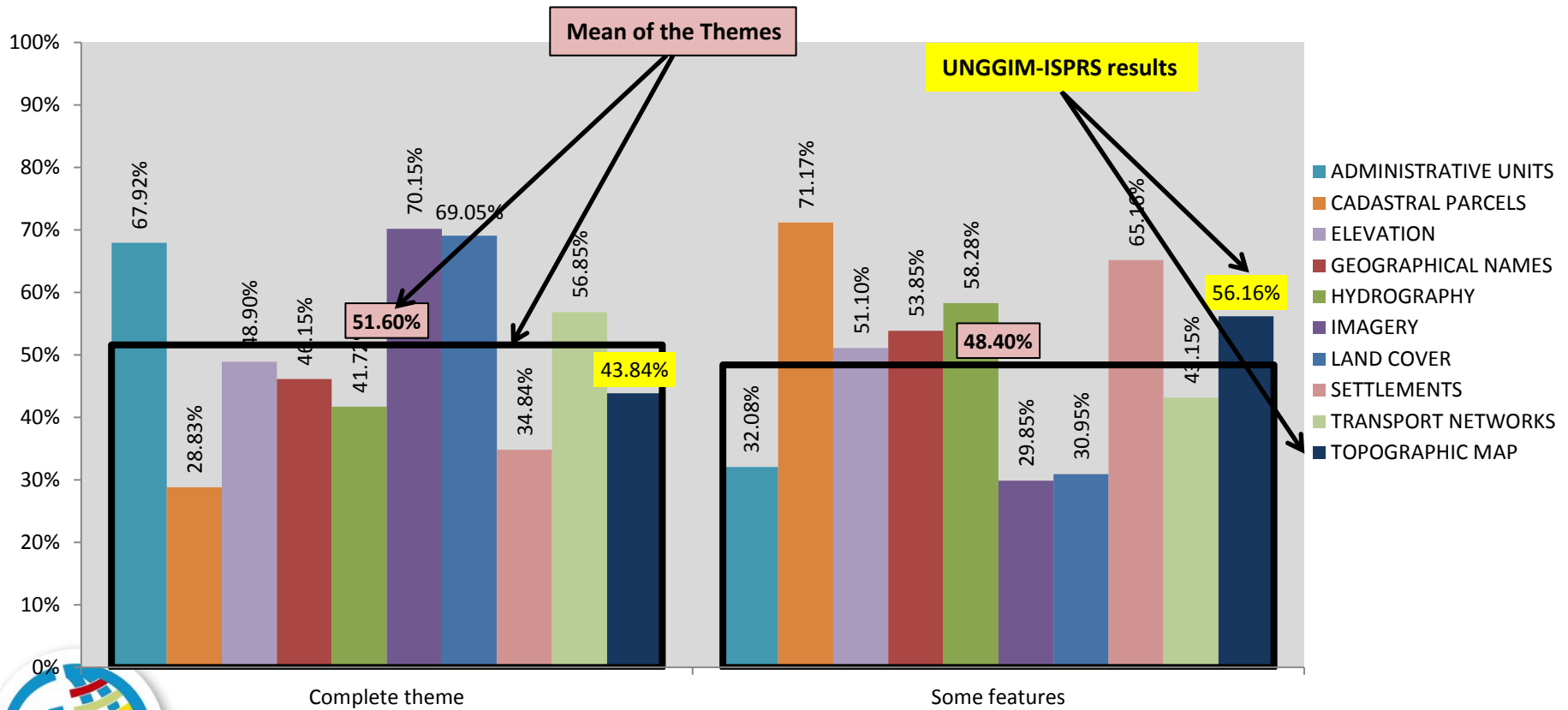
Q6.- The data update done complete or partially?

Q7.- The update is done for the complete theme or for some features/attributes?

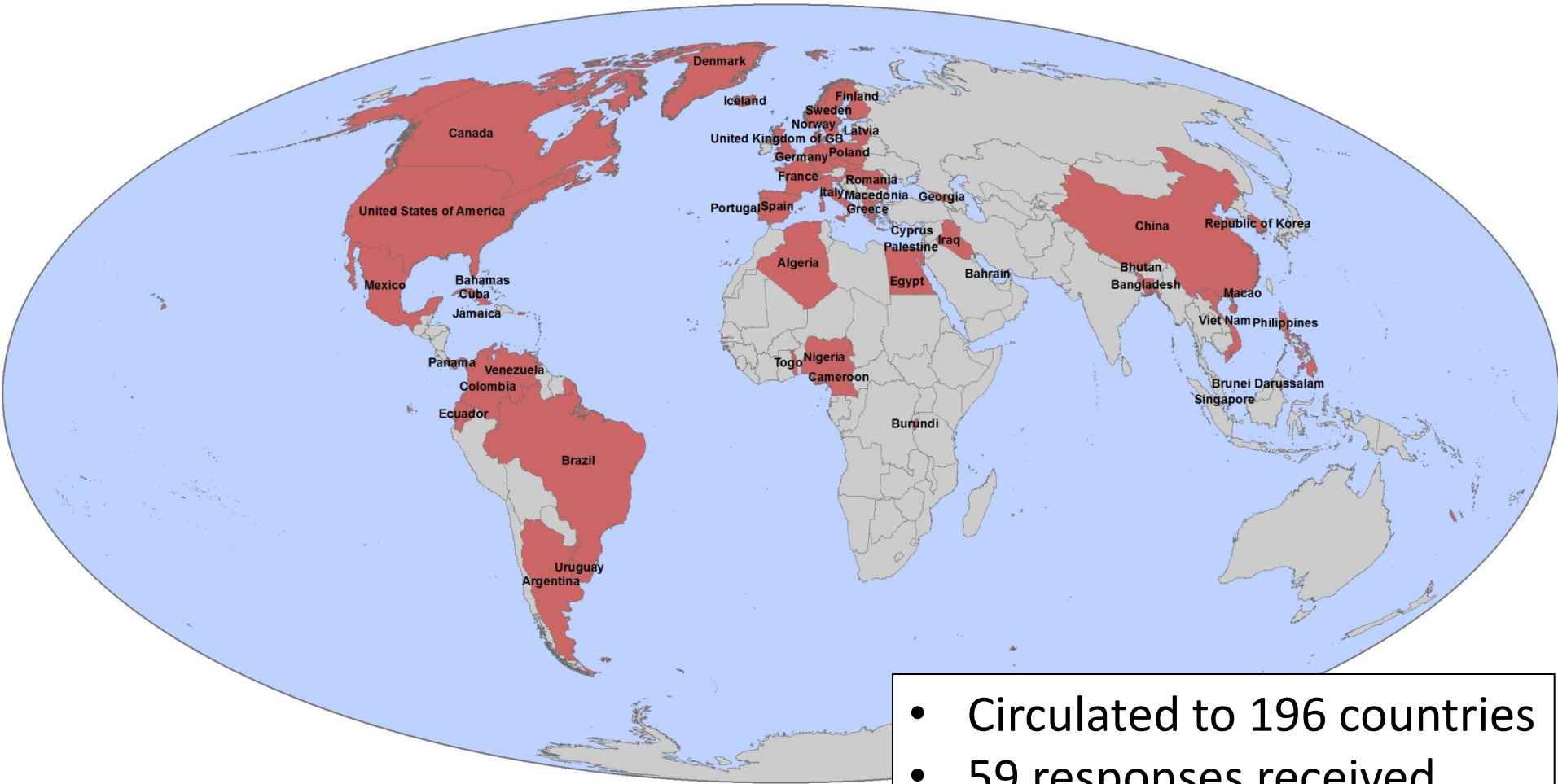
Q8.- Who are the users of GRI?



Some questions reflect the result of the *Status of Topographic Mapping in the World* (UN-GGIM/ISPRS) "e.g":



TG1 Questionnaire



■ Countries answering the questionnaire

- Circulated to 196 countries
- 59 responses received
- 30% countries



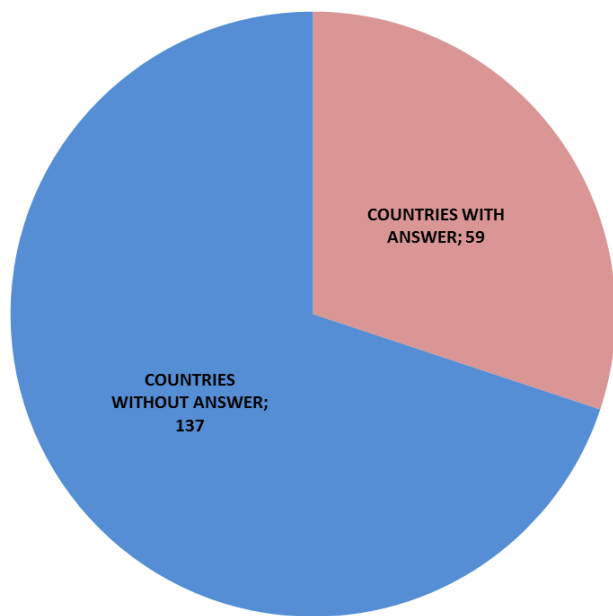
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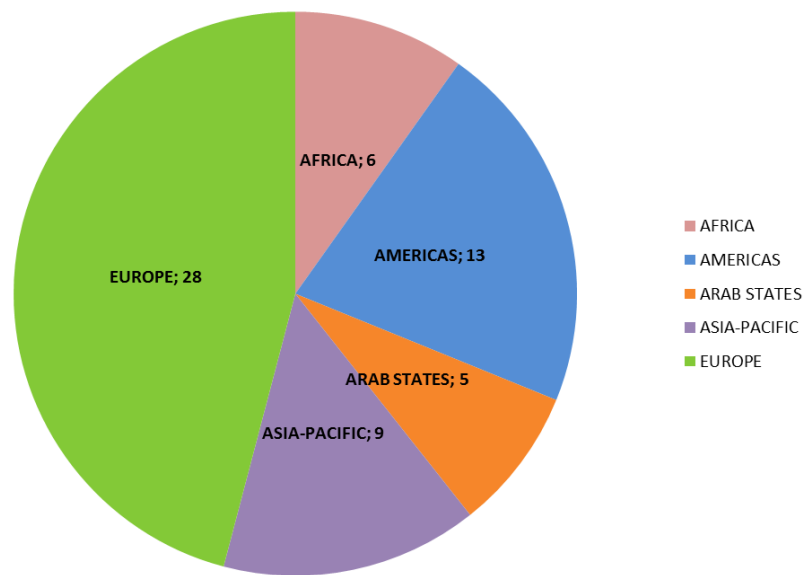
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TG1 Questionnaire

ANSWERS TO COMBINED QUESTIONNAIRE



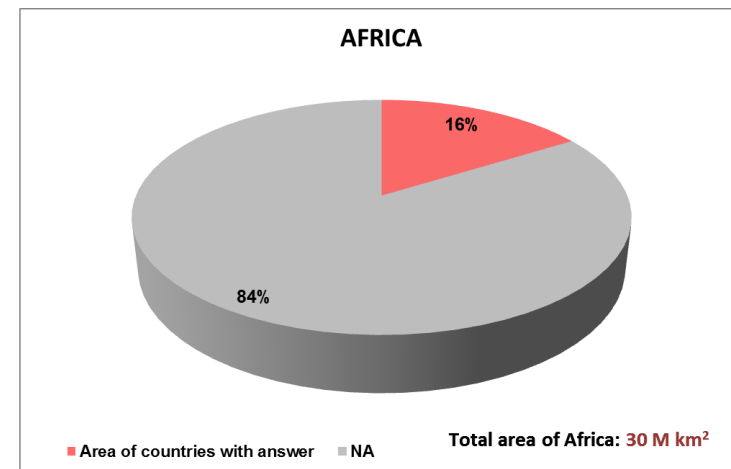
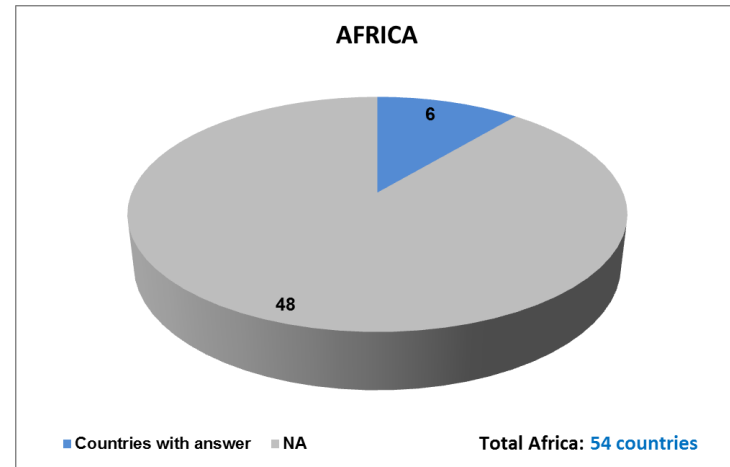
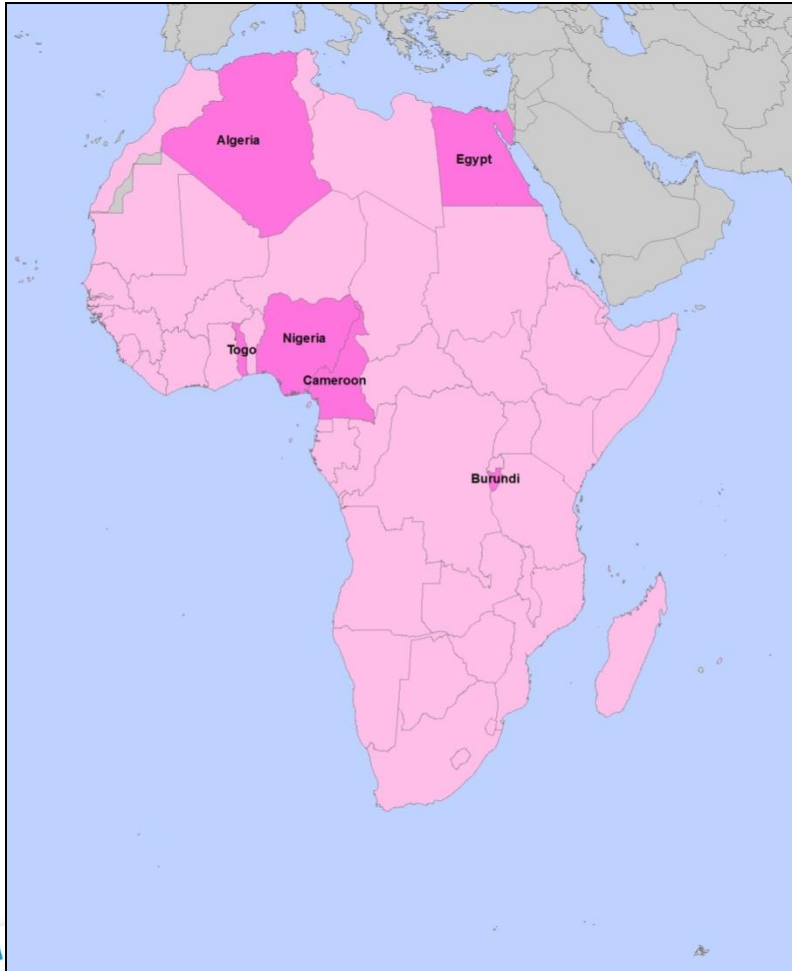
ANSWERS TO COMBINED QUESTIONNAIRE BY REGIONS



TG1 Questionnaire

Africa

54 countries
6 countries with answer
16% area of the Region

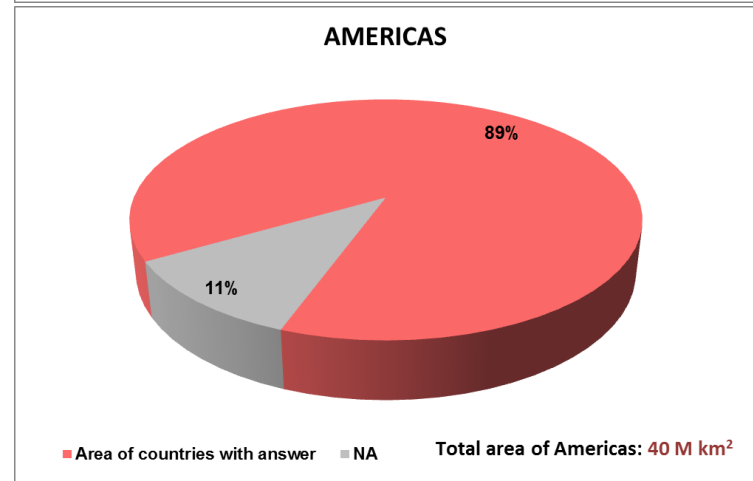
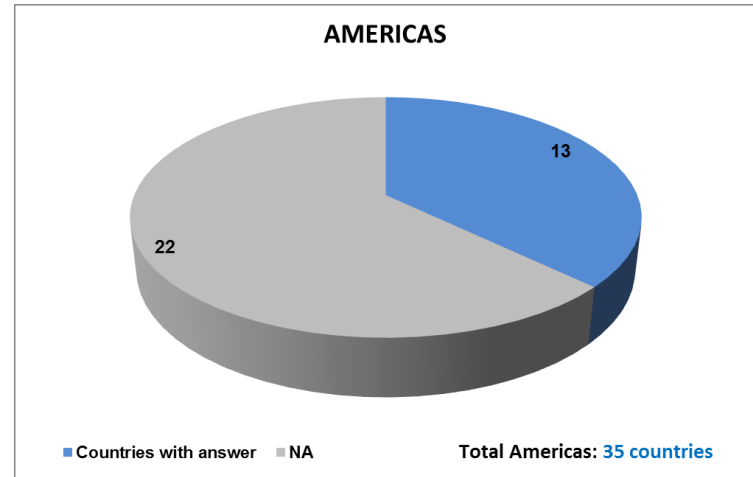


TG1 Questionnaire



Americas

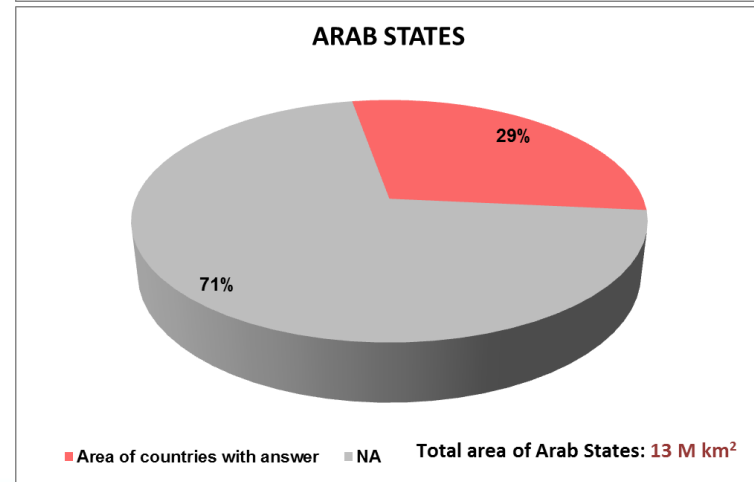
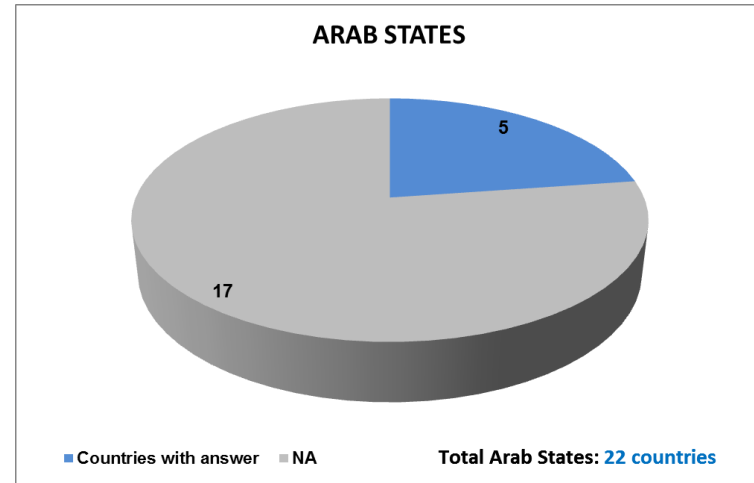
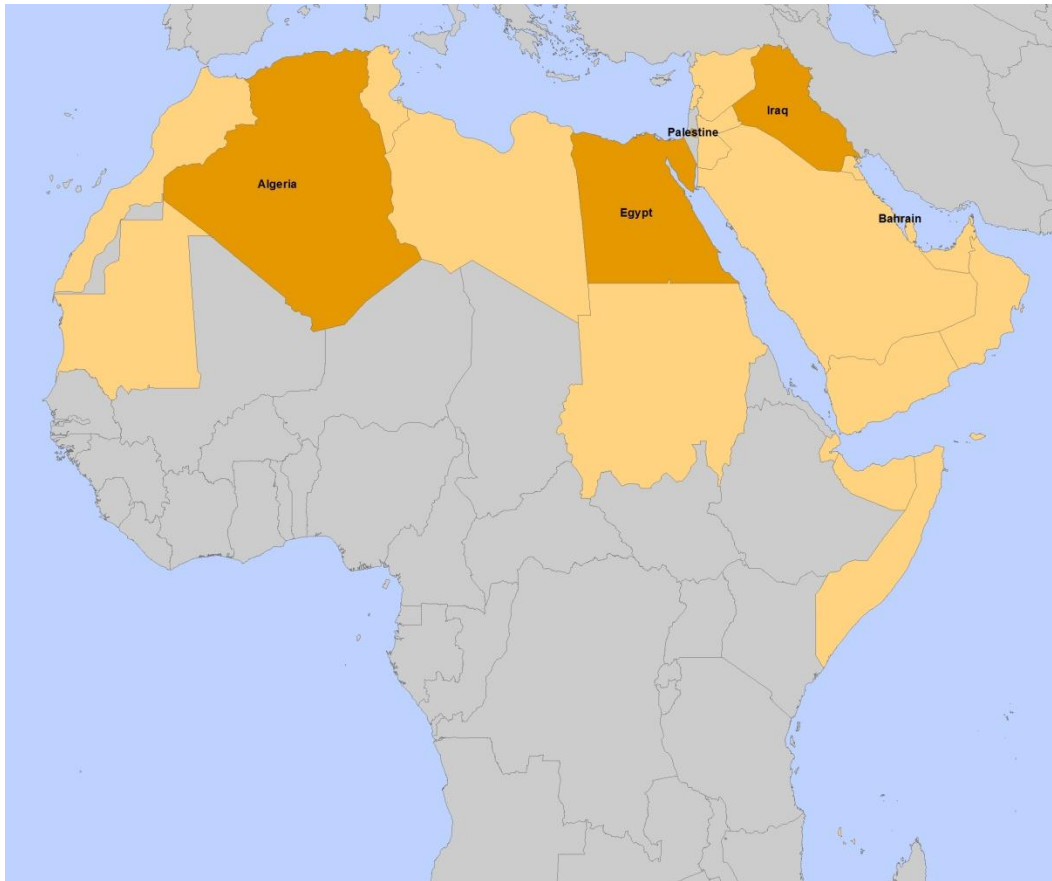
35 countries
13 countries with answer
89% area of the Region



TG1 Questionnaire

Arab States

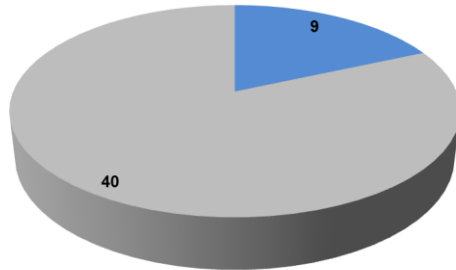
22 countries
5 countries with answer
29% area of the Region



TG1 Questionnaire Asia-Pacific

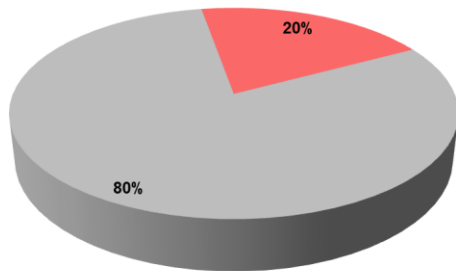
49 countries
9 countries with answer
20% area of the Region

ASIA-PACIFIC

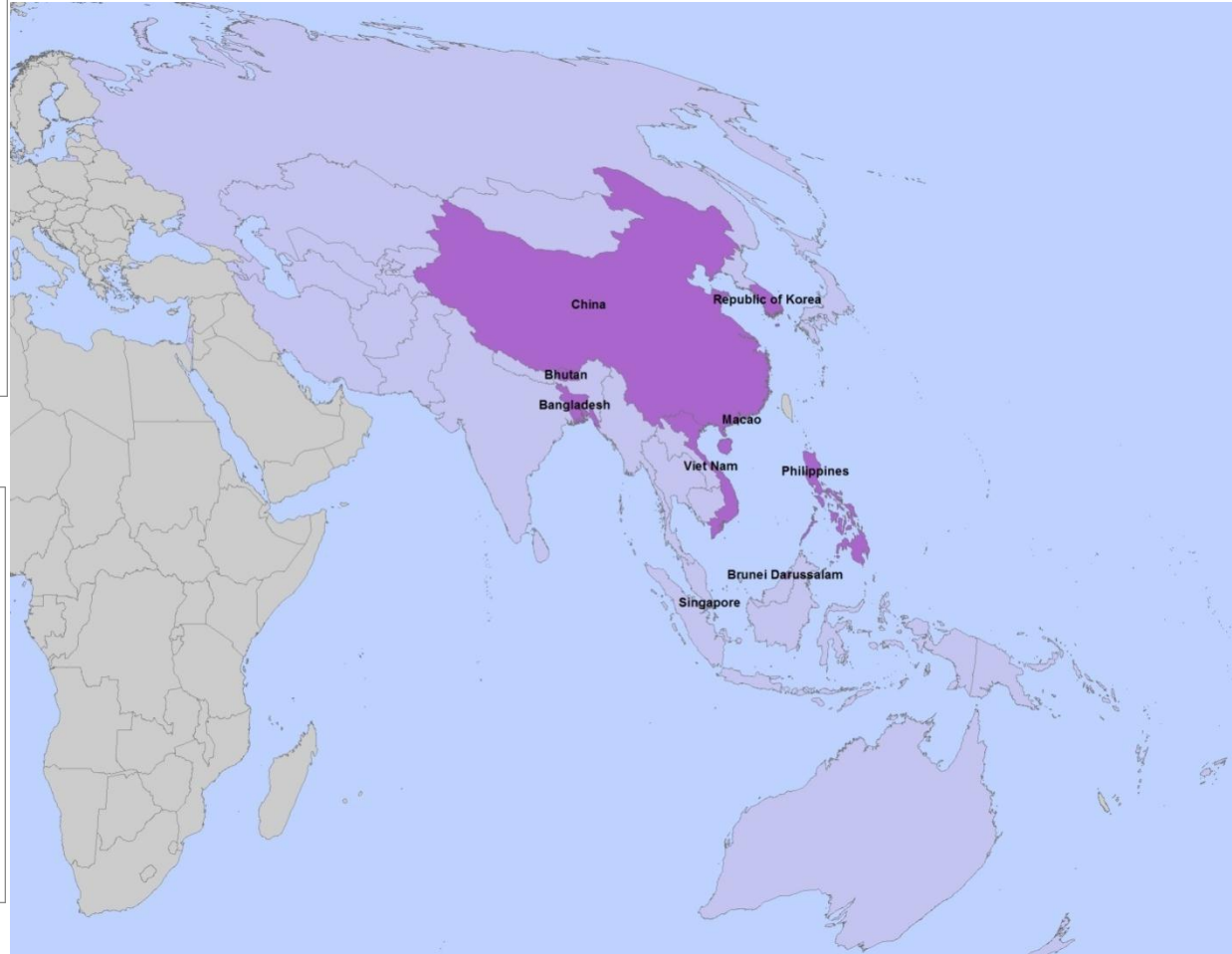


■ Countries with answer ■ NA Total Asia-Pacific : 49 countries

ASIA-PACIFIC



■ Area of countries with answer ■ NA Total area of Asia-Pacific: 53 M km²

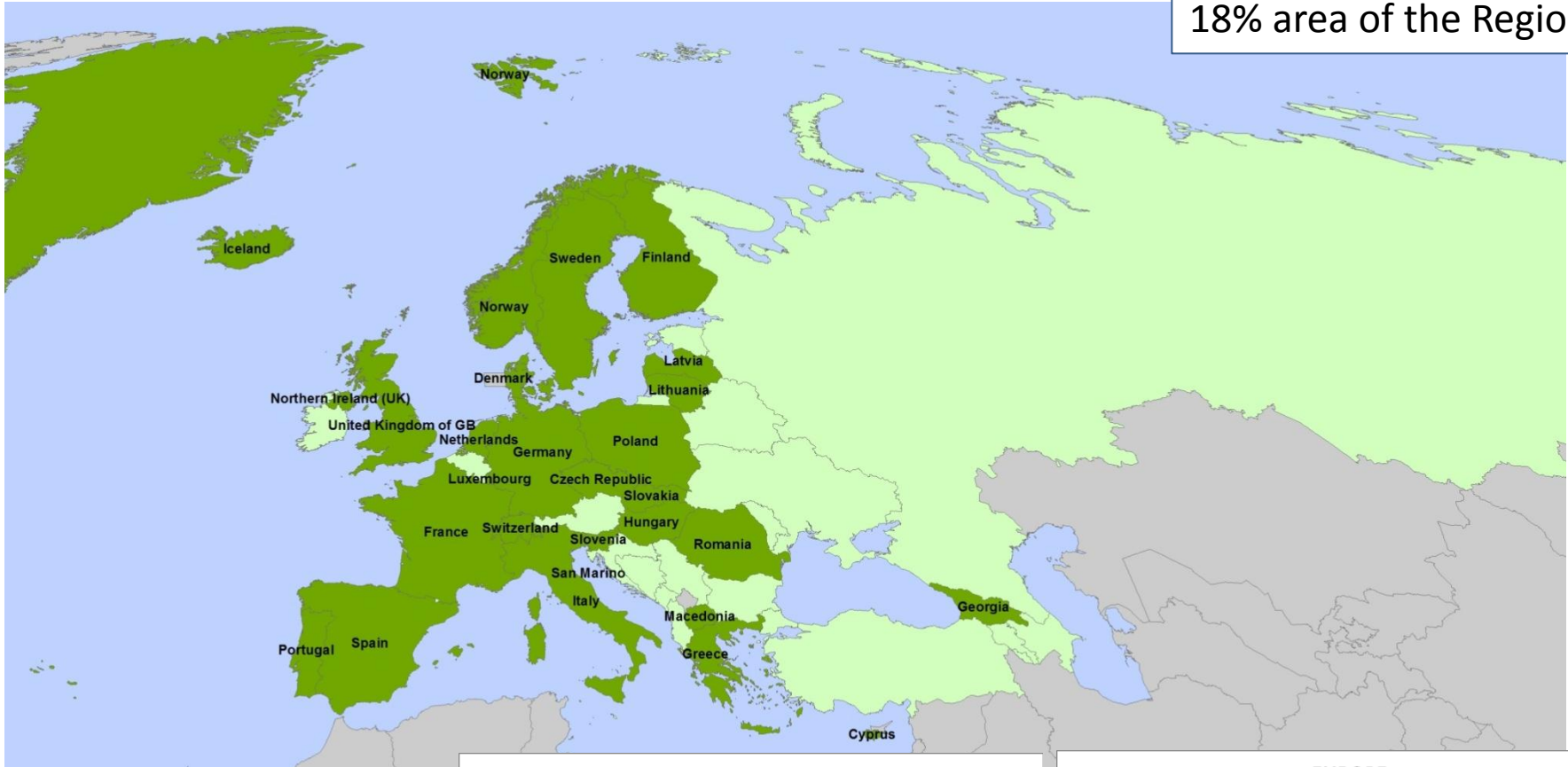


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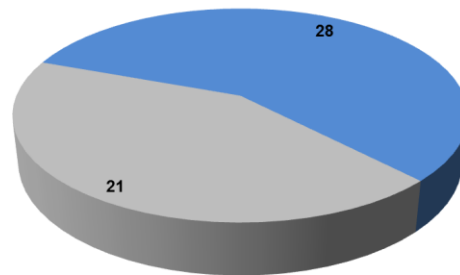
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49 countries
28 countries with answer
18% area of the Region



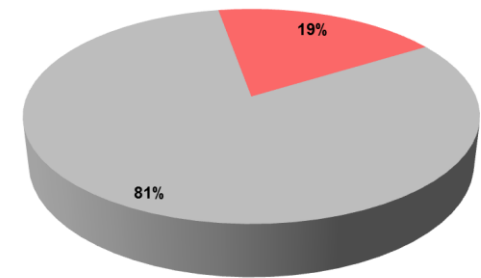
EUROPE



■ Countries with answer ■ NA

Total Europe : 49 countries

EUROPE



■ Area of countries with answer ■ NA Total area of Europe: 24 M km²

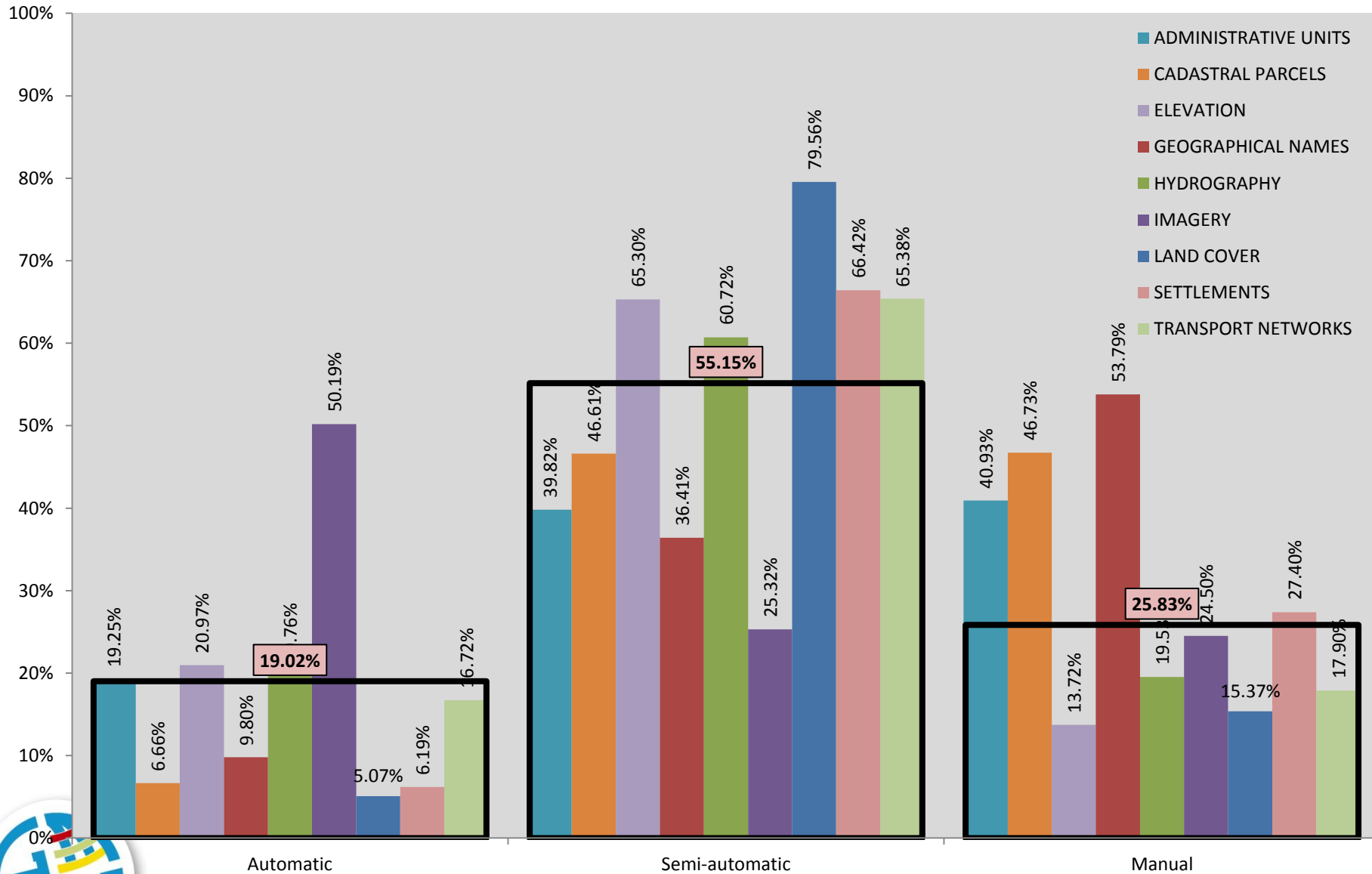


5. Questionnaire: Results

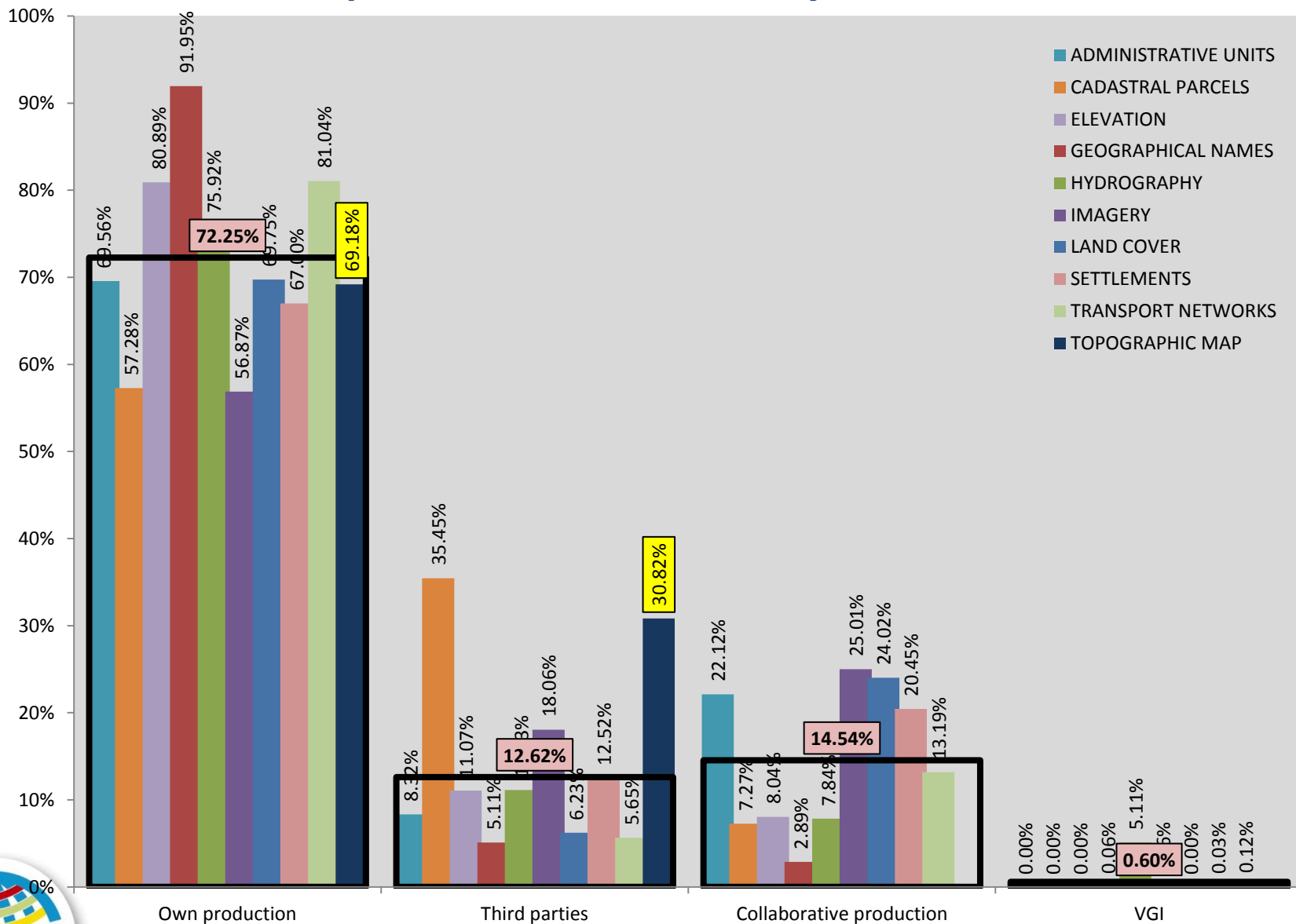
- The results are done in percentage of production effort
 - ✓ When more than an answer is given to a questions we have considered that the capacity of production is shared between all the answers given
- The results of TG1 questionnaire are referred to the **area of countries**



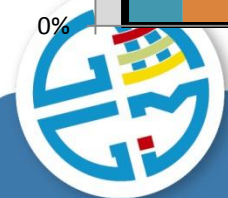
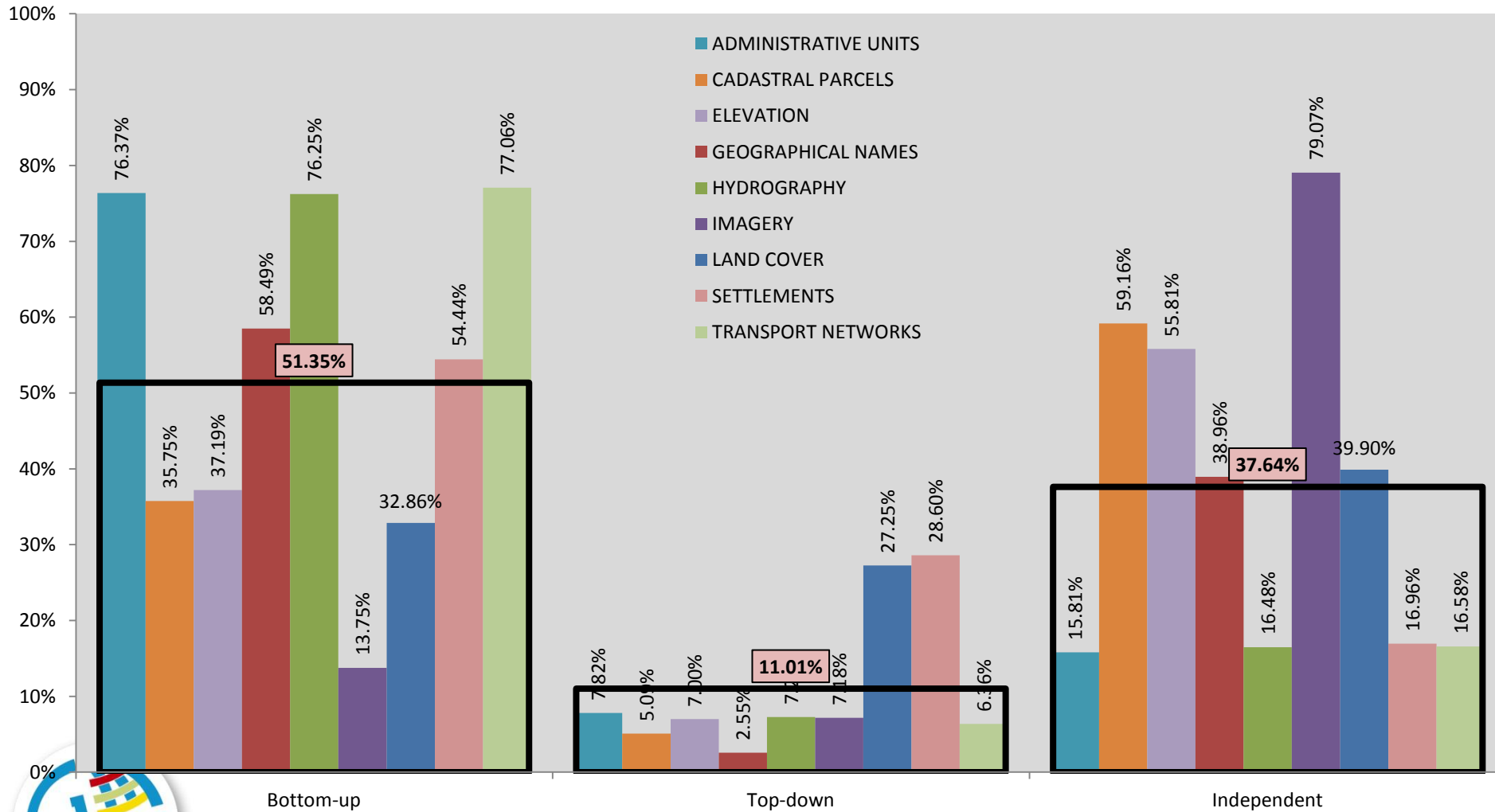
Q1. Methods applied for data creation/update



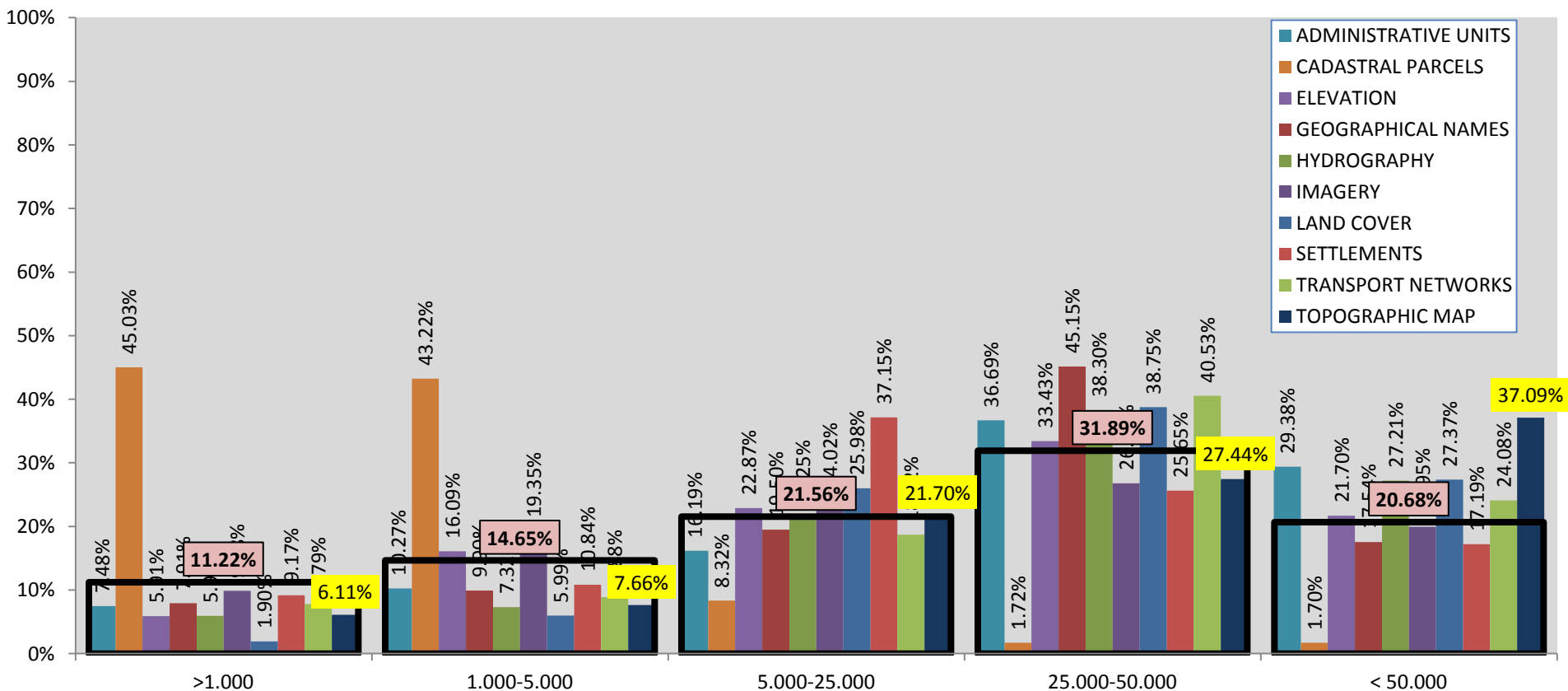
Q2. The creation/update of GRI is done by:



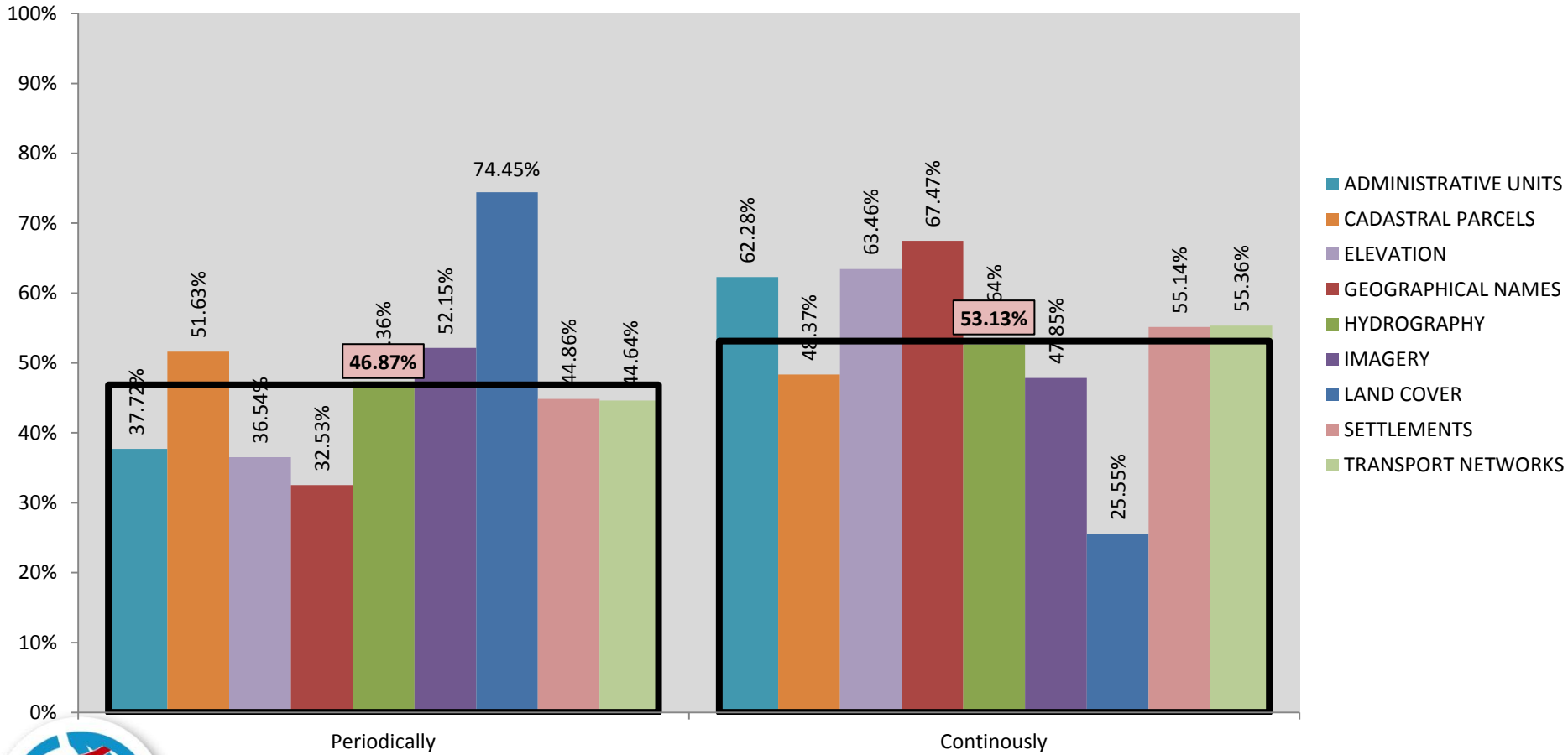
Q3. Approach used in creation/update of GRI



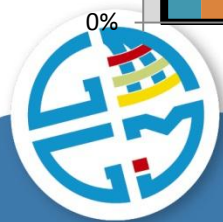
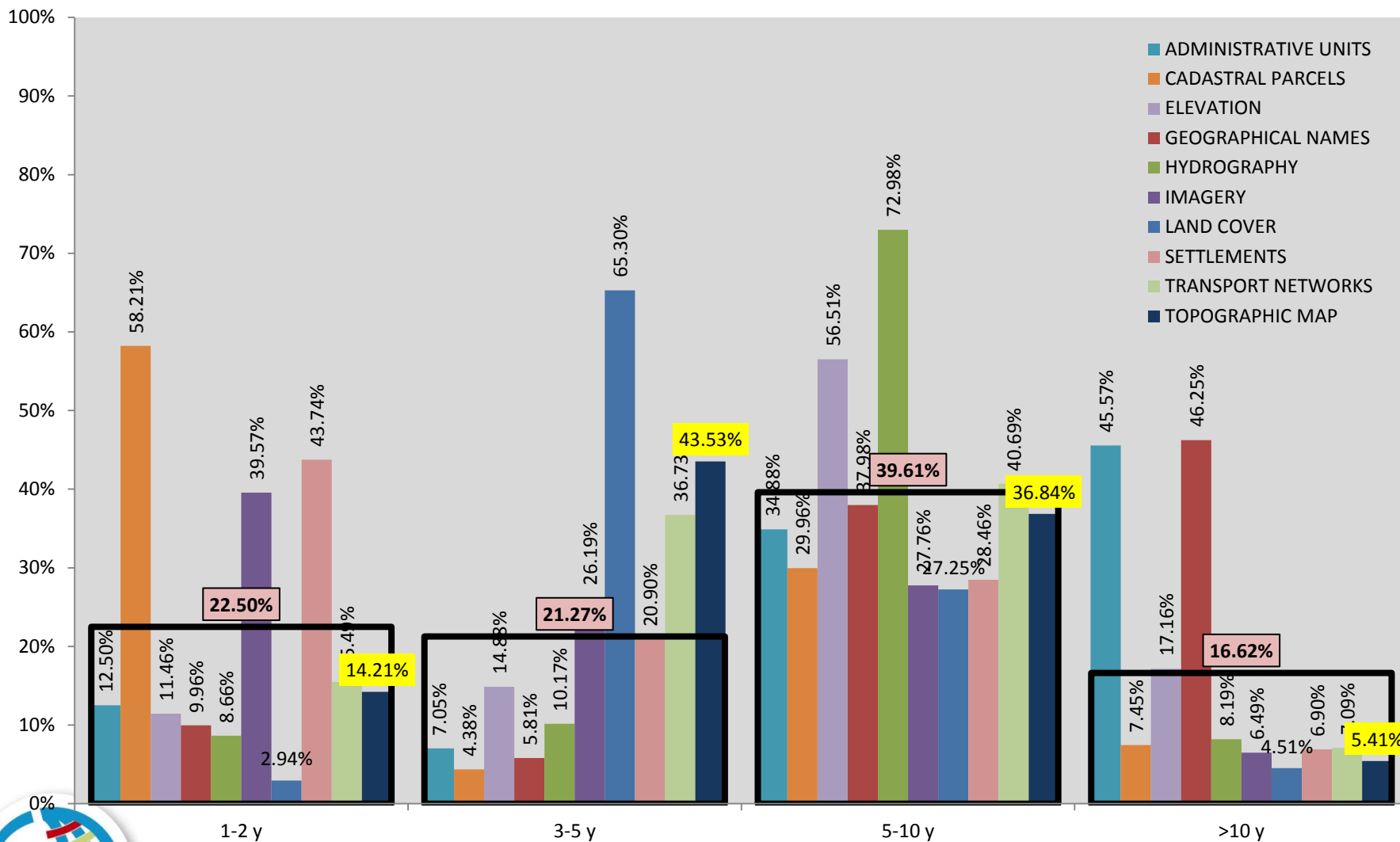
Q4. Production scale



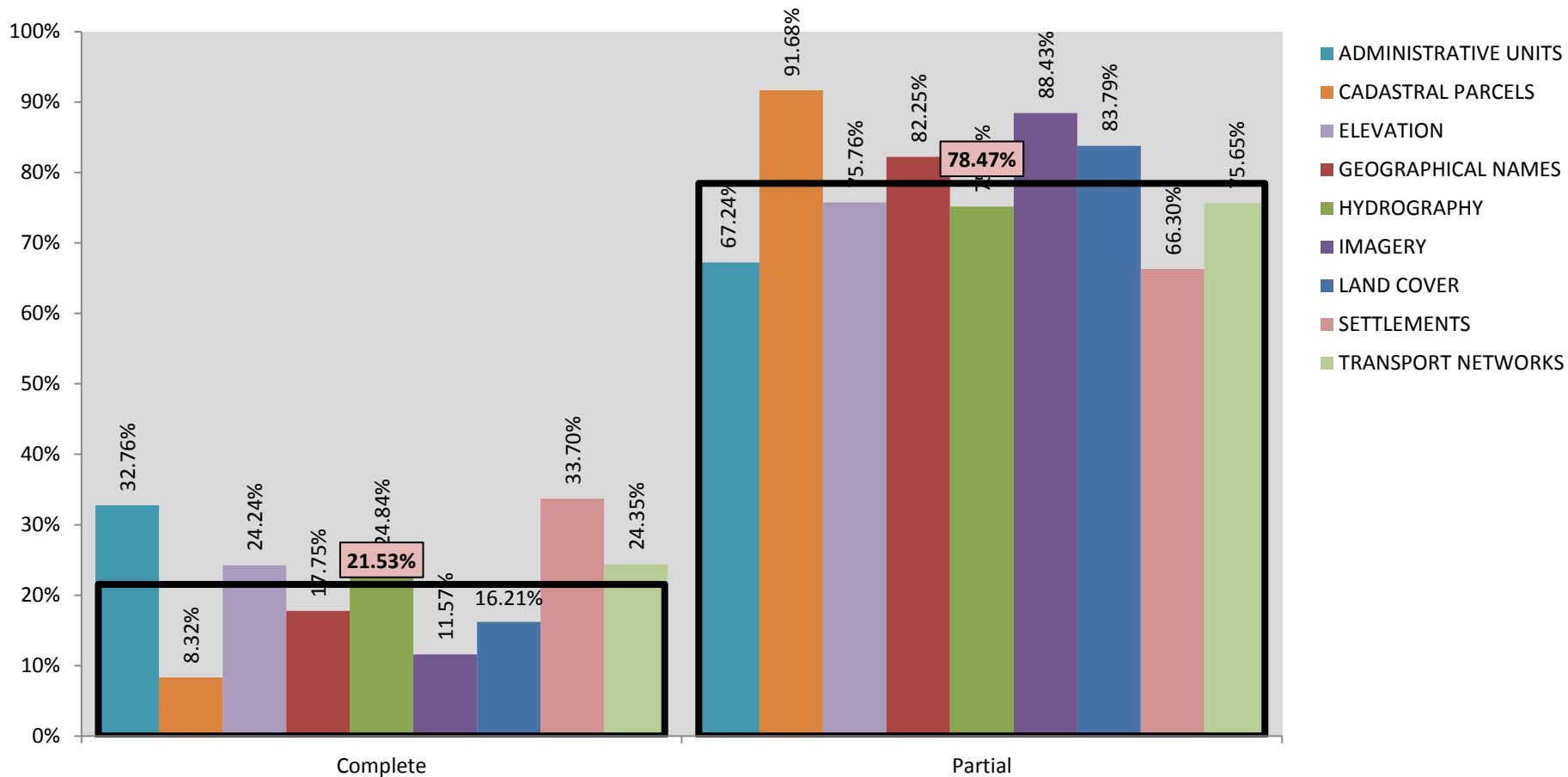
Q5. Type of GRI update



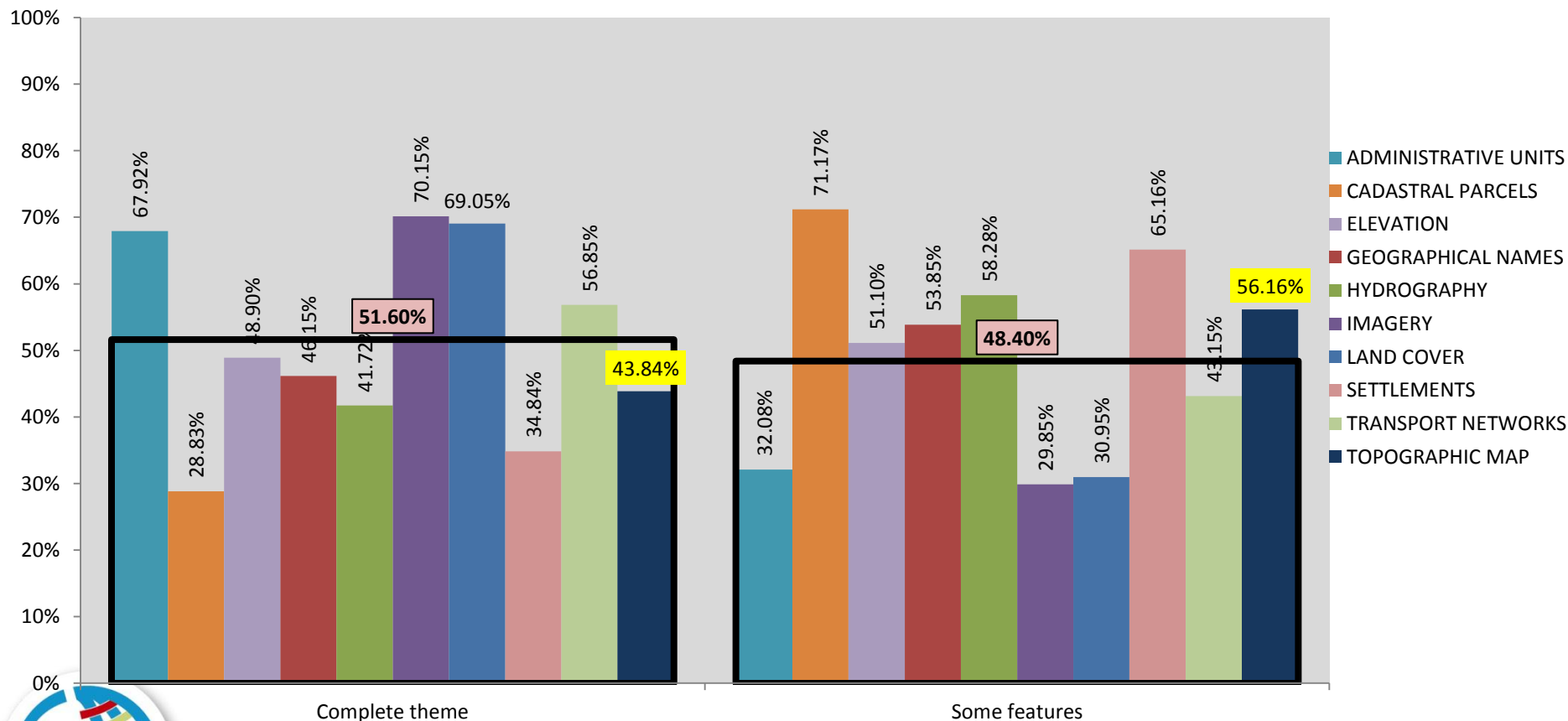
Q5b. Periodicity of update



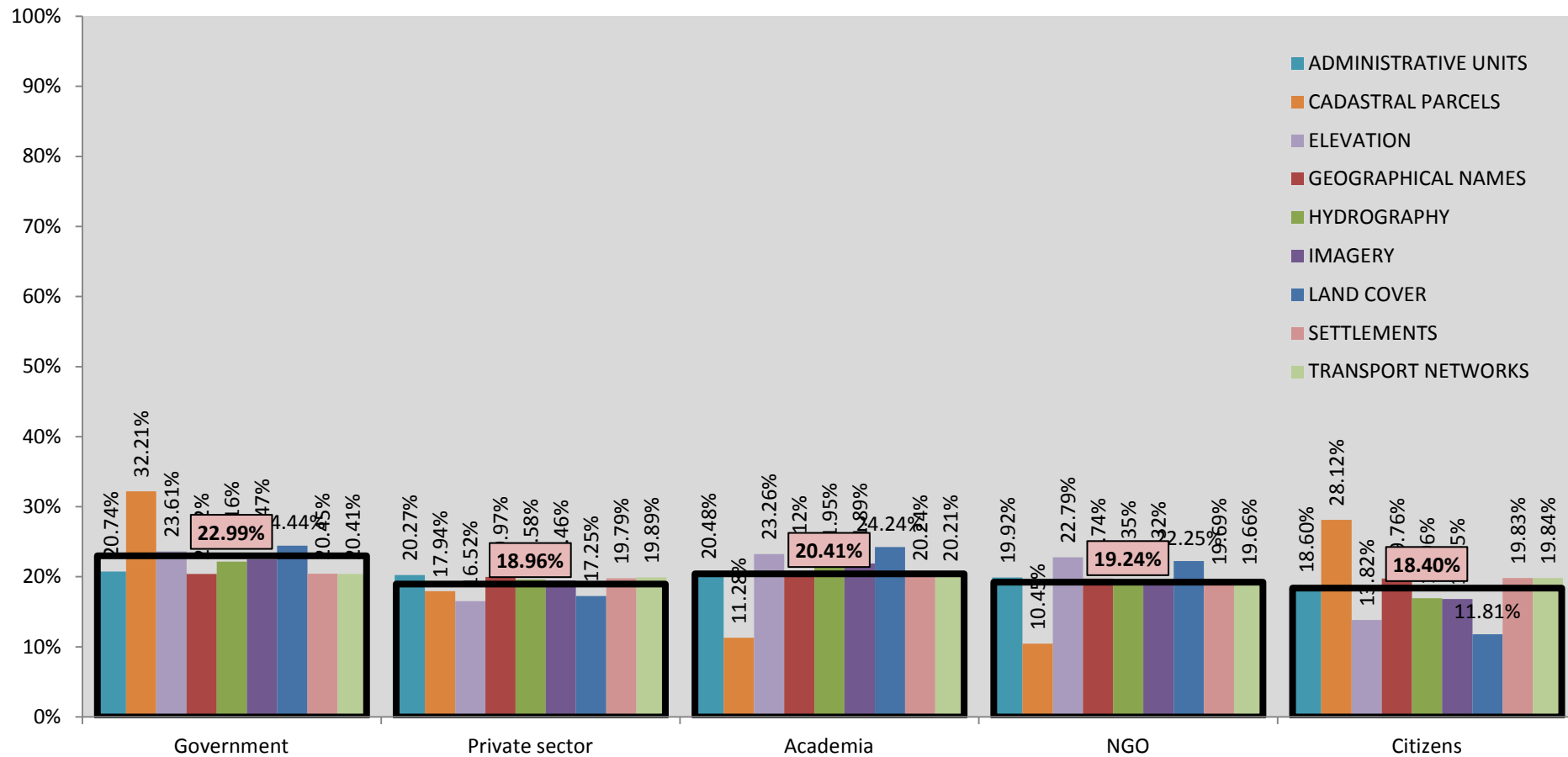
Q6. Complete or partial update



Q7. Update done for the complete theme or for some features /attributes of the theme



Q8. Users of GRI



6. Next steps

- **Re-circulate the questionnaire** to be completed by more countries till **September 2015**
- Collaborate with other NIA TG's to formulate **proposal of indicators** will be sent to the NIA WG after the meeting. This must be finished before **10/2015** in order to have a further assessment of the different GIM systems
- Discuss and define **the way** to identify of **best practices** of GIM **02/2016**



7. Conclusions for the current production of all 9 themes (GI/GRI) considered:

- ✓ For the **creation** the methods more used:
 - Semi-automatic methods
 - Own production
 - Bottom-up
 - Scales 25/50.000

- ✓ For **up-dating**:
 - More continuously (but also periodically, in this case between 5/10 years)
 - Partially for the territory
 - All completely theme (but also by some features)

- ✓ **Final users**:
 - Governments (but similar amount for others users)

- ✓ It is possible to extract from this questionnaire **many other conclusions** using **different point of view** (consultation by countries, regions, scales, methodology...)



Thank you for your attention

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