Strengthening SDI in the Caribbean

Summary of progress

June 26, 2014

Overall objective:

Promote the development of spatial data infrastructure in member countries of the Association of Caribbean States, to strengthen the generation, use and sharing of geospatial information

Specific objectives:

- **Support the integration and participation of Caribbean countries in the UN-GGIM: Americas initiative.**

- **Reduce the gap in Geospatial Data Infrastructure in the region, strengthening the use of geospatial information.**

Main Procedures

1. Diagnose the status of the building and management of geospatial information.
2. Strengthen the framework of the Caribbean and the integration of Regional Geodetic Network.
3. Support the development of a System of Classification and Land Cover Mapping.
4. Establish a geomatics solution for the query, analysis and publication of the information generated by the project

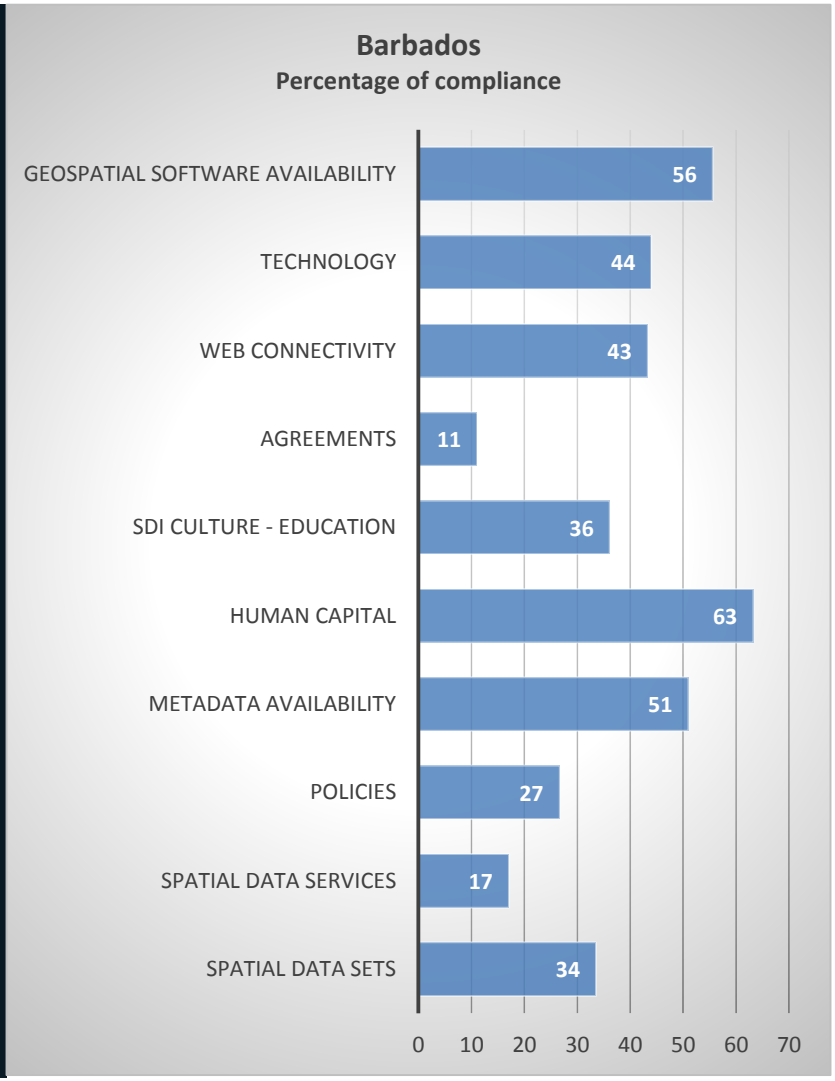
Elements considered in the diagnosis

- **Information/Data availability**
  - Spatial data sets
  - Spatial data services
  - Policies
  - Metadata availability
- **Human Resources**
  - Human capital
  - SDI culture - education
  - Agreements
- **Access network**
  - Web connectivity
  - Technology
  - Geospatial software availability

Caribbean Region

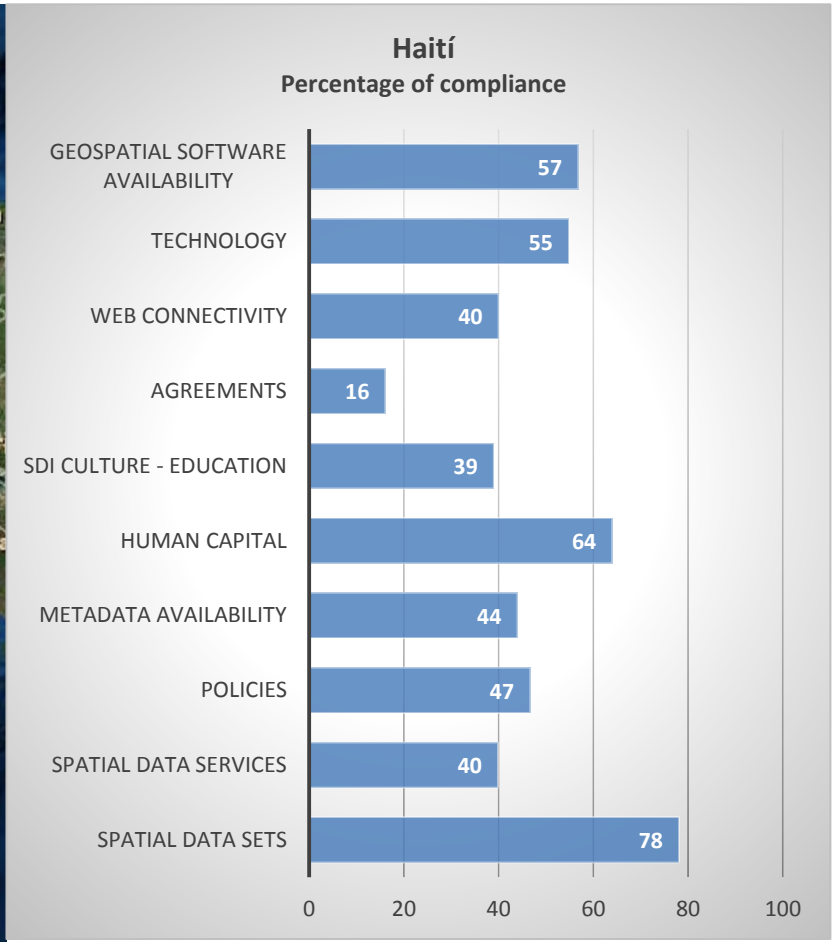
Barbados

Grape Hall
10 km
10 millas
Saint Lucy
Saint Lucy
Saint Peter
Saint Andrew
Saint Peter
Saint Andrew
Barbados
Saint Joseph
Saint James
Saint Thomas
Saint James
Saint Thomas
Saint John
Saint John
Saint Philip
Saint George
BRIDGETOWN
Saint George
Christ Church
Saint Michael
The Crane
Christ Church


Barbados
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
56
TECHNOLOGY
44
WEB CONNECTIVITY
43
AGREEMENTS
11
SDI CULTURE - EDUCATION
36
HUMAN CAPITAL
63
METADATA AVAILABILITY
51
POLICIES
27
SPATIAL DATA SERVICES
17
SPATIAL DATA SETS
34
0
10
20
30
40
50
60
70

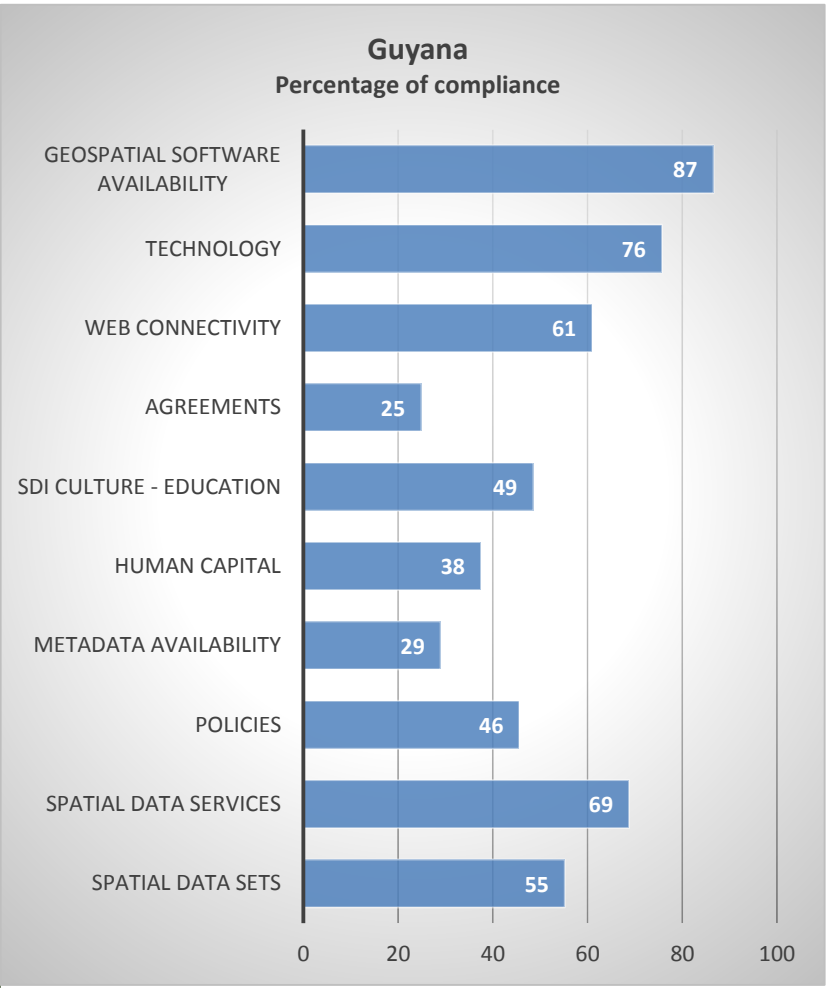
Haití

Moa
Cap-Haïtien
Gonaïves
HAITI
Jérémie
Miragoâne
Petit Goâve
Les Cayes
200 km
100 millas

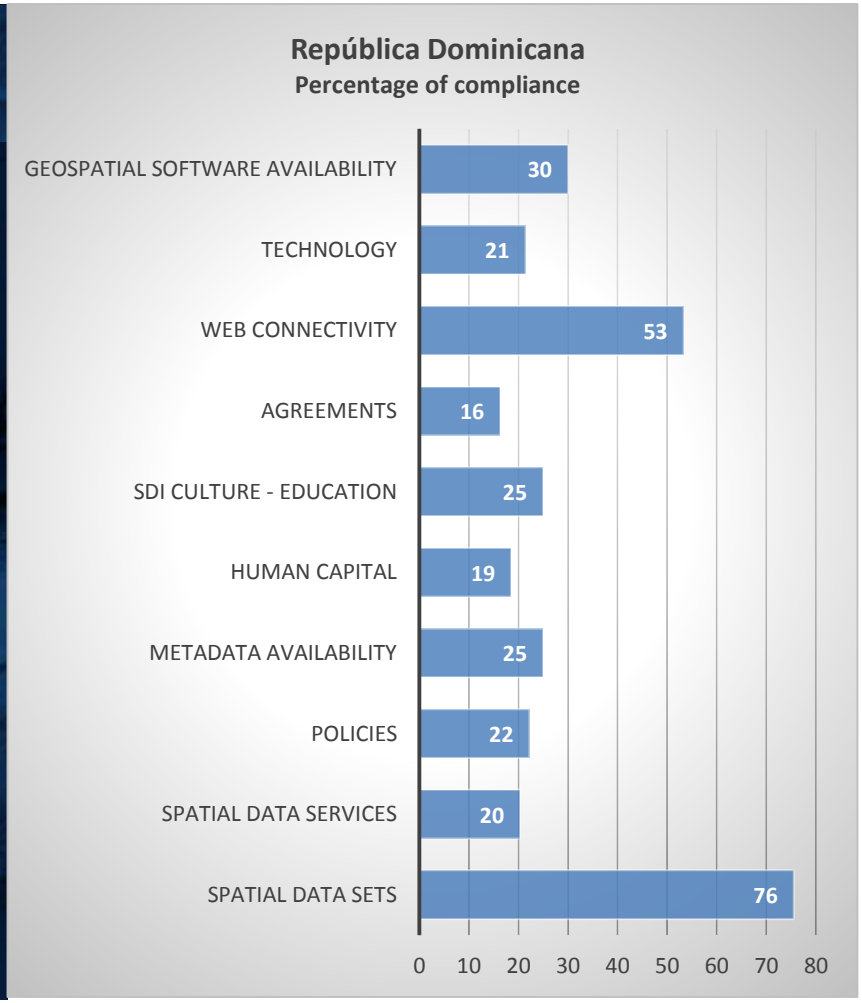

Haití
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
57
TECHNOLOGY
55
WEB CONNECTIVITY
40
AGREEMENTS
16
SDI CULTURE - EDUCATION
39
HUMAN CAPITAL
64
METADATA AVAILABILITY
44
POLICIES
47
SPATIAL DATA SERVICES
40
SPATIAL DATA SETS
78
0
20
40
60
80
100

Guyana

Georgetown
GUYANA
SURINAM
ORAIMA
500 km
300 millas

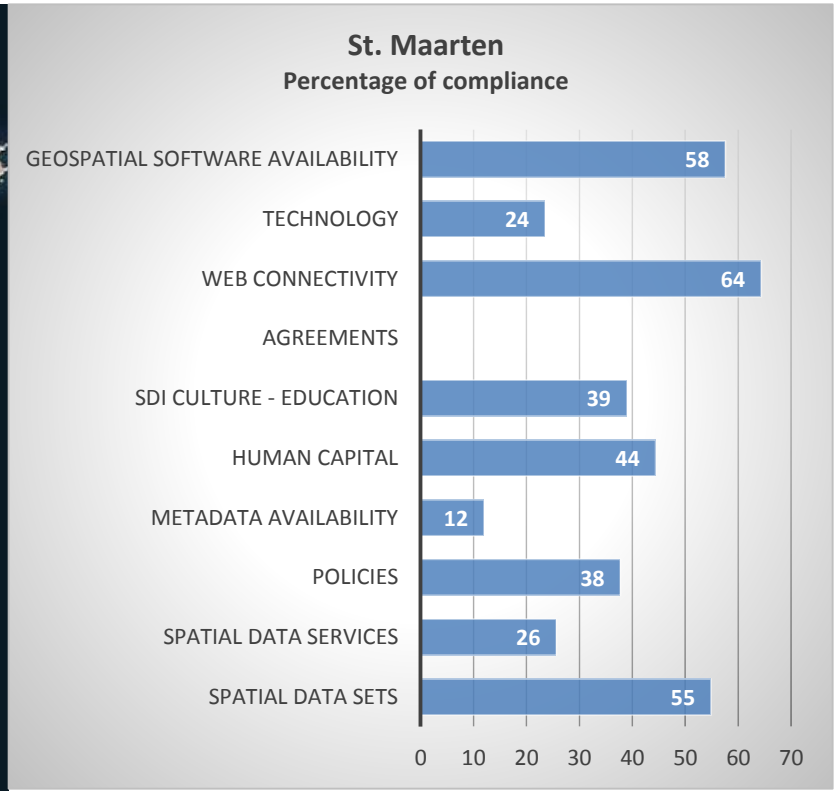

Guyana
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
87
TECHNOLOGY
76
WEB CONNECTIVITY
61
AGREEMENTS
25
SDI CULTURE - EDUCATION
49
HUMAN CAPITAL
38
METADATA AVAILABILITY
29
POLICIES
46
SPATIAL DATA SERVICES
69
SPATIAL DATA SETS
55
0
20
40
60
80
100

República Dominicana

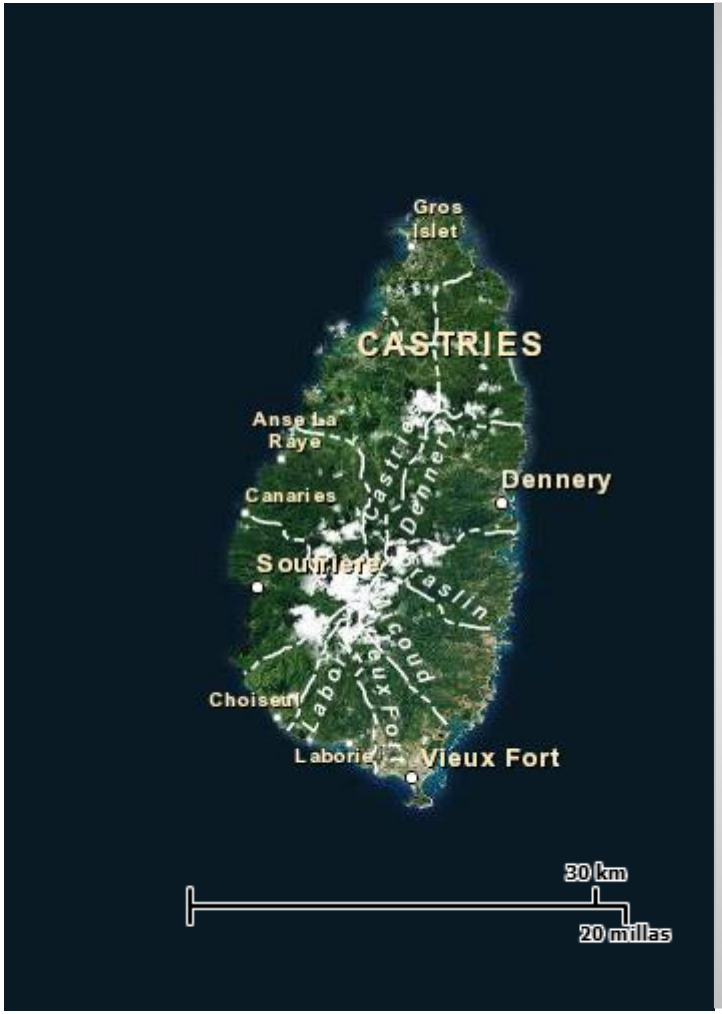


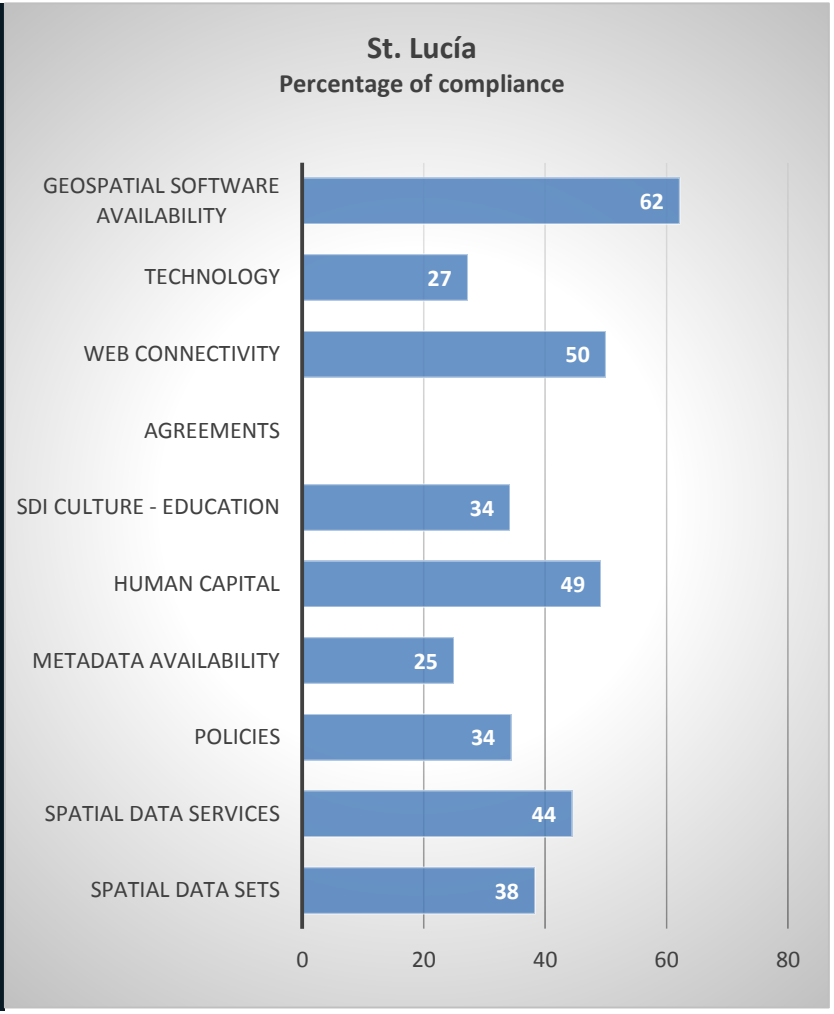
St. Maarten

5 km
5 millas
Saint Martin
MARIGOT
SAINT MARTIN
SINT MAARTEN
Sint Maarten
Welgelegen
PHILIPSBURG

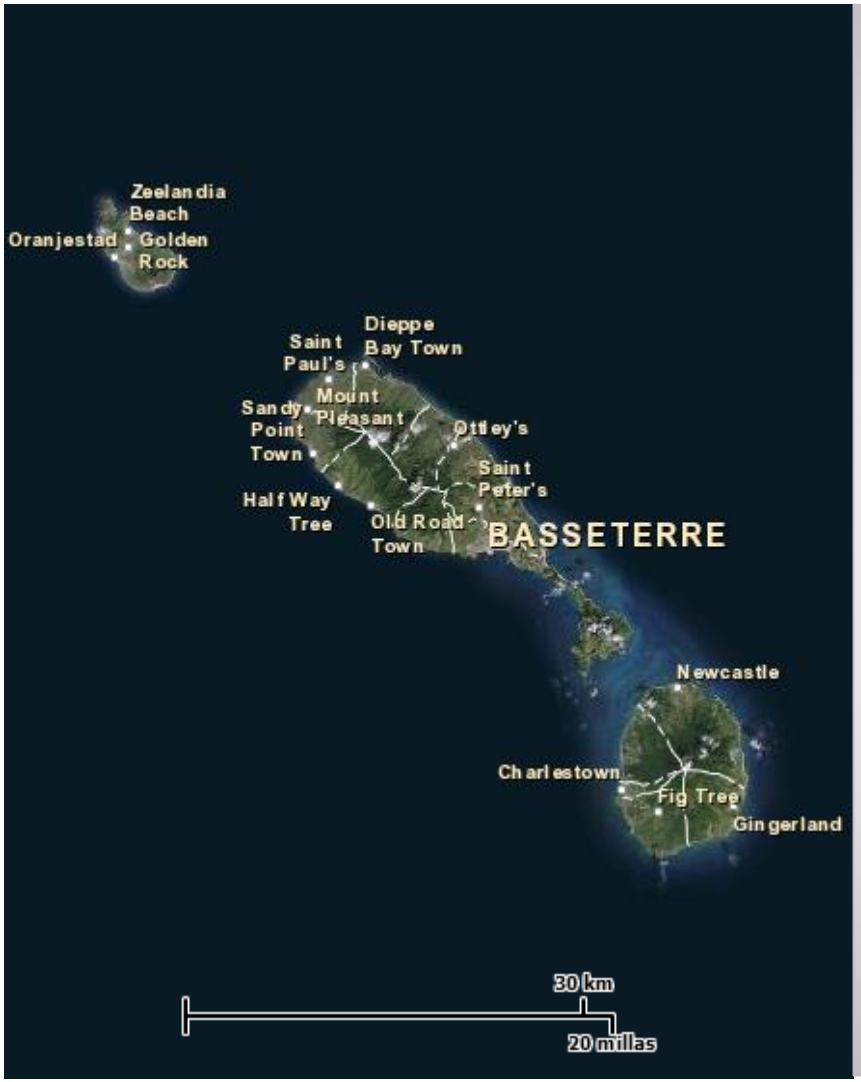

St. Maarten
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
58
TECHNOLOGY
24
WEB CONNECTIVITY
64
AGREEMENTS
SDI CULTURE - EDUCATION
39
HUMAN CAPITAL
44
METADATA AVAILABILITY
12
POLICIES
38
SPATIAL DATA SERVICES
26
SPATIAL DATA SETS
55
0 10 20 30 40 50 60 70

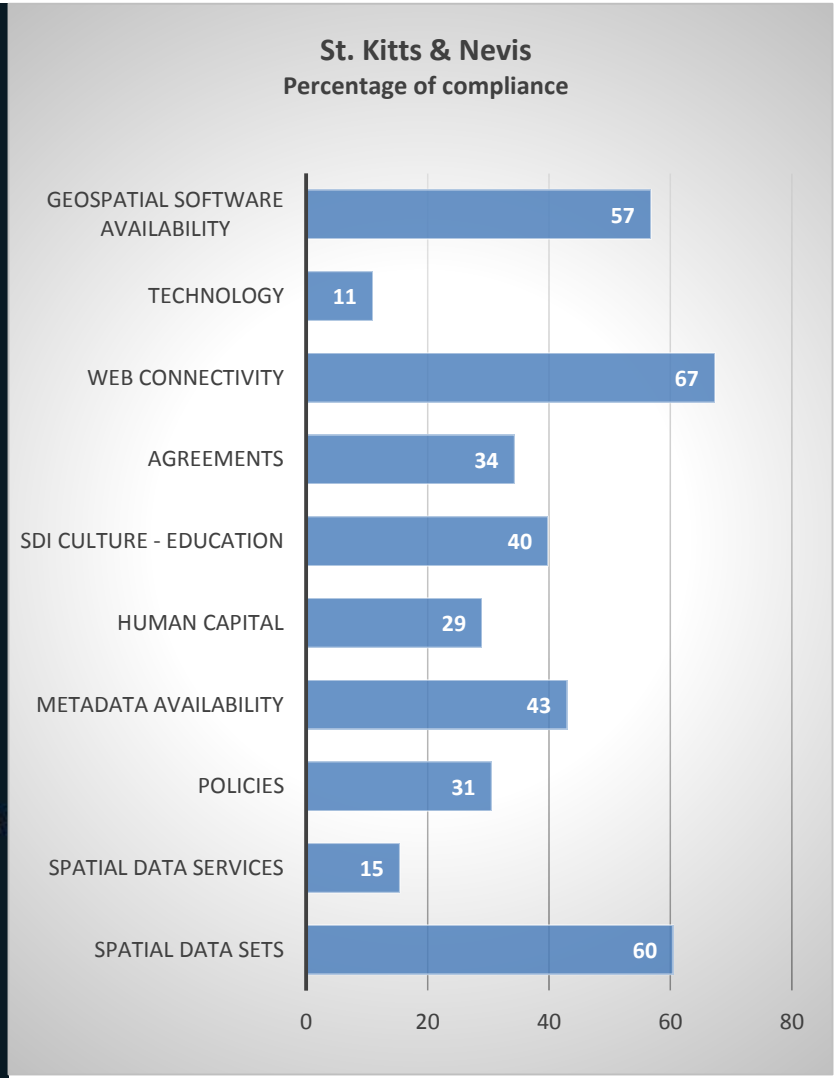
St. Lucia


Gros Islet
CASTRIES
Anse La Raye
Canaries
Dennery
Soufriere
Choiseul
Laborie
Vieux Fort
Castries
Dennery
Laslin
Vieux Fort
30 km
20 millas

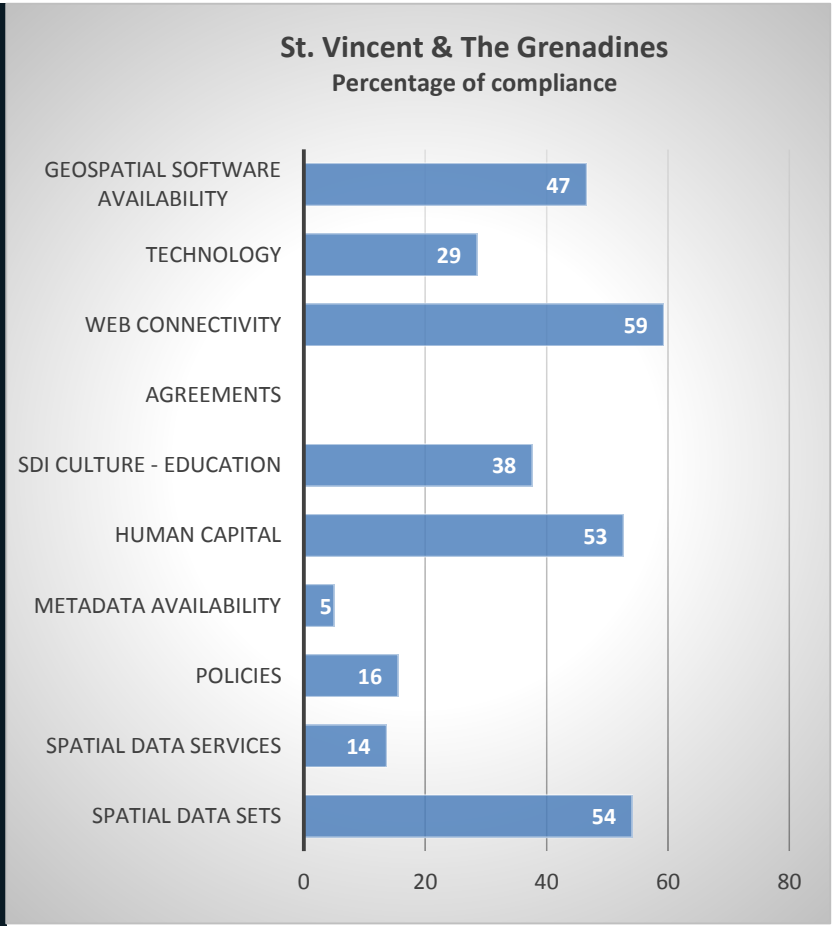

St. Lucía
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
62
TECHNOLOGY
27
WEB CONNECTIVITY
50
AGREEMENTS
SDI CULTURE - EDUCATION
34
HUMAN CAPITAL
49
METADATA AVAILABILITY
25
POLICIES
34
SPATIAL DATA SERVICES
44
SPATIAL DATA SETS
38
0
20
40
60
80

St. Kitts & Nevis

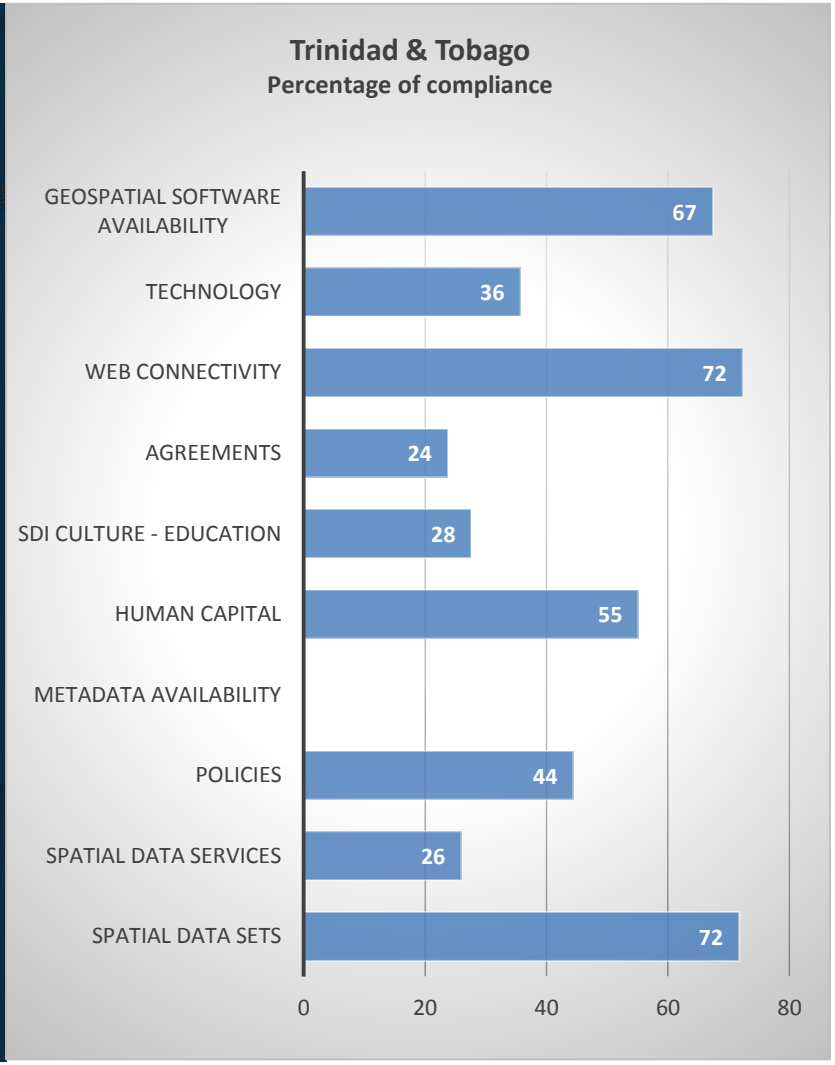




St. Vincent & The Grenadines

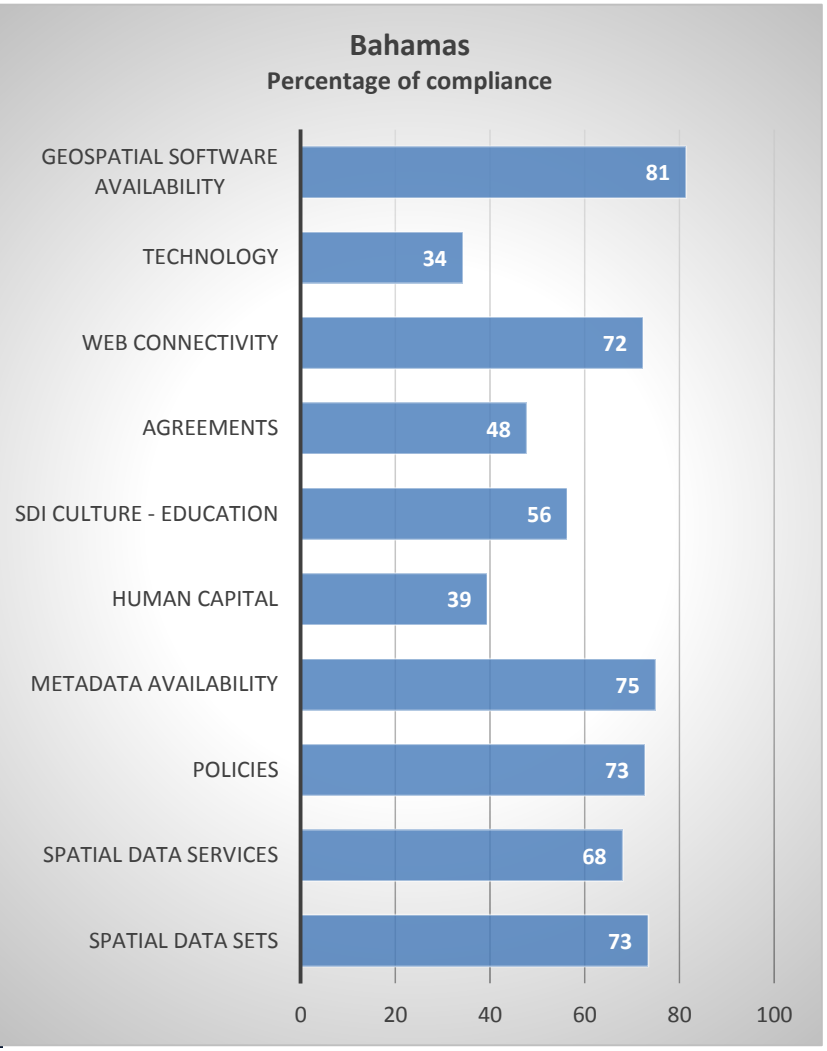


Trinidad & Tobago



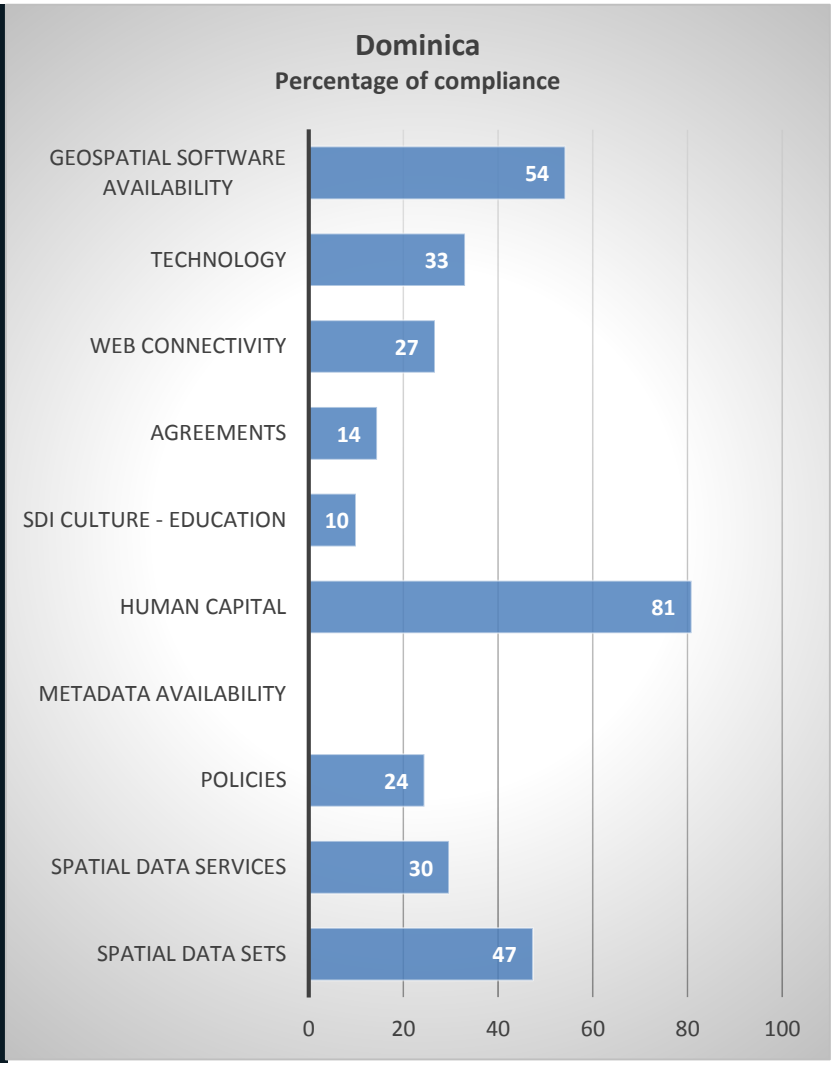
Bahamas

500 km
300 millas
Palm Beach
Lauderdale
Nassau
BAHAMAS
Ciego De Avila
Camaguey
Holguin
Manzanillo
Guantanamo
Santiago De Cuba
HAITI
Port-au-Prince
JAMAICA
Kingston


Bahamas
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
81
TECHNOLOGY
34
WEB CONNECTIVITY
72
AGREEMENTS
48
SDI CULTURE - EDUCATION
56
HUMAN CAPITAL
39
METADATA AVAILABILITY
75
POLICIES
73
SPATIAL DATA SERVICES
68
SPATIAL DATA SETS
73
0
20
40
60
80
100

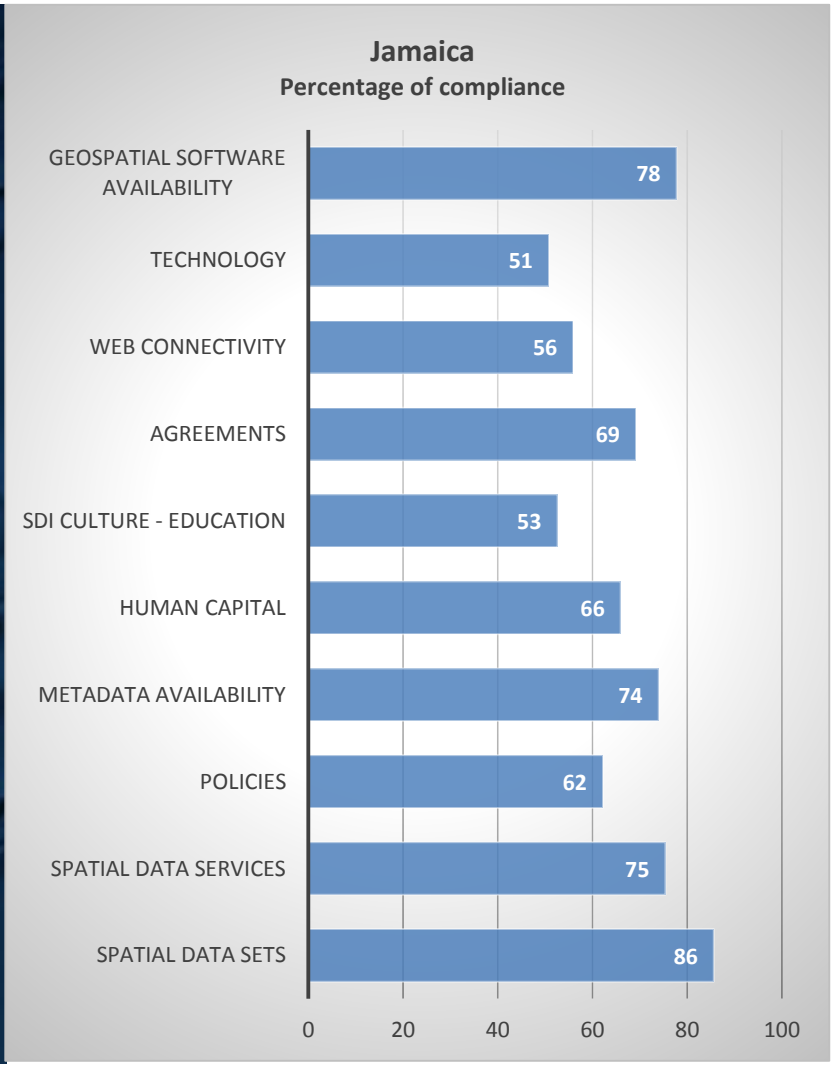
Dominica

Vieille Case
Saint Andrew
Saint John
Portsmouth
Marigot
Colihaut
Castle Bruce
Saint Joseph
Canefield
La Plaine
ROSEAU
Pointe Michel
Berekua
30 km
20 millas


Dominica
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
54
TECHNOLOGY
33
WEB CONNECTIVITY
27
AGREEMENTS
14
SDI CULTURE - EDUCATION
10
HUMAN CAPITAL
81
METADATA AVAILABILITY
POLICIES
24
SPATIAL DATA SERVICES
30
SPATIAL DATA SETS
47
0
20
40
60
80
100

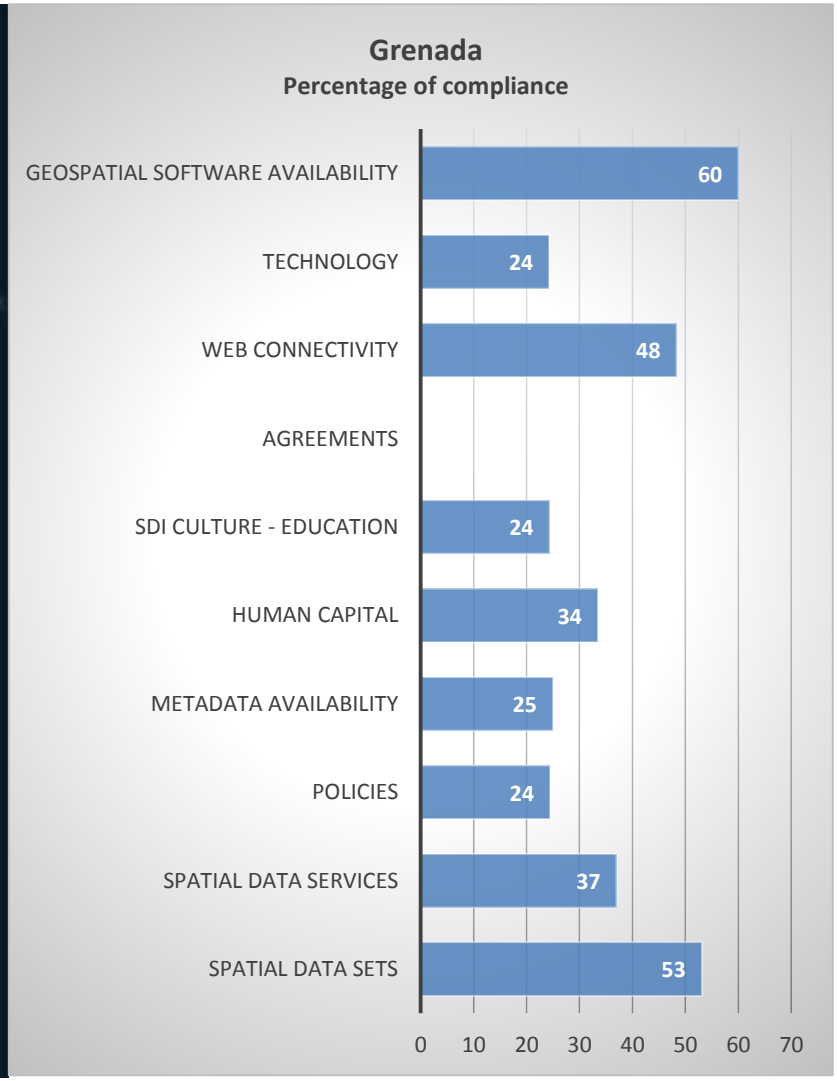
Jamaica

Montego Bay
Mandeville
May Pen
Kingston
100 km
50 millas


Jamaica
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
78
TECHNOLOGY
51
WEB CONNECTIVITY
56
AGREEMENTS
69
SDI CULTURE - EDUCATION
53
HUMAN CAPITAL
66
METADATA AVAILABILITY
74
POLICIES
62
SPATIAL DATA SERVICES
75
SPATIAL DATA SETS
86
0
20
40
60
80
100

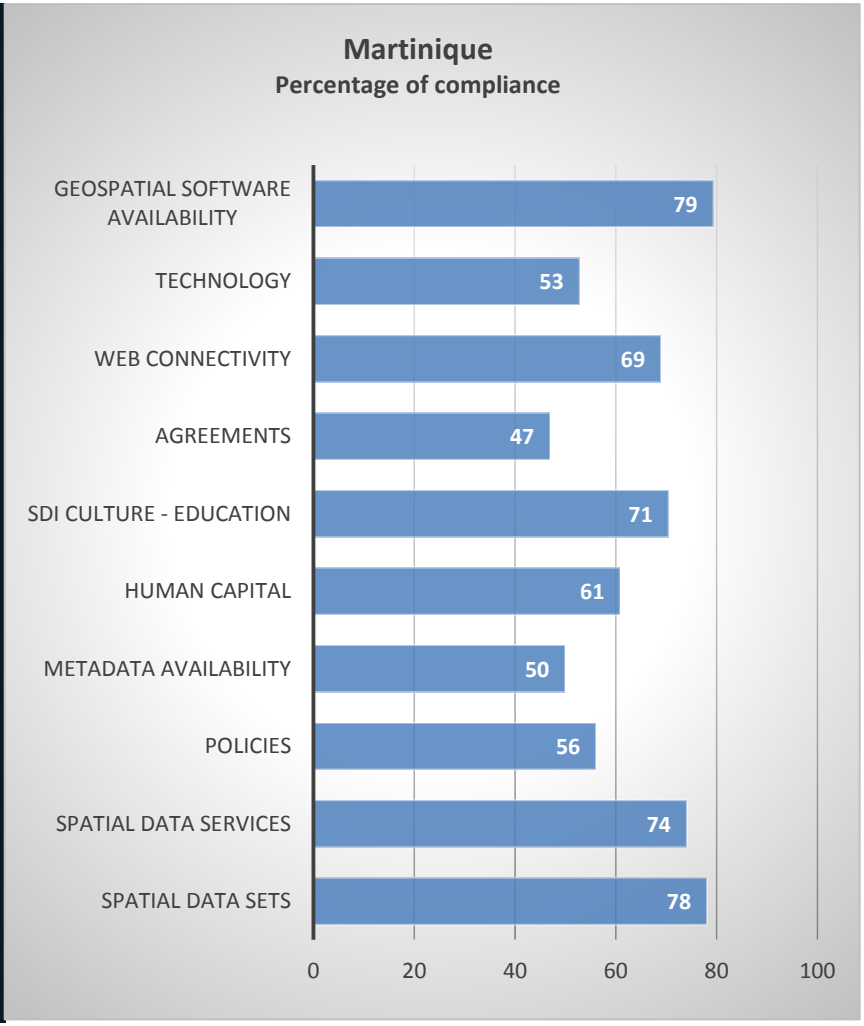
Grenada

10 km
10 millas
Grenada
ST.
GEORGE'S

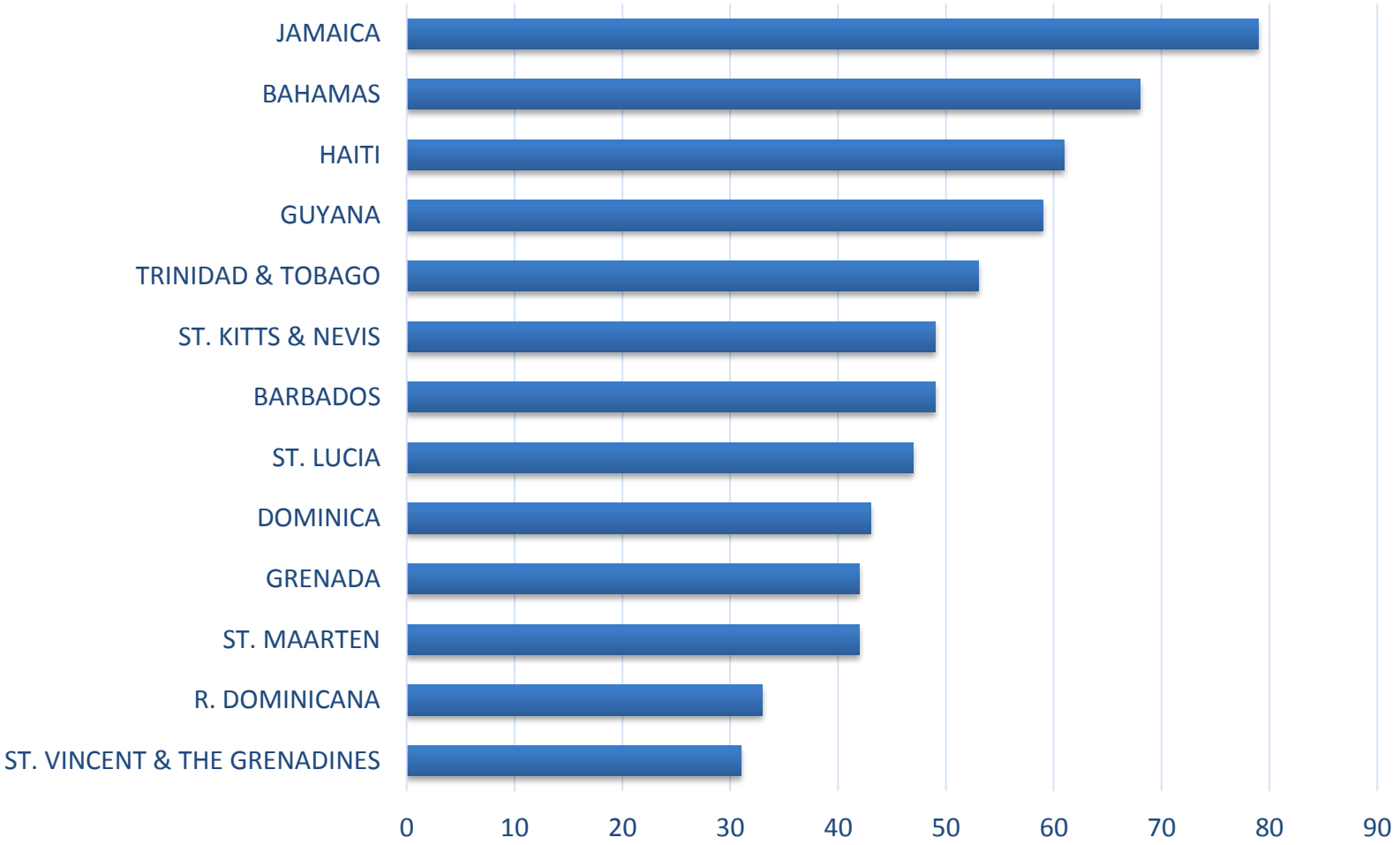

Grenada
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
60
TECHNOLOGY
24
WEB CONNECTIVITY
48
AGREEMENTS
SDI CULTURE - EDUCATION
24
HUMAN CAPITAL
34
METADATA AVAILABILITY
25
POLICIES
24
SPATIAL DATA SERVICES
37
SPATIAL DATA SETS
53
0
10
20
30
40
50
60
70

Martinique

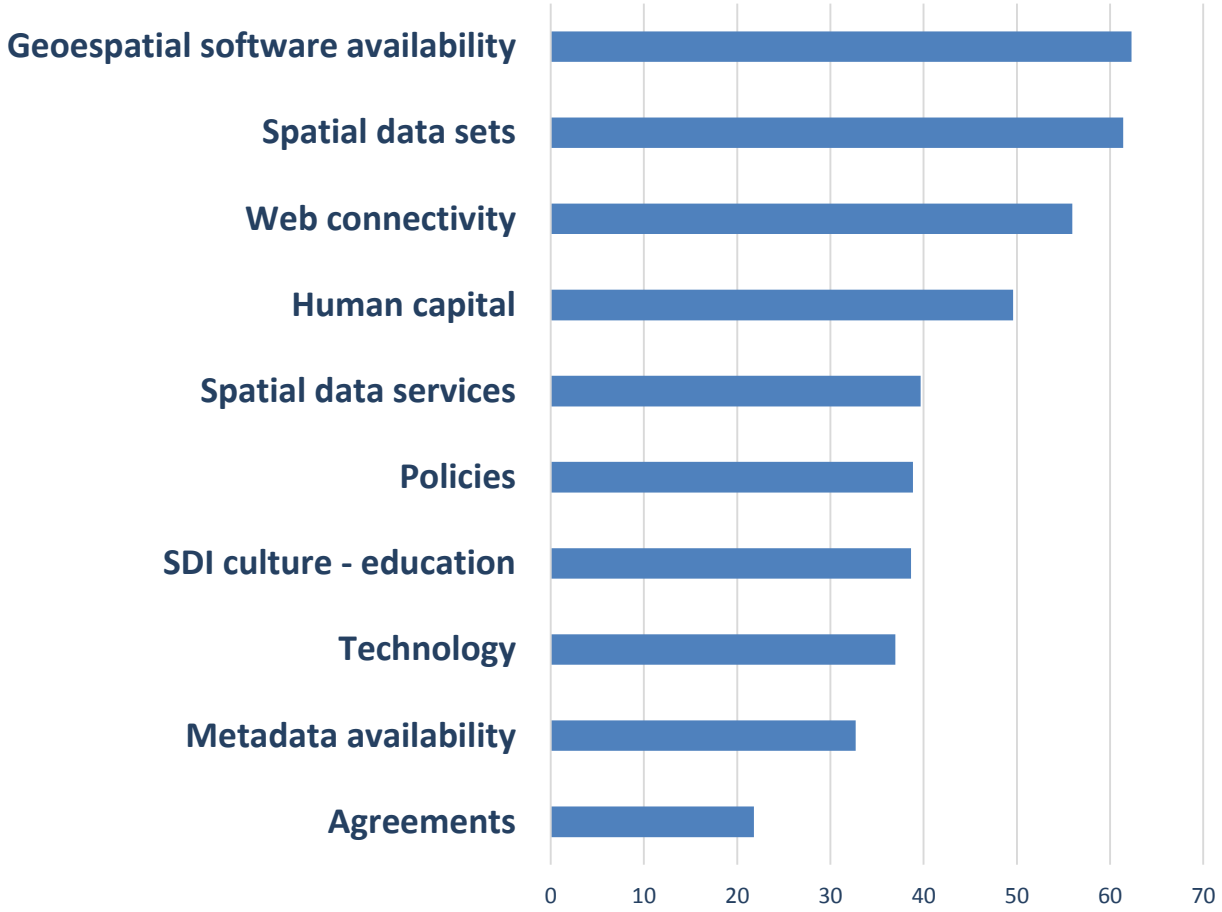
30 km
20 millas
Basse-Pointe
Marigot
Sainte-Marie
Tartane
Saint-Pierre
La Trinité
Le Robert
Schoelcher
Fort-de-France
Le Lamentin
Le François
Anse a
l'Ane
Le Vauclin
Les
Les Trois-Ilets
Anses-d'Arlets
Rivière-Pilote
Le Diamant
Sainte-Luce
Sainte-Anne


Martinique
Percentage of compliance
GEOSPATIAL SOFTWARE AVAILABILITY
79
TECHNOLOGY
53
WEB CONNECTIVITY
69
AGREEMENTS
47
SDI CULTURE - EDUCATION
71
HUMAN CAPITAL
61
METADATA AVAILABILITY
50
POLICIES
56
SPATIAL DATA SERVICES
74
SPATIAL DATA SETS
78
0
20
40
60
80
100

Average value of the gaps by country



Average value per element for the region



Proposals

Agreements including policies and standards, represents the largest gap for the region, which can be reduced through a training program, mainly in the use of standards.

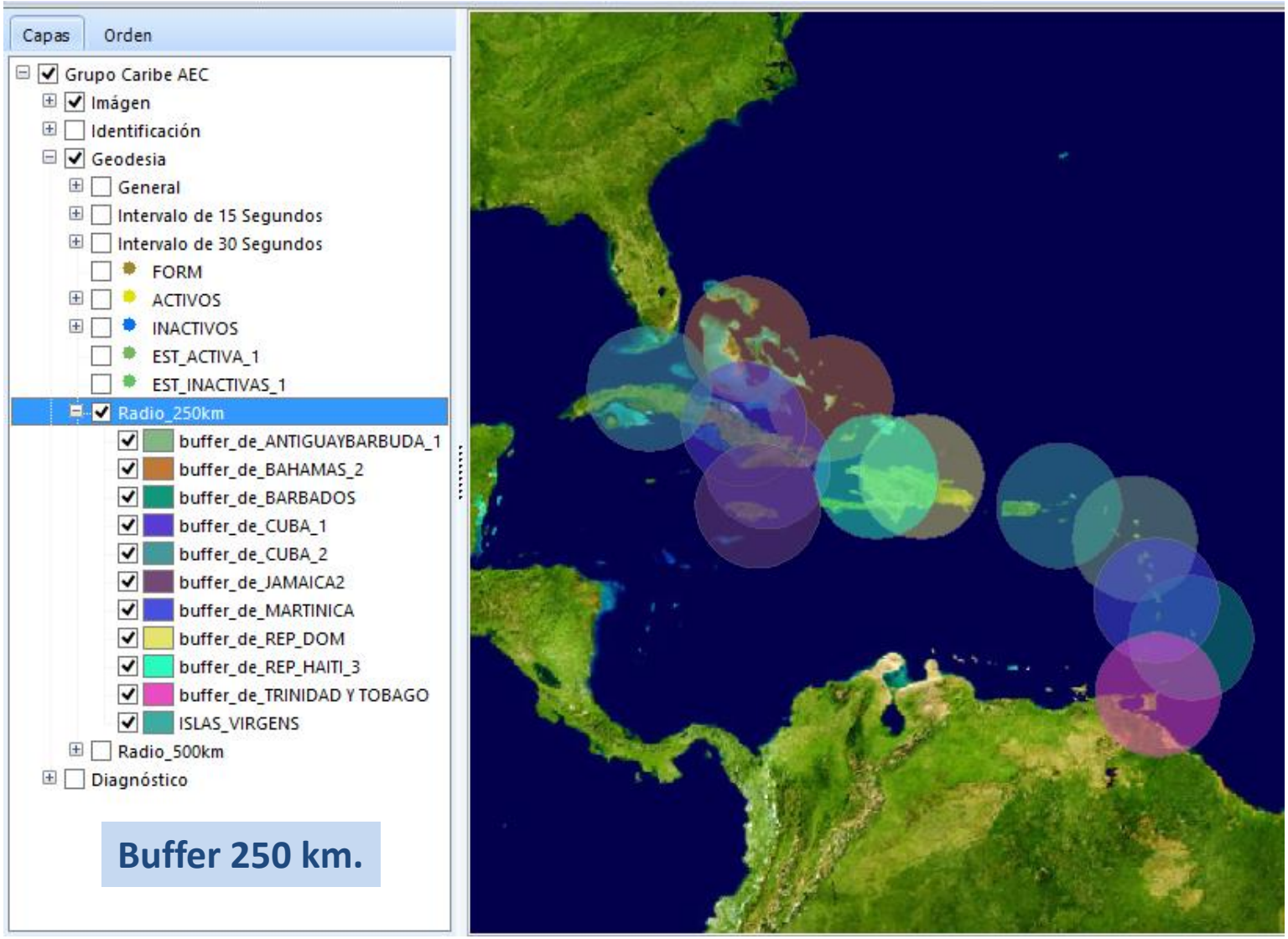
Using **metadata** is essential for proper housing management information is therefore necessary to implement a mechanism for its implementation.

As for the **technology**, aims to strengthen the region into two areas: improving the geodetic reference frame and renew some servers and computer equipment.

In connection with **spatial data services** offering a geomatics solution for internet dissemination of information is proposed.

Finally it is proposed to implement a comprehensive training program to build capacity and skills of **human capital**.

GNSS Network 13 Stations



Current actions

- We are building scenarios for the identification and positioning of the Geodetic Network in the region.
- We seek to establish contact with organizations working on similar projects in the region in order to join forces.
- Valoramos las características tecnológicas de los equipos GNSS, con el fin de seleccionar los de mejores características y de menor costo.

Map of vegetation cover

Current actions

- We are researching literature and cartographic material of the region, in order to have information for the regional criteria and refine training camps for the classification process.
- We test using satellite images of the region to assess their effectiveness and quality to produce a map of the vegetation of the region.
- We investigated similar work in the region in order to refine the selection criteria applicable to the project.

Geomatics solution

Current actions

- We analyze in detail the questionnaires in each country, to meet the technological and operation of computers and servers current Features.
- We are assessing the capabilities of the human capital issues of spatial data infrastructures in order to identify needs.
- We analyze the characteristics necessary equipment and means of communication that allow implementing a geoportal in each country.
- We investigate the solutions offered by other agencies to contact for information sharing and building synergies.

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Summary of progress

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