

Expert Group on the Integration of Statistical and Geospatial Information

Preliminary results from the Global Survey on Readiness to Implement the Global Statistical Geospatial Framework

Background

Introduction

The United Nations Expert Group on the Integration of Statistical and Geospatial Information (EG-ISGI) is developing guidance to support the implementation and operationalisation of the Global Statistical Geospatial Framework (GSGF). Through the adoption by the United Nations Committee of Experts on Global Geospatial Information Management (UN-GGIM) and the United Nations Statistical Commission (UNSC), the GSGF has been recognised as a framework for the world that provides an underlying mechanism to integrate statistical and geospatial information.

During spring of 2021 the EG-ISGI, through its Task Team on capacity building, has conducted a global survey to diagnose readiness at the country level for implementing the Global Statistical Geospatial Framework, in order to assess the general awareness of that Framework and the Integrated Geospatial Information Framework and how countries consider their usefulness. The national perspective is essential to enable the EG-ISGI to develop relevant guidance for the implementation of the GSGF that reflects national needs and capability.

The survey builds on previous work to assess the European implementation of the Global Statistical Geospatial Framework within the region, requesting responses from both the statistical and geospatial communities. To support its dissemination, the Global Survey was informally translated into, and received responses in, the six UN languages (Arabic, Chinese, English, French, Spanish, and Russian).

The survey was disseminated in close collaboration with the regional focal points:

- **Africa** – The UN Economic Commission for Africa (UNECA) and UN-GGIM Africa
- **The Americas** – the UN Economic Commission for Latin America and the Caribbean (UNECLAC) and UN GGIM: Americas
- **Arab States** - the UN Economic and Social Commission for Western Asia (UNESCWA), UN-GGIM: Arab States and the Gulf Cooperation Council – Statistics (GCC-STAT)
- **Asia and the Pacific** – the UN Economic and Social Commission for Asia and the Pacific (UNESCAP) and UN-GGIM Asia and the Pacific
- **Europe** – the UN Economic Commission for Europe (UNECE) and UN-GGIM: Europe

Structure of the survey

In total, the survey comprised 27 questions structured along four thematic sections (Section A contained only background information and Section F was for open input and additional comments).

Section B aimed to assess the general awareness about the GSGF and the IGIF among NSOs, NGIAs and other public bodies in Member States. Respondents were also asked to rate the usefulness of the frameworks to facilitate statistical-geospatial integration.



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Section C aimed to capture information about the current situation and practice in Member States. The questions in this section addressed a number of issues ranging from institutional collaboration, data access and governance to performance of infrastructures for data integration.

Section D addressed the need for guidance and capacity building. The respondent were asked to rate the need for guidance and to express what kind of guidance they consider most useful to support the effective implementation of the GSGF. In addition, the respondents were asked to express the need for development and training to build capacity for statistical-geospatial data integration.

Finally, Section E was a special module targeting management of privacy and confidentiality issues when using, sharing or releasing geospatial data. This section was included on behalf of the EG ISGI Task Team on confidentiality. The results from Section E are presented briefly in this report but will also be processed further by the EG ISGI Task Team on confidentiality.

Release and dissemination of the survey

The launch of the survey was officially announced in the 52nd session of the UN Statistical Commission on the 1-3 of March 2021. The questionnaire was disclosed as a background document under the Agenda item Integration of statistical and geospatial information.¹ The background document was unofficially translated into the six UN languages to facilitate dissemination and uptake in all regions.

The survey was disseminated to NSOs and NGIAs through the regional UN focal-points starting on April 13. The message contained an information note and a link to the online-form for collection of answers. The regional focal-points acted as contact points as well as facilitators to promote the contribution to the survey in their region.

The EG ISGI originally planned to close the survey on May 31, but due to a low number of responses, this deadline was extended to June 7. To meet additional requests for further extension of the deadline, the EG ISGI decided to keep the the survey open for an additional couple of months. The results in this report are based on a data extract from the survey as of **July 1**.

The EG ISGI is considering to provide an updated, final, background document for later reporting to the Committee of Experts and Statistical Commission to enable inclusion of more responses, especially from those regions with a low response rate.

Response

In total, 90 complete replies were submitted from 76 Member States, 1 non-Member State observer, and 1 from an associate member of a regional commission. The majority, 59 per cent of Member States submitted one coordinated reply from NSOs, NGIAs and/or other organisation, whereas 41 per cent of the Member States submitted singular replies representing only one organisation. 18 Member States, submitted more than one reply and for 32 Member States one response was submitted representing either an NSO or an NGIA, but not both. There was a slight bias for replies from NSOs. Coordinated

¹ <https://unstats.un.org/unsd/statcom/52nd-session/documents/>

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responses from NSOs and NGIAs together with single responses from NSOs amounted to 66 Member States. The total figure for NGIAs was 55 Member States. “Other organisations” were involved in replies from only 7 Member States.

In total, 38 per cent of the UN’s 193 Member States produced a response to the survey. There were significant regional differences in the response rate. The highest response rate was obtained for UN-GGIM: Europe and UN-GGIM: Americas where 61 per cent of the regional committee’s members provided a response. UN-GGIM: Africa had the lowest response rate where only 10 per cent of the regions Member States responded.

Number of responding Member States and response rate by UN-GGIM region*

UN-GGIM regions	Member States	Responding Member States	Response rate (%)
UN-GGIM: Asia and the Pacific	62, [15]	18	29
UN-GGIM: Americas	38, [2], (9)	23	61
UN-GGIM: Arab States	22, [8], (1)	7	32
UN-GGIM: Europe	56, [15]	34	61
UN-GGIM: Africa	51, [8]	5	10
Total	203	78	38

**Please note that some Member States are mirrored in more than one UN-GGIM region. Accordingly, their responses have been counted in more than one region. The number of Member States mirrored with other UN-GGIM regions are indicates within the square brackets []. The global total is calculated without overlap. The number of Member States per UN-GGIM region, on which the response rate has been calculated, includes also associated members and non-member state observers . The number of associated members and non-member state observers are indicated within the parentheses ().*

The low response rate somewhat limits the prospects for a proper and unbiased analysis of the data. One problem is the under-coverage of replies from low- and middle-income countries, notably from Africa and Asia Pacific, which tends to bias the responses towards high-income countries. Another problem is the skewed regional coverage which makes direct comparisons between regions difficult. The EG ISGI has initiated discussion on this topic with the regional focal-points, and it was uniamously agreed that further action is needed to increase the number of responding Member States from under-represented regions

Preliminary results

The proceeding sections summarise the initial findings of the Global Survey, considering the challenge and inequal responses already seen, the EG ISGI is cognisant of the need to make further progress in the Global Survey’s response. Regardless, the following summarises and discusses the results so far with the intention that these can help inform the Committee of Experts in how countries have started to implement and operationalise the GSGF – further, the analysis provides the EG ISGI with the opportunity to reflect on its future work, and will seek to incorporate responses to the gaps identified in its future work.



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Awareness about the GSGF and the IGIF

To measure to what degree the Global Statistical Geospatial Framework (GSGF) and the Integrated Geospatial Information Framework (IGIF) have been socialised at country level, respondents were asked to self-assess the awareness of both these frameworks along a scale ranging from 0-5, where 0 represents no awareness at all and 5 represents a high degree of awareness. In addition, respondents were asked to rate the awareness by the following categories of organisations:

- NSOs
- NGIAs
- Combined NSOs/NGIAs
- Within the rest of government/other public bodies

When interpreting the level of awareness by organisation, it is important to keep in mind that the respondents were asked to rate the awareness within *all* organisations listed in the question, not just their own organisation. For coordinated responses (representing the coordinated opinion of more than one organisation) we assume that the level of awareness has been discussed between organisations. In single responses (representing only one organisation), a relatively high degree of respondents choose to use the option “Don’t know” for statements regarding other organisations than their own.

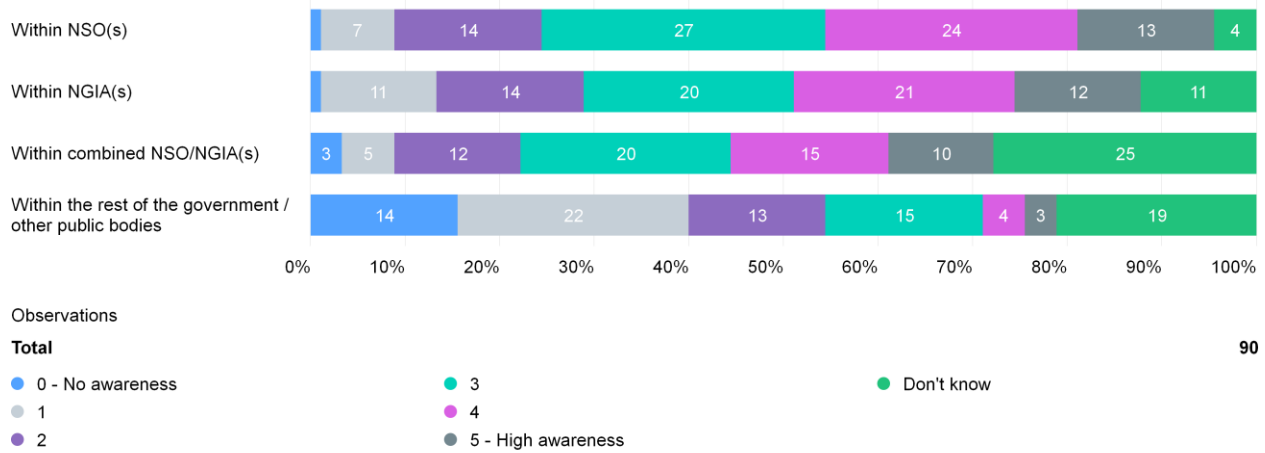
An average value, based on all replies, gives an overall awareness rating of 2.80 for the GSGF and 2.63 for the IGIF. The average figure is useful as an indicator to follow up on over time, however it does not provide rich insights as to understand how well settled these frameworks are on national level. In contrast, the rating and breakdown by organisation gives more informative data.

The replies indicate that the highest level of awareness about the GSGF (rating 4 or 5) is found within NSOs, whereas the lowest awareness is found within the rest of government/other public bodies. The replies regarding the IGIF indicate that the highest awareness about the IGIF (rating 4 or 5) is found within NGIAs and again the lowest awareness is found within the rest of government/other public bodies.

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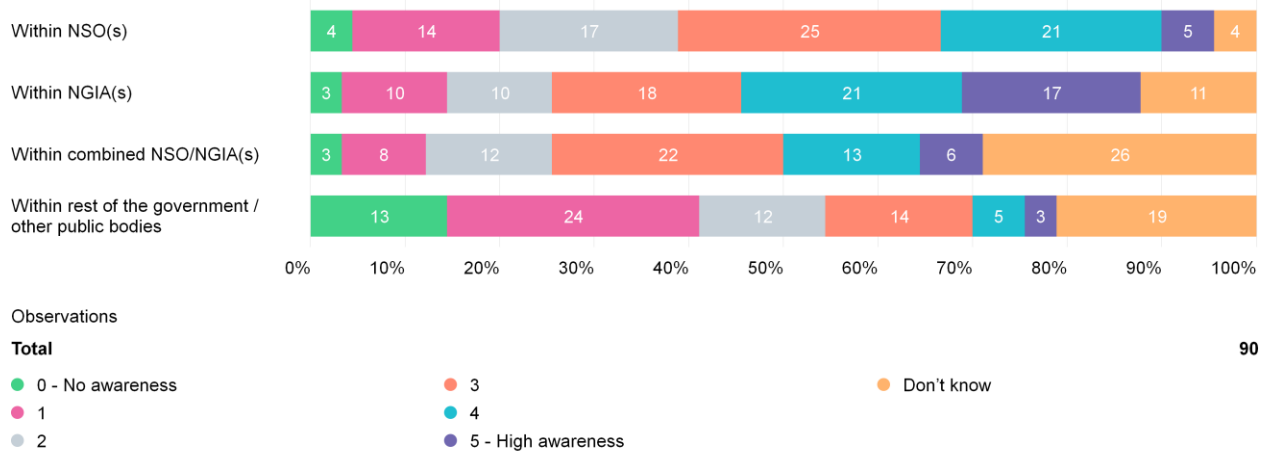
B.1 Awareness of the Global Statistical Geospatial Framework

"How would you describe the level of awareness about the GSGF among institutions in your country?"



B.3 Awareness about the Integrated Geospatial Information Framework

"How would you describe the level of awareness about the IGIF among institutions in your country?"



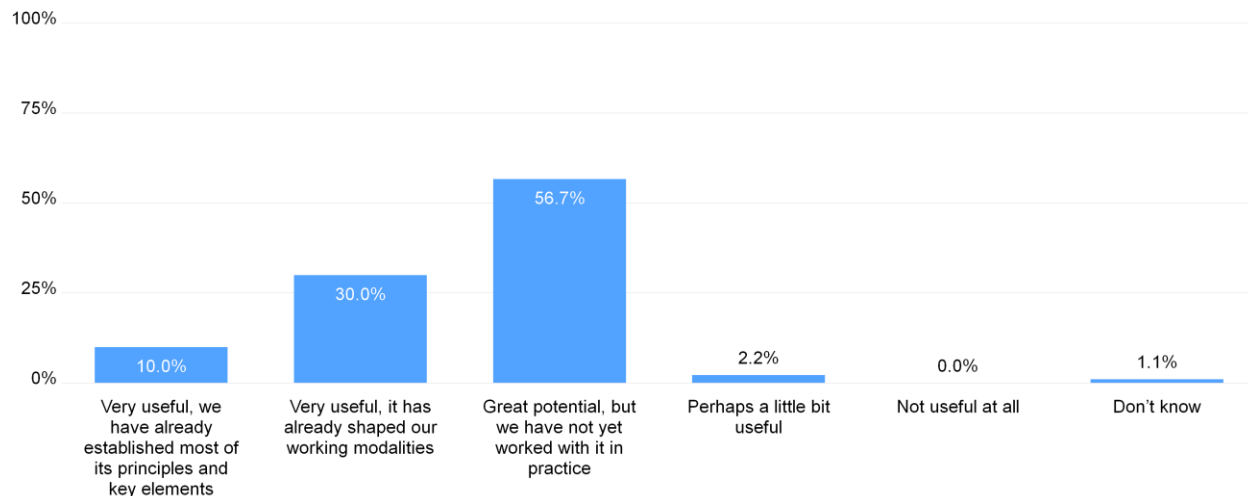
As expected, for both frameworks, there is a quite broad group of respondents indicating that the awareness is neither low nor high (a neutral rating of 3). Interestingly, rather few respondents indicate “no” or “very low awareness” with the exception for category “The rest of government/other public bodies” for which the awareness of both frameworks are rated as “non” or in the lower range of the scale.

As a follow-up question on the awareness, respondents were also asked to rate the usefulness of the GSGF for facilitating statistical-geospatial integration in their country. The respondents were given a fixed set of options to choose from. The options were designed to reflect a combination of perceived usefulness and maturity in Member States of implementation.

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B.2 Usefulness of the Global Statistical Geospatial Framework

"How useful do you consider the GSGF to be for facilitating statistical-geospatial integration in your country?"



Observations

Total

90

The responses suggest a strong confidence in the framework among Member States. Almost 60 per cent of the respondents indicated that they see a great potential in the framework, though they have not yet started to work with it in practice. Roughly one third of the respondents considered the framework useful and reported that it has already shaped their working modalities. Finally, 10 per cent of the respondents acknowledged the usefulness of the GSGF and reported that they have already established most of its principles and key elements. Zero per cent of the respondents considered the framework “*not useful at all*” and only a few percentages expressed concerns by using the option “*perhaps a little bit useful*”.

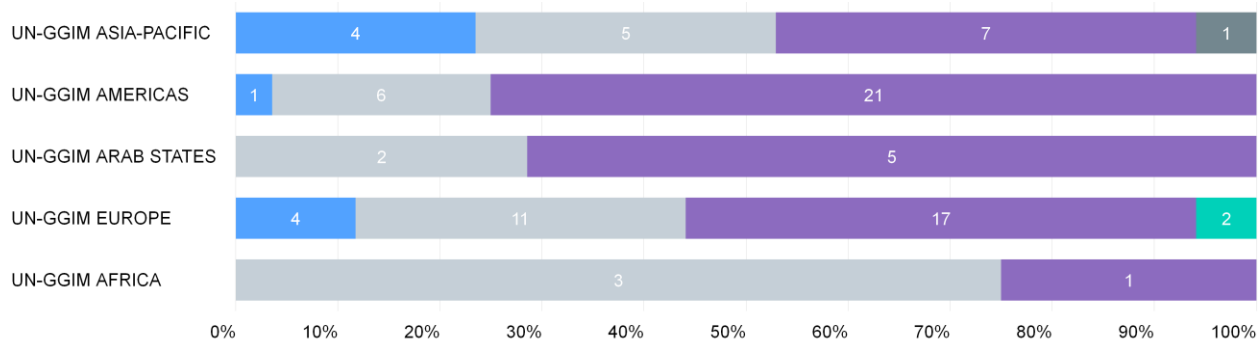
In four out of five UN-GGIM region the most frequent reply was option three (“*Great potential, but we have not yet worked with it in practice*”). In three out of five UN-GGIM regions, at least one respondent selected option 1 (“*Very useful, we have already established most of its principles and key elements*”).



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B.2 Usefulness of the Global Statistical Geospatial Framework - by UN-GGIM Region:

"How useful do you consider the GSGF to be for facilitating statistical-geospatial integration in your country?"



Observations

Total

90

- Very useful, we have already established most of its principles and key elements
- Very useful, it has already shaped our working modalities
- Great potential, but we have not yet worked with it in practice
- Perhaps a little bit useful
- Not useful at all
- Don't know

Organisational aspects of geospatial data management

Section C aimed to capture information about the current situation and practice in Member States. The result from section C is divided into three thematic blocks in this report. The first block reports on organisational aspects of geospatial data management.

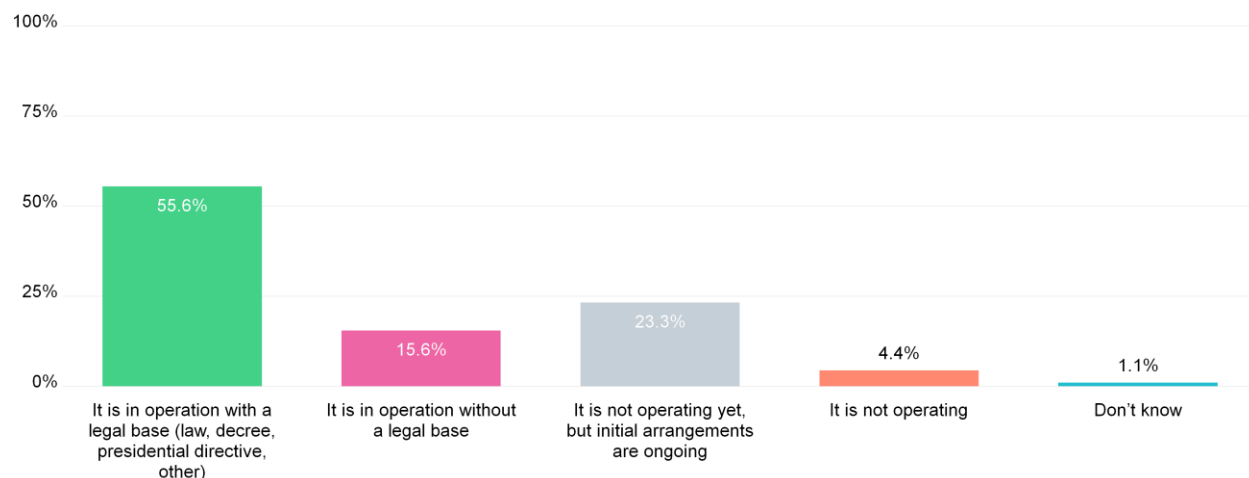
In question C.1 respondents were asked to describe the mode of operation of their national spatial data infrastructure/national initiative for geospatial information management (hereafter referred to as NSDI). The overwhelming majority of respondents, 56 per cent, replied that their NSDI is in operation supported by a legal framework, which means it is operating under a law, decree or directive. Some 16 per cent considered their NSDI operational but without conduct of a legal framework. Altogether almost one third of the respondents reported that they do not have an operating NSDI, however the majority of these respondents replied that there are arrangements ongoing to set up an operational NSDI.



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C.1 National spatial data infrastructure/national initiative for geospatial information management

"How would you describe the national spatial data infrastructure/national initiative for geospatial information management in your country?"



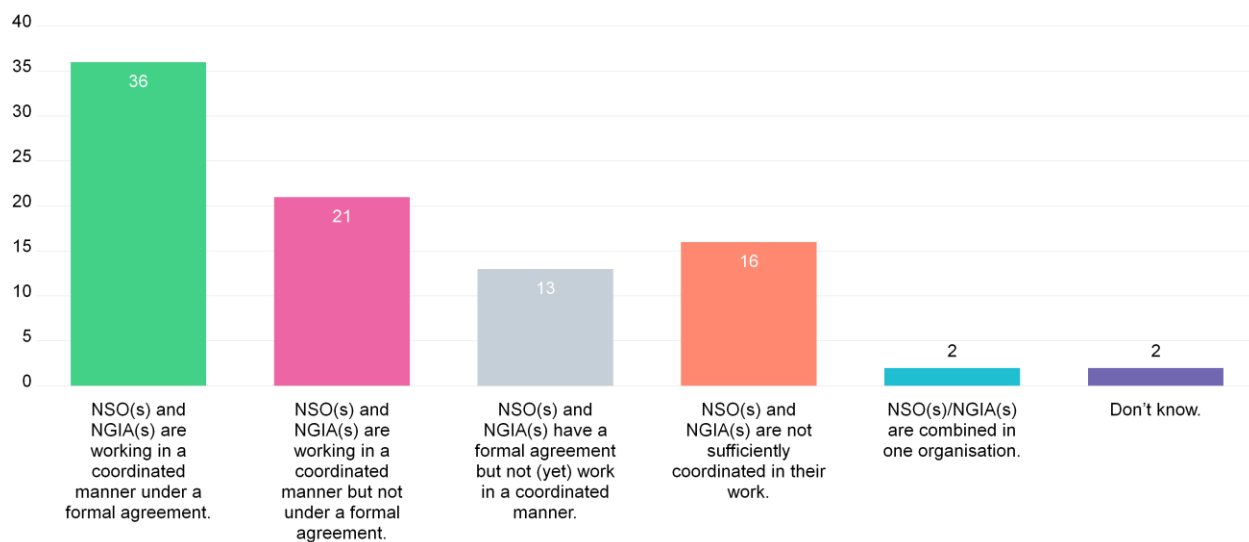
Observations

Total

90

C.2 Working relations between NSO(s) and NGIA(s)

"How would you describe the working relationship between NSO(s) and NGIA(s) in your country?"



Observations

Total

90

In question C.2 respondents were asked to describe the working relations between National Statistical Offices (NSOs) and National Geospatial Agencies (NGIAs). One third of the responses indicated that NSOs

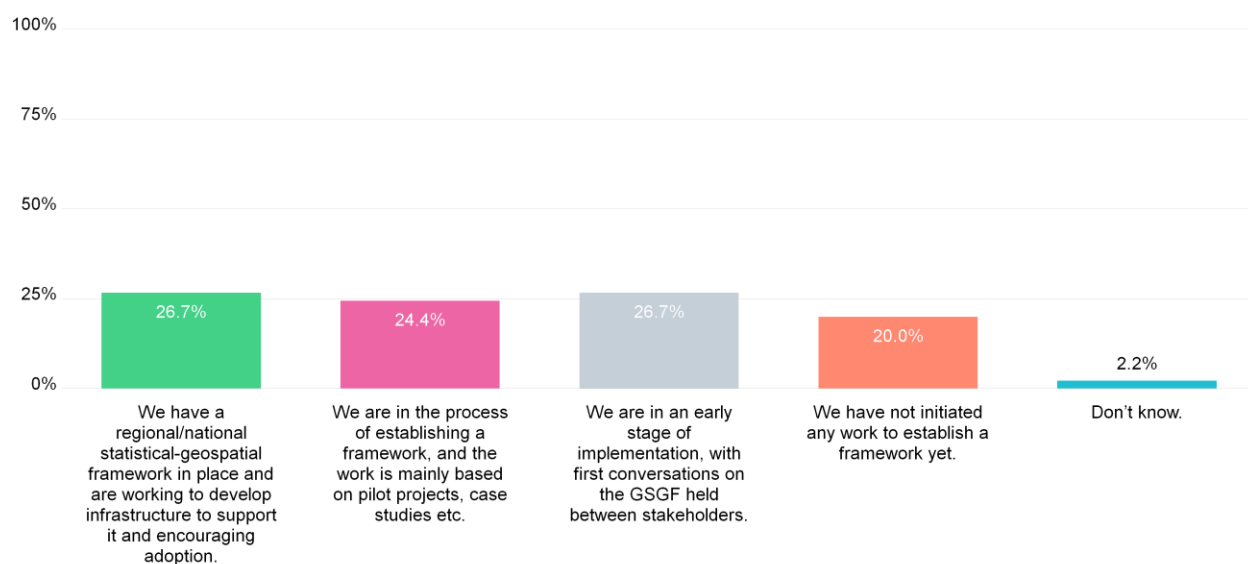
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and NGIAs are working together in a coordinated manner under a formal agreement. An additional 21 per cent of the respondents replied that they do work in a coordinated manner but the collaboration is not supported by a formal agreement. Altogether, 30 per cent reported that NSOs and NGIAs are not sufficiently coordinated in their work. Slightly less than half of these respondents report that lack of coordination occur in spite of formal agreements signed between organisations.

The aim of question C.3 was to research, if and to what extent, national statistical-geospatial frameworks have been implemented in Member States. Some 27 per cent of the respondents replied that they have regional/national statistical-geospatial frameworks already in place and another 24 per cent reported that they are in the process of establishing such frameworks. Slightly less than 50 per cent of the respondents indicated that there are no statistical-geospatial framework in place and that they are either in a very early stage of implementation or that there are currently no work initiated in the direction towards implementation.

C.3 Implementation of national statistical geospatial frameworks

"How would you describe the implementation of a national statistical-geospatial framework in your country?"



Observations

Total

90

Data sources and governance

Questions C.4-C.7 + question C.12 (about use of administrative data) were designed to research the state-of-play concerning data sources and governance of data.

Question C.4 concerns fundamental geospatial data used for geocoding statistical and/or administrative data. Multiple options were available for this question as one organisation typically use a range of different data sources.

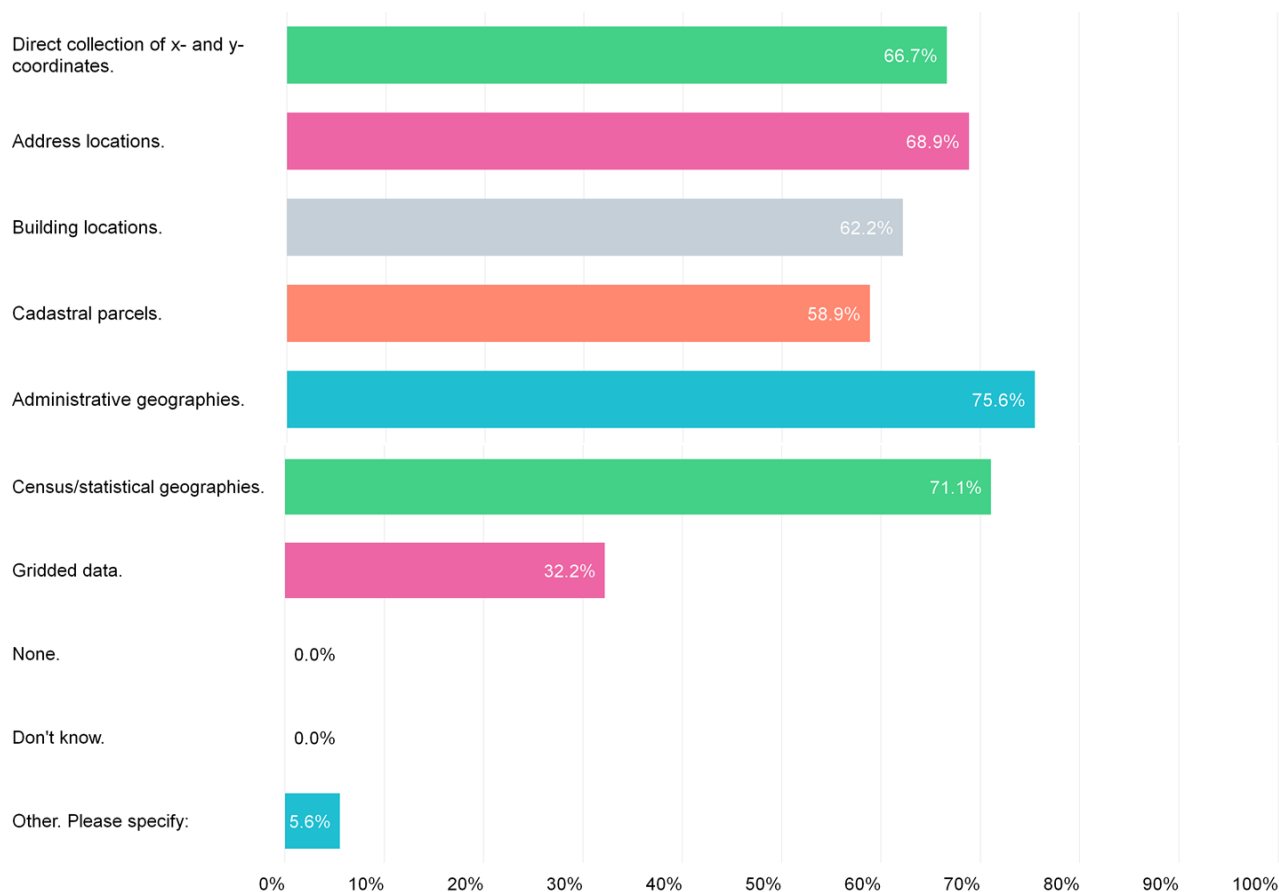


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The most common categories of data used for geocoding seems to be address location and administrative geographies. Both these categories were mentioned by 75 per cent of the respondents. The second most frequently mentioned category was census/statistical geographies, followed by direct collection of x and y coordinates.

C.4 Fundamental geospatial data for geocoding

"What fundamental geospatial data are being used to geocode (sometimes called georeference) statistical and/or administrative data in your country?"



Observations

Total

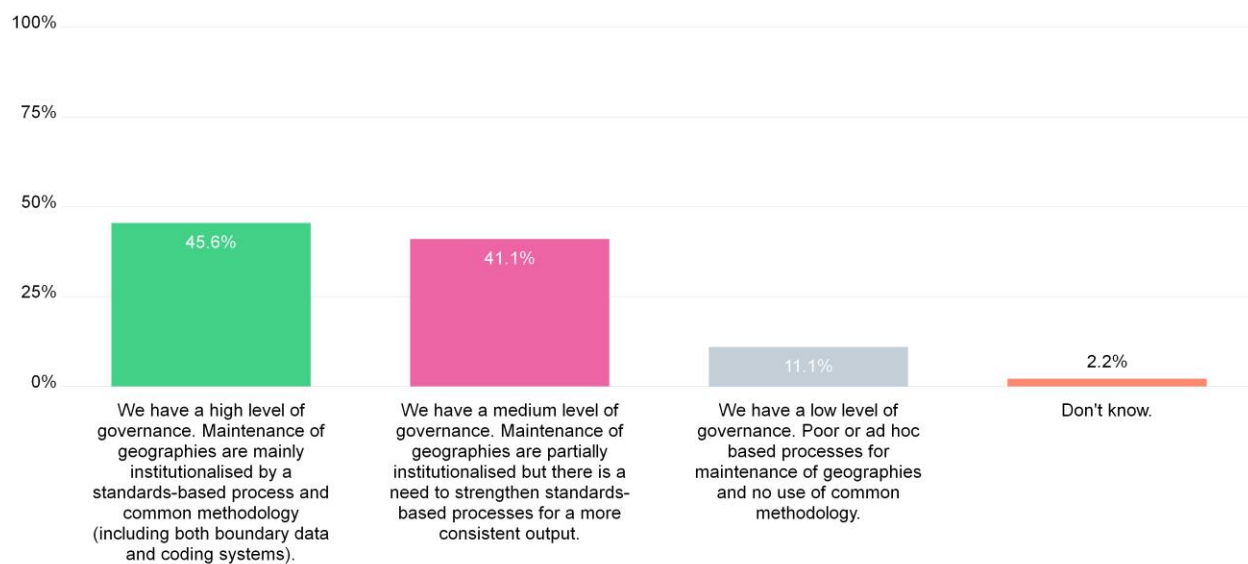
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Question C.5 aimed to describe the maturity of governance of administrative and statistical geographies. Respondents were asked to rate the governance level according to one of the three categories “high”, “medium” and “low”. A high level of governance assumes institutionalised and standards-based maintenance of geographies whereas low means poor and *ad hoc* based maintenance processes. Almost half of the respondents indicated that they have a high level of governance. Only 11 per cent indicated a low level of governance.

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C.5 Governance of administrative and statistical geographies

"How would you describe the governance of administrative and statistical geographies in your country?"



Observations

Total

90

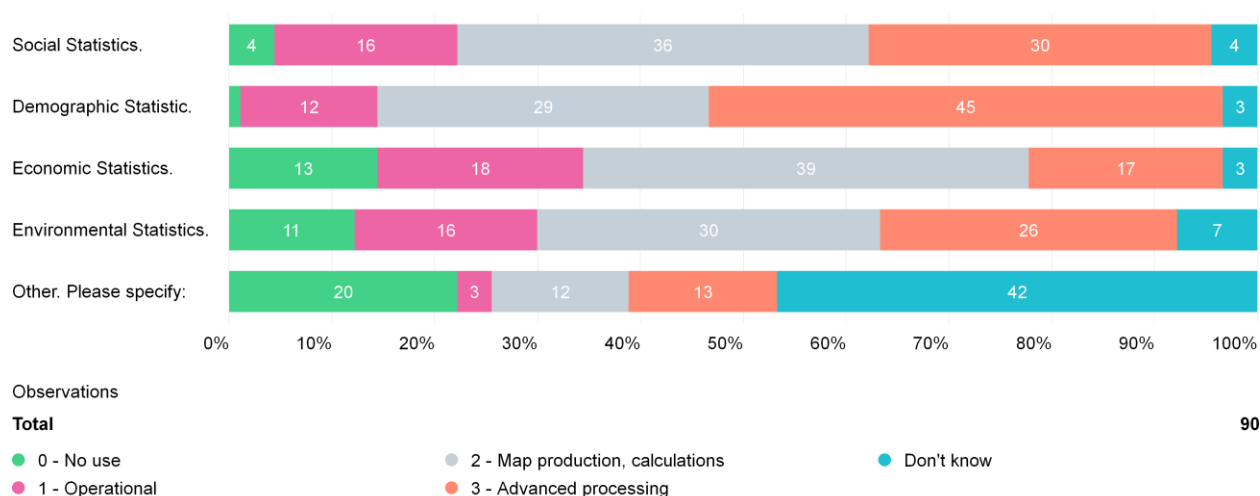
Question C.6 was designed to assess the maturity of use of geospatial information in the production of statistics within different statistical domains. Four main domains were listed in the question but respondents could also list other domains. The respondents were asked to rate the use along a four-grade scale where 0 means no use at all, 1 means operational (but basic) use, 2 means somewhat more sophisticated use including map production and processing and 4 means advanced data processing.

As expected, there are quite substantial differences between statistical domains in terms of maturity to harness geospatial information. The domain that gained most advanced scores was “demographic statistic” whereas “economic statistic” got the lowest number of advanced scores among the four fixed domains. “Economic statistics”, together with “environmental statistic”, also got the highest number of zeros, indicating that geospatial information is not used at all. However, it should be noted that a broad group of respondents indicated that geospatial information is indeed part of the statistical production on a fairly sophisticated level in all of the four domains listed.

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C.6 Use of geospatial information in the production of statistics

"To what extent and level is geospatial information used in the production of statistics in different statistics domains?"



In question C.7 respondents were asked to indicate the lowest possible geographical level at which their country will be able to capture and geocode unit record data in the next Population and Housing Census. A number of fixed options were presented and the respondents were only allowed to choose one option. Please note that the question refers to the lowest level for *capturing* and *geocoding* Census micro data, not the lowest level for permanent data storage or dissemination of data.

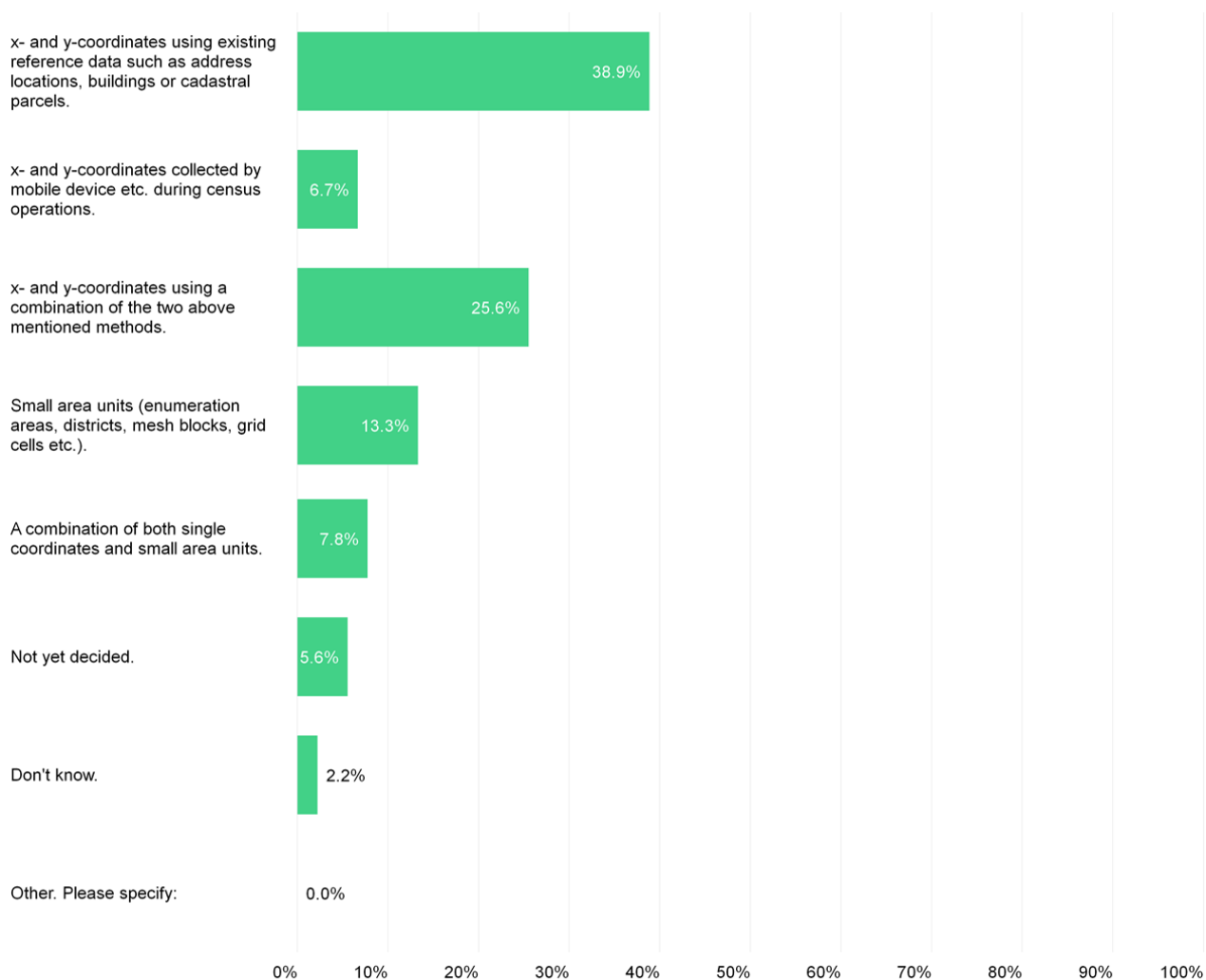
The rationale behind the question is two-folded; firstly, to find out if there is an existing infrastructure of geospatial reference data that will be utilised in Census operations and secondly, to find out if this infrastructure of geospatial reference data enables georeferencing of Census data to an exact x and y location (point-based georeferencing).

A quite significant share of the respondents, 40 per cent, indicated that they will be able to use existing geospatial reference data (such as addresses and buildings) to obtain an exact location for statistical units in Census operations. A small share, only 7 per cent, reported that they will use direct collection of location by means of mobile devices (typically recording of GPS coordinates). An additional 26 per cent reported that they will use a combination of the two above-mentioned methods. Altogether, this shows a high share of Member States with capability for a point-based georeferencing of Census data. Only 13 per cent of the respondents report that small areas, enumeration areas, mesh blocks etc, is the lowest possible geographical level at which they will be able to capture and geocode unit record data in the next Population and Housing Census.

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C.7 Lowest geographical level to capture and geocode unit record data in the next Census

"What is the lowest possible geographical level at which your country will be able to capture and geocode unit record data in the next Population and Housing Census?"



Observations

Total

90

The final question related to data sources and governance was C.12, which is related to the use of administrative data sources to produce spatially enabled data or for geostatistical purposes within the production of official statistics.

Respondents were asked to rate their current uptake on administrative data sources according to three distinctive options; Administrative data sources are already implemented, not yet implemented but a

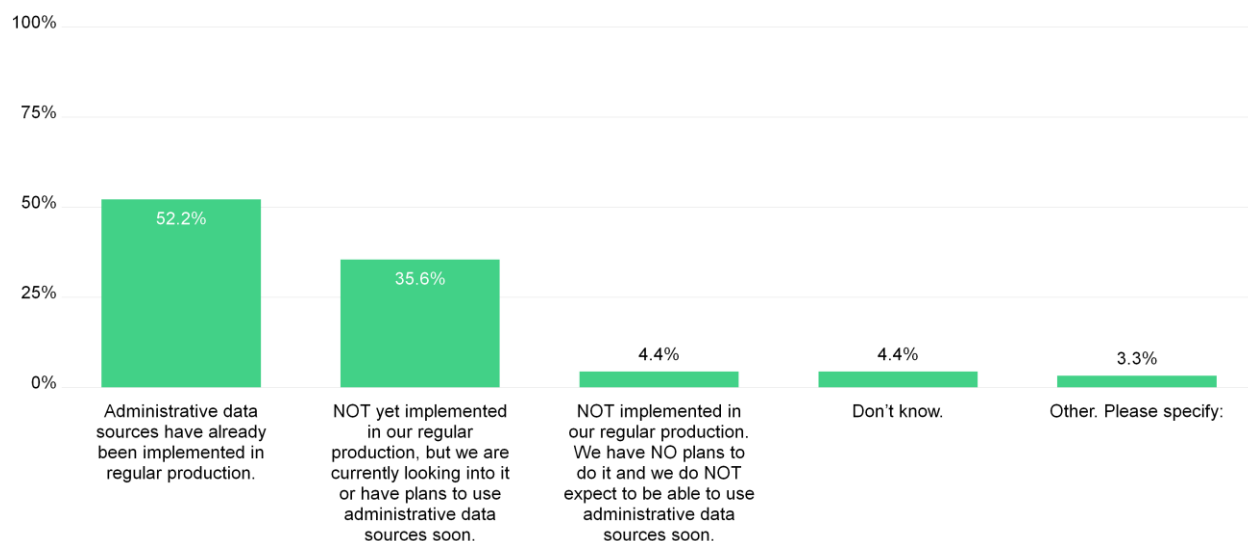
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prospect for implementation in a near future or finally, not implemented and no prospects for this to happen anytime soon.

To keep the question simple, we decided not to ask the respondents to clarify what type of administrative data sources they are using. Though not knowing the source of data limits the usefulness of the replies a bit, it is interesting to consider that more than 50 per cent of the respondents report that administrative data sources have already been implemented in regular production. Less than 5 per cent of the respondents indicate that administrative data sources are not used and there are no current plans to start using it in regular production.

C.12 Use of administrative data sources

"How would you describe the use of administrative data sources to produce spatially enabled data or for geostatistical purposes within the production of official statistics?"



Observations

Total

90

Performance and sustainability of infrastructures and data management environments

Questions C.8-C.11 were created to follow up on the questions presented in the previous section (*Data sources and governance*), targeting the performance of the geospatial data infrastructure as well as the sustainability of the data management environment for geocoding.

In question C.8 respondents were asked to select one statement that best described the data infrastructure used for geocoding and integration of statistical and geospatial data in their country. The response options were fixed and ranged from a high performance option, more or less ideal in terms of maintenance and data harmonisation, to low performance options indicating lack of conformity and effectivity. The majority of respondents, 36 per cent, indicated that they have a well-functioning data infrastructure for geocoding and integration of statistical and geospatial data,

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including features like access to harmonised referenced data via national access points. A fair share of respondents, 31 per cent, indicated that they do have an operational data infrastructure but it suffers from lack of conformity and uneven quality across datasets.

C.8 Sustainability of the data infrastructure for geocoding and integration of statistical and geospatial data

"How would you describe the sustainability of the data infrastructure used for geocoding and integration of statistical and geospatial data in your country?"



Observations

Total

90

In order to understand the conditions for creation and maintenance of geospatial reference data, in question C.9 respondents were asked to describe how production of geospatial reference data is organised. A number of fixed response options were given on which organisation(s) are responsible for creating and maintaining point-based reference data (e.g. location enabled address, building or property registers).

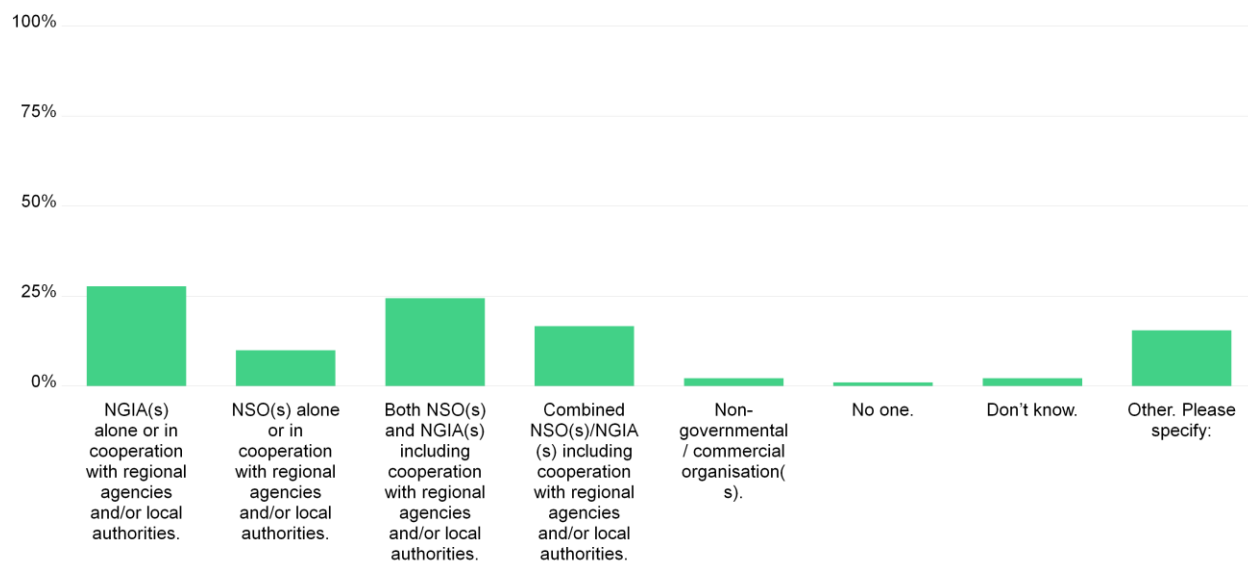
The most common arrangement seems to be that the NGIAs (alone or in cooperation with regional/local agencies) are responsible (27 per cent). The second most common arrangement seems to be a shared responsibility between NGIAs and NSOs (alone or in cooperation with regional/local agencies). However, as reflected in the open response option,

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there are also a number of country specific arrangements including ministries and agencies (other than NSOs and NGIAs) with special tasks to maintain registers and data repositories.

C.9 Responsibility for creating and maintaining point-based reference data

"Which organisations are responsible for creating and maintaining the point-based reference data (e.g. location enabled address, building or property registers) that are used in your country to geocode statistical unit record data?"



Observations

Total

90

Question C.10 aimed to research the performance of data management environment for geocoding unit record data. Please note that this question was intended only for NSOs or any other organisation responsible for undertaking significant geocoding tasks.

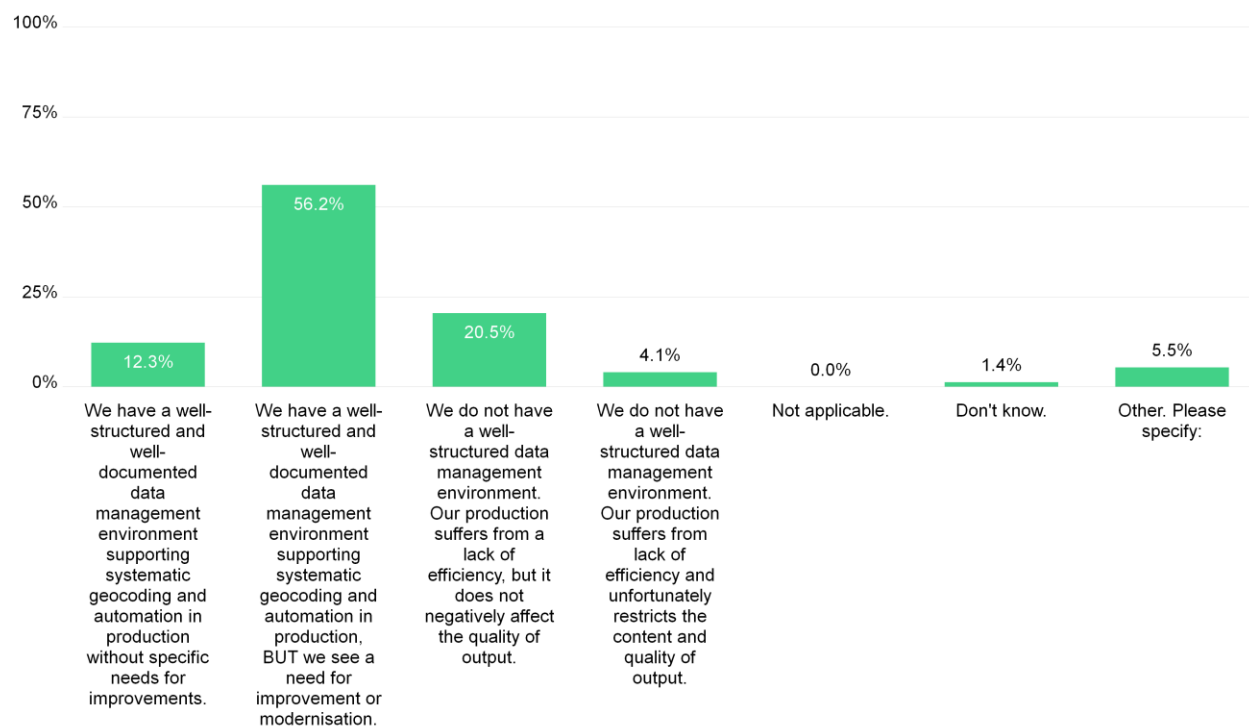
Respondents were asked to select one statement that best described the sustainability of the data management environment deployed for geocoding. Similar to question C.8, the response options were fixed and ranged from a high performance option, more or less ideal, to low performance options indicating lack of structure and documentation.

Relatively few respondents, 12 per cent, choose the ideal, high performance option. The vast majority of respondents, 56 per cent, indicated a rather well-functioning and well-documented environment but with a certain need for improvement and automation. Altogether 25 per cent of the respondents considered their data environments as not well-functioning, of which 4 per cent also claimed that the lack of sustainability has a negative impact on content and quality of the output.

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C.10 Sustainability of the data management environment for geocoding unit record data

"How would you describe the sustainability of the data management environment for geocoding of unit record data?"



Observations

Total

73

Question C.11 aimed to investigate obstacles that may prevent an effective and systematic integration of statistical, administrative and geospatial data. A fixed list of six "obstacles" were presented and the respondents were asked to rate all the obstacles from 0 (not a problem at all) to 5 (a significant problem).

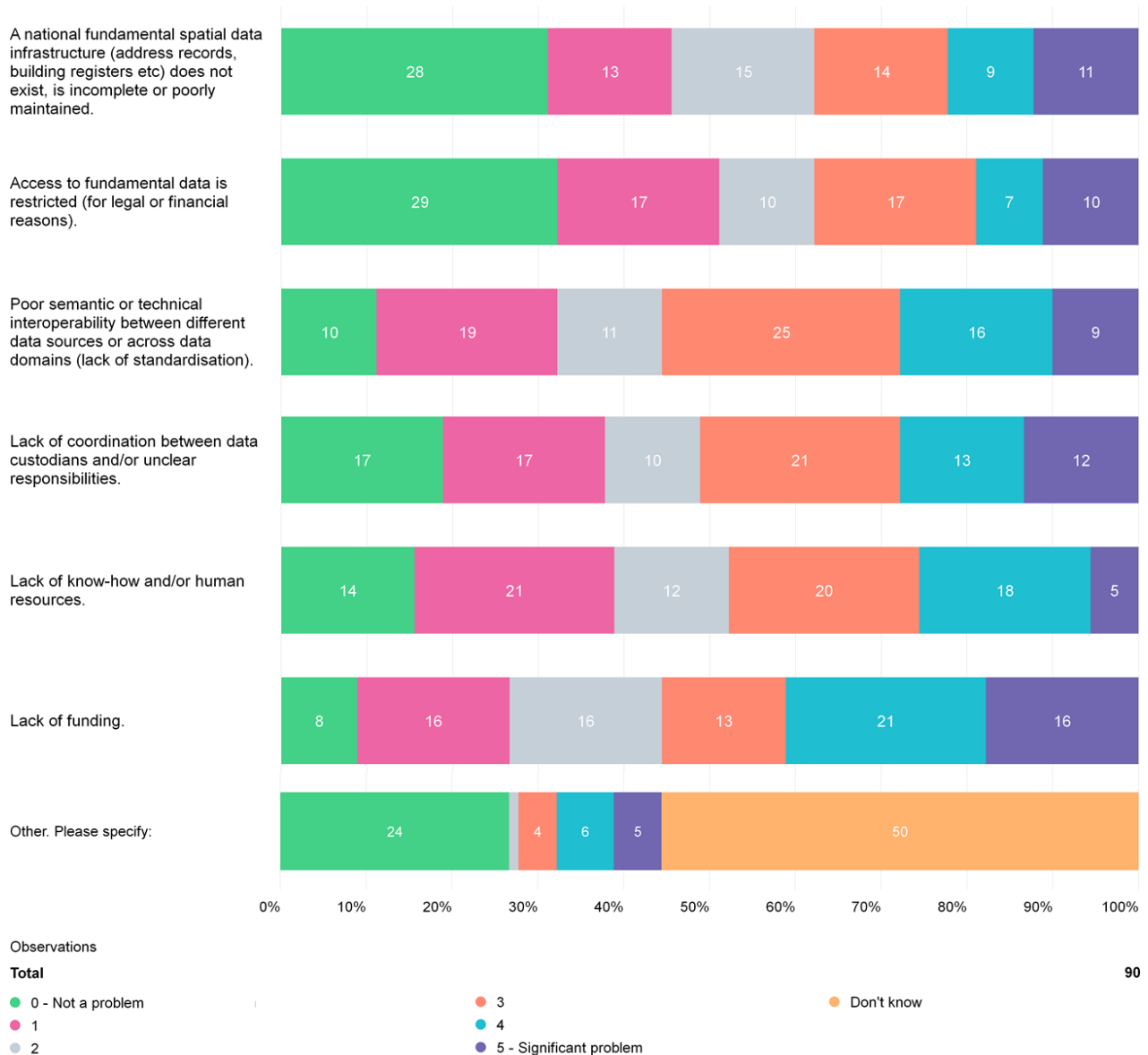
The obstacle that was rated as most significant, as well as second most significant, was lack of funding. Almost 40 per cent of the respondents assigned this obstacle a 4 or a 5. On the positive account is the fact that almost 30 per cent of the respondents also rated "lack of a national fundamental geospatial data infrastructure and restricted access to fundamental geospatial data" as a non-significant obstacle.



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C.11 Obstacles to statistical-geospatial data integration

"What are the obstacles in your country that prevent an effective and systematic integration of statistical, administrative and geospatial data?"



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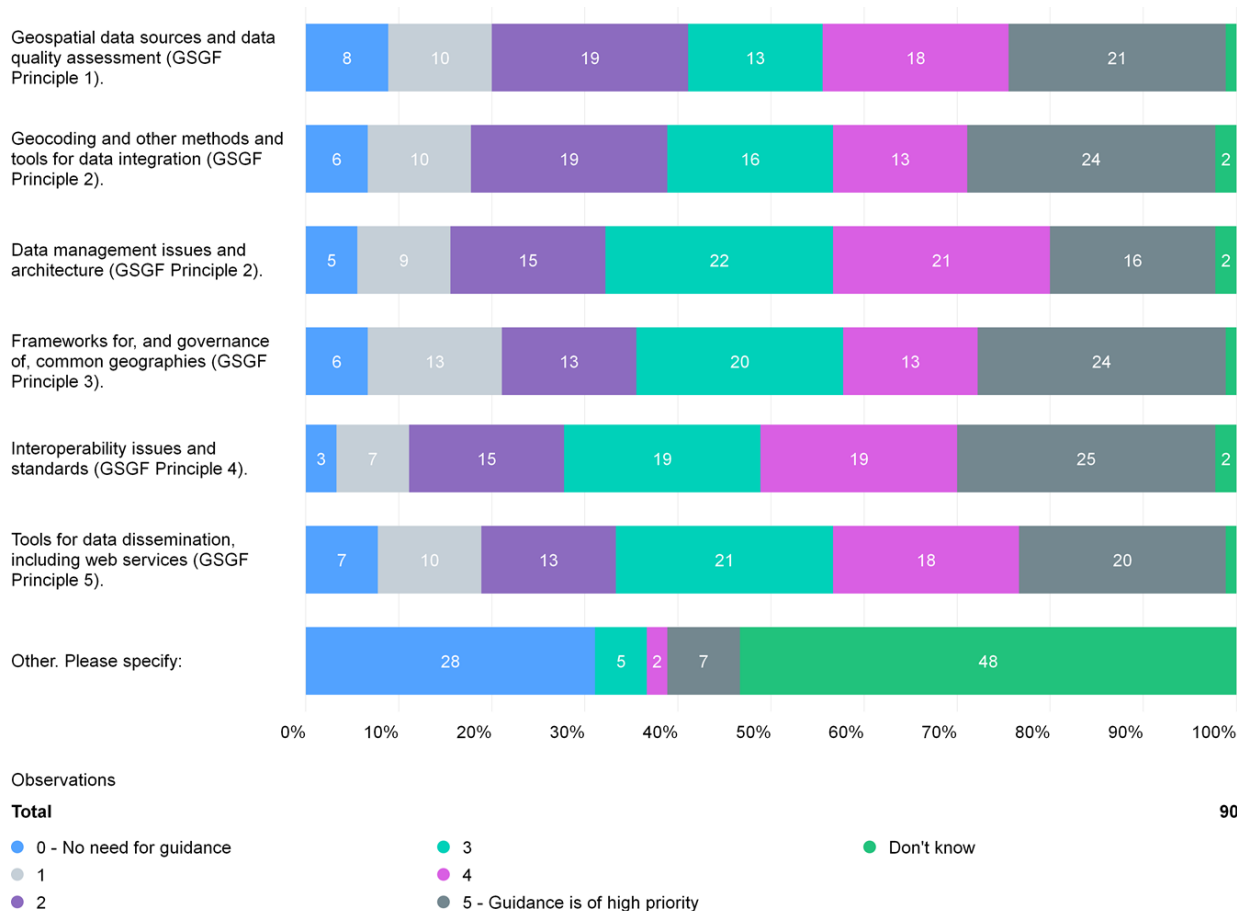
Need for guidance

Question D.1 addressed the need for guidance loosely following the principles of the Global Statistical Geospatial Framework (GSGF). Respondents were presented to six fixed options which they were asked to rate from 0 (no need for guidance) to 5 (guidance is of high priority).

The outcome of this question is a general request for guidance, without a clear orientation towards any particular principle of the GSGF. Taking the two highest rankings (4 and 5) into consideration, there is a slight emphasis on the need for guidance on interoperability issues (Principle 4). For the rest of the principles the variations are insignificant. A fair interpretation of this response is that the requested guidance need to address the full body of statistical-geospatial data integration.

D.1 Need for guidance

"Please rate the following themes to help the EG-ISGI prioritise its work so the most relevant guidance can be developed and provided to countries to support implementation of the GSGF."



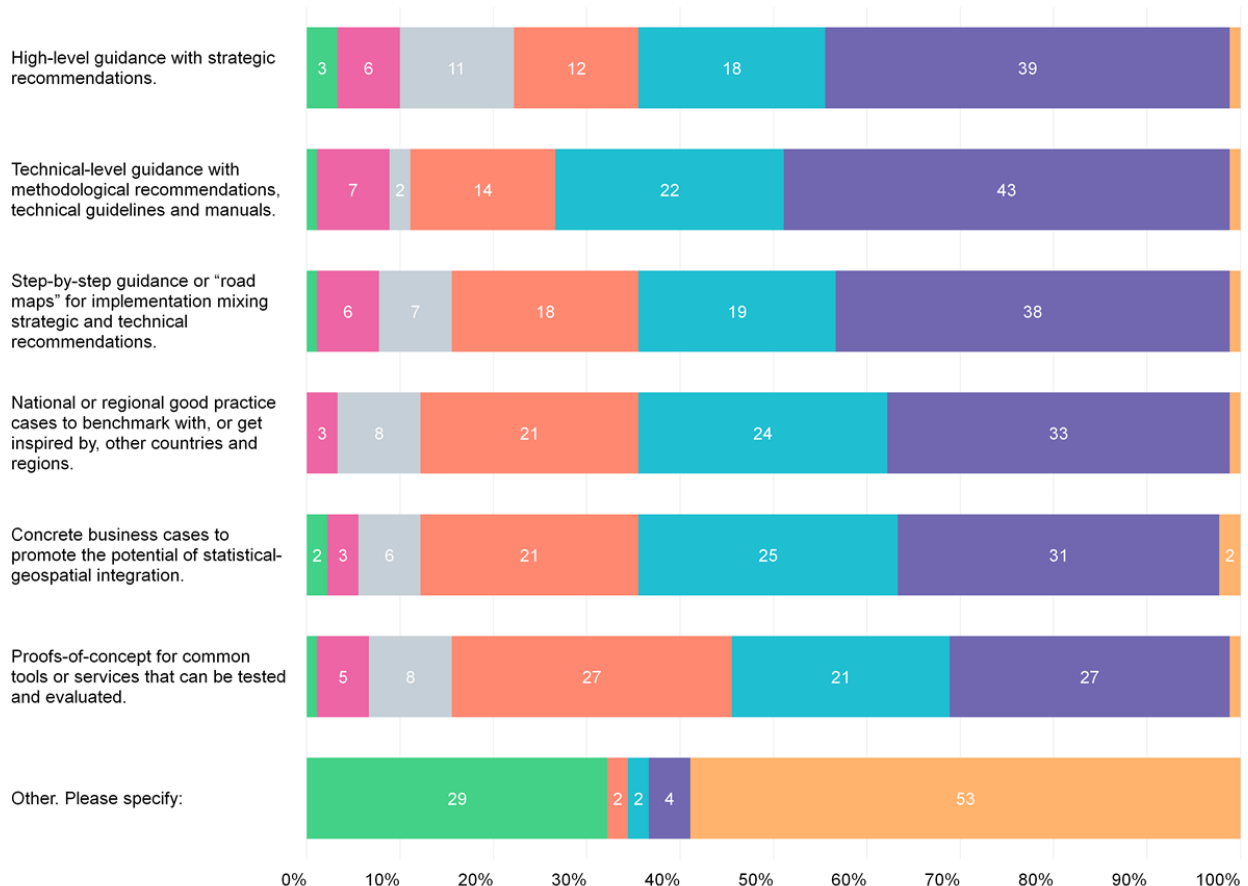
In question D.2 respondents were asked to indicate what type of guidance they consider most useful in order to implement the GSGF. Respondents were presented to six fixed options which they were asked to rate from 0 (not useful) to 5 (very useful).

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Similar to question D.1, the responses does not give a clear path but rather a general message that guidance is crucial. However, the request for technical-level guidance, guidelines and manuals stands out as more prominent compared to the other categories.

D.2 Type of guidance

"What type of guidance would you consider most useful to implement the GSGF on a national level effectively?"



Observations

Total

90



Need for capacity building and training

Question D.3 addressed the need for capacity building. Respondents were presented to seven fixed thematic options which they were asked to rate from 0 (no need) to 5 (urgent need).

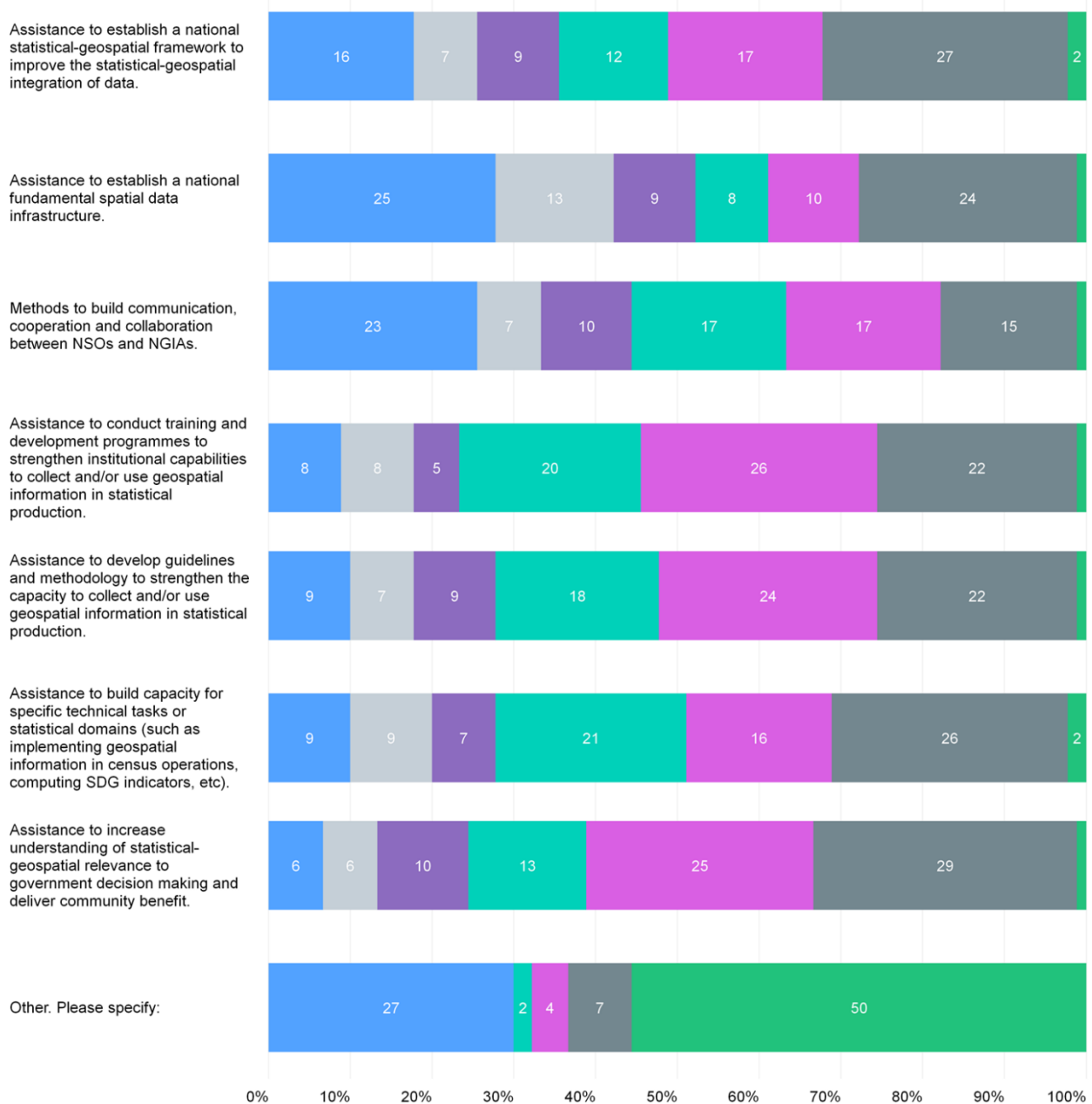
Five of the seven thematic categories were rated as urgent (5) or close to urgent (4) by at least 40 per cent of the respondents. Interesting to note is that the most urgent option, rated as urgent or close to urgent by more than 50 per cent of the respondents, was the non-technical option "Assistance to increase

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understanding of statistical-geospatial relevance to government decision making and deliver community benefit”.

D.3 Need for capacity building

“Do you see a need for capacity building in your country and if yes, which themes are most crucial to cover?”



Observations

Total

90

- 0 - No need
- 1
- 2

- 3
- 4
- 5 - Urgent need

- Don't know



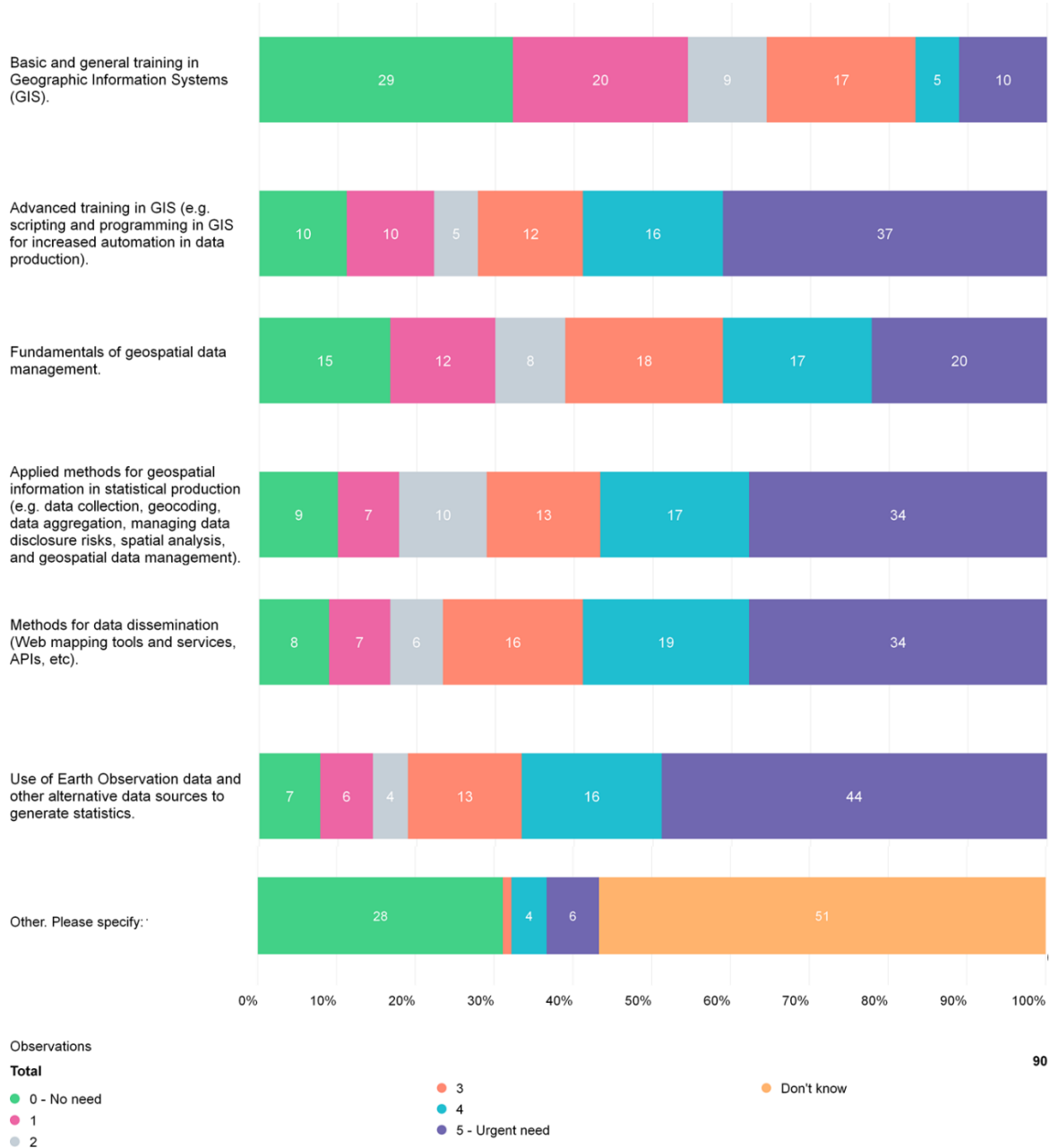
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The options “Assistance to establish a national fundamental spatial data infrastructure” and “Methods to build communication, cooperation and collaboration between NSO and NGIOs” had the highest share of 0-rankings (no need).

In question D.4 the need for training was explored. Respondents were presented to six fixed thematic options which they were asked to rate from 0 (no need) to 5 (urgent need).

D.4 Need for training

“Do you see a need for training in your country and if yes, which themes are most crucial to cover?”



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In analogy to question D.3 most of the options presented were considered urgent (5) or close to urgent (4) by a significant share (more than 50 per cent) of respondents. “Only basic and general training in GIS” and “Fundamentals of geospatial data management” were considered less urgent or not urgent at all by a significant share of respondents.

The top category was “Earth Observation data and other alternative data sources to generate statistics” which was rated urgent (5) or close to urgent (4) by 60 per cent of the respondents.

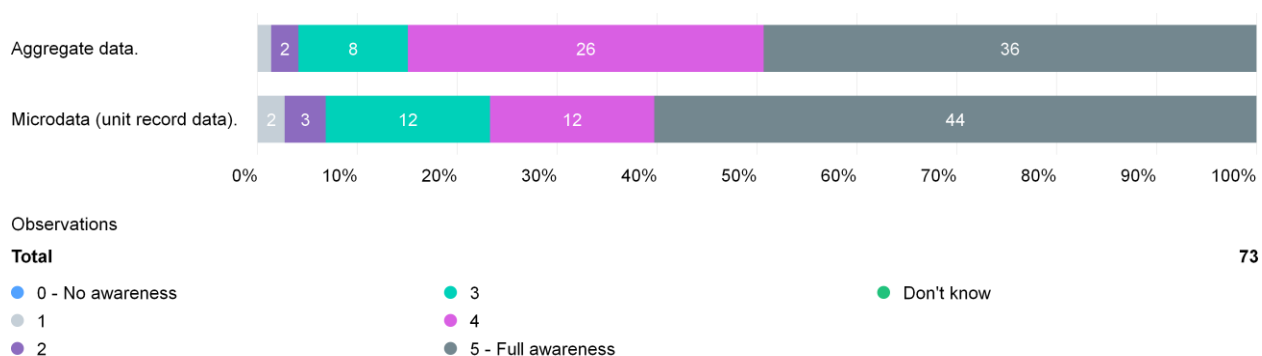
Management of privacy and confidentiality

Section E was a special module targeting management of privacy and confidentiality issues when using, sharing or releasing geospatial data. This section was included on behalf of the EG ISGI Task Team on confidentiality. The results from Section E are presented briefly in this report but will also be processed further by the EG ISGI Task Team on confidentiality.

Question E.1 addressed the level of awareness within the NSOs of specific disclosure issues when using, sharing or releasing geospatially enabled data. Respondents were presented to two options (Aggregate data and Microdata) which they were asked to rate the level of awareness for from 0 (no awareness) to 5 (full awareness).

E.1 Level of awareness of specific disclosure issues with geospatial data

“How would you describe the level of awareness, within your NSO, of specific disclosure issues when using, sharing or releasing geospatially enabled data?”



Out of 73 respondents, that filled Section E completely, only 11 rated the level of awareness with a 3 or lower for aggregated data and 17 for micro data. The vast majority rated for full awareness for both aggregate and microdata. Not very surprising is the fact, that the answers for aggregate data and microdata differ only slightly.

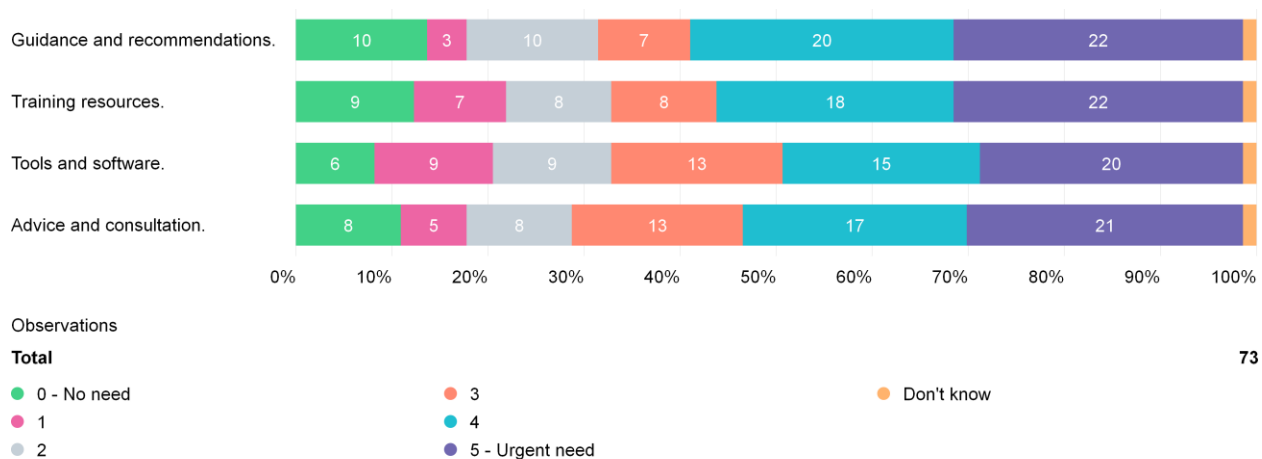
Those results suggest a very strong awareness for specific disclosure issues when dealing with geospatially enabled data.

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Question E.7 addressed the current needs in capacity building for the management of confidentiality. Respondents were presented to four fixed thematic options which they were asked to rate from 0 (no need) to 5 (urgent need).

E.7 Current needs in capacity building for the management of confidentiality

What are your current needs in capacity building for the management of confidentiality?



Guidance and recommendations: Only 10 out of 73 respondents have no need for Guidance and recommendations, whereas more than half (42 out of 73) report an urgent need (meaning a 4 or 5 on the scale).

Training resources: Only 9 out of 73 respondents have no need for Training resources, whereas more than half (40 out of 73) report an urgent need (meaning a 4 or 5 on the scale).

Tools and software: Only 6 out of 73 respondents have no need for Tools and software, whereas nearly half (35 out of 73) report an urgent need (meaning a 4 or 5 on the scale).

Advice and consultation: Only 8 out of 73 respondents have no need for Advice and consultation, whereas more than half (38 out of 73) report an urgent need (meaning a 4 or 5 on the scale).

In summary, on the one hand, a high level of awareness for the specific disclosure issues when using, sharing or releasing geospatially enabled data. On the other hand, there is a very strong need for all for all areas queried, i.e. Guidance and recommendations, Training resources, Tools and software as well as Advice and consultation.

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Comments and input from respondents

The EG ISGI appreciates the open comments provided by respondents at the final stage of the survey. Many respondents took the opportunity to express general concerns about lack of training and funding to successfully adopt frameworks for statistical-geospatial integration. Some respondents also provided additional explanations and in-depth information supporting their considerations. Finally, there were also comments suggesting improvement in design of questions to better capture the great variety of institutional arrangements in countries across the globe. All these comments provide the EG ISGI with valuable, complementary information, especially regarding the non-quantifiable aspects of statistical-geospatial data integration.

In Summary

As already concluded in the background section, the low response rate induces some bias problems when interpreting the data. Regional under-coverage does not necessarily have a significant impact on the answers to all questions in the survey, but some of the input, crucial to inform the work plan of the EG ISGI (particularly questions concerning the level of awareness as well as need for guidance, training and capacity building), are probably more prone to change the views with a broader base of respondents.

Besides the challenge of regional bias, the overall impression is a good balance between responding organisations. There is a slight overweight for NSOs among the responses. There is also a high-degree of coordinated responses where two or more organisations have provided one consolidated reply.

The recognition of both the GSGF and the IGIF is solid, though not necessarily high. As expected, the awareness of the GSGF is considered higher among NSOs whereas awareness of the IGIF seems more settled within NGIAs. The responses reflect a strong confidence in the GSGF. The usefulness of the GSGF is ranked high across all regions.

Looking into national practice, there is a high degree of Member States with operational NSDIs and working relationships between NSOs and NGIAs. Lack of access to fundamental geospatial information is not reflected as a significant problem. There are also positive reports on the maturity of data infrastructures and data management environments as well as indications on a significant momentum for fully georeferenced Censuses around the globe.

Furthermore, the preliminary results from the survey reflect a strong request for implementation guidance, training initiatives and capacity building. Worth noting is that this request is expressed by respondents from all regions, from experienced Member States as well as from Member States with less developed arrangements for statistical-geospatial integration.