

# Status of topographic Mapping in the World 2018

This is a follow-up to the questionnaire sent in 2012, to verify and to update information on the current status of mapping in the world. The information collected will eventually be used to develop country profiles, good practices and lessons learned in the dissemination and use of geospatial and mapping data. The results of this questionnaire will be collated and disseminated to countries.

Please note: *You can save the current status of the questionnaire by clicking "Resume later" on the bottom left. The button will appear on the next page. You will be asked to enter your email as well as to define a username and password. Both will be mailed to you together with a link to continue the questionnaire. If want to continue a questionnaire, you can click on "Load unfinished survey" on the bottom left of this page. You will be asked to enter your username and password that you created earlier.*

There are 77 questions in this survey

## PART A: Background Information

Please can you provide the following background information. Please note that no personal information will be published.

### 1 [ ]Country (or region)

Please write your answer here:

### 2 [ ]Background information

Please write your answer(s) here:

Name

Functional title

Institution, department or unit

E-mail

Persons/Institutions consulted

## PART B: National Topographic Mapping Coverage

Geospatial data can be collected as vector or raster data without reference to a particular scale. Scale of data collection is however still a valuable proxy, as it influences the density of displayable features, which are available through generalization at smaller scales. The scale ranges in the questionnaire are therefore related to the density of data content.

**3 [ ] At what scales are topographic digital data and/or map products (or series) produced and maintained? Choose the categories closest to your scales if they are different to those suggested below.**

Please choose **all** that apply:

- Category I: Scale 1 : 1 000 or greater
- Category II: Scale 1 : 5 000
- Category III: Scale 1 : 25 000
- Category IV: Scale 1 : 50 000
- Category V: Scale 1 : 100 000
- Category VI: Scale 1 : 250 000
- Category VII: Scale 1 : 500 000
- Category VIII: Scale 1 : 1 million or smaller

**4 [ ] For each scale that is used please list the percentage of coverage for your country, at that scale range and the average age of maps. (If possible, provide indexes that show the coverage of these data and/or maps by category in graphic form via e-mail to [radtke@ipi.uni-hannover.de](mailto:radtke@ipi.uni-hannover.de))**

	Map coverage as percentage of country area	Average age in years counting from today
Category I: Scale 1 : 1 000 or greater	<input type="text"/>	<input type="text"/>
Category II: Scale 1 : 5 000	<input type="text"/>	<input type="text"/>
Category III: Scale 1 : 25 000	<input type="text"/>	<input type="text"/>
Category IV: Scale 1 : 50 000	<input type="text"/>	<input type="text"/>
Category V: Scale 1 : 100 000	<input type="text"/>	<input type="text"/>
Category VI: Scale 1 : 250 000	<input type="text"/>	<input type="text"/>

	Map coverage as percentage of country area	Average age in years counting from today
Category VII: Scale 1 : 500 000	<input type="text"/>	<input type="text"/>
Category VIII: Scale 1 : 1 million or smaller	<input type="text"/>	<input type="text"/>

**5 [ ] In each case indicate the reference datum used.**

Please write your answer here:

**6 [ ] Do the maps and/or data have restricted access or limited circulation?**

Please choose **only one** of the following:

- Yes, all maps are restricted
- Maps are partially restricted
- No restrictions

**7 [ ] If maps and/or data have restricted access or limited circulation, can you indicate why and to whom?**

Please write your answer here:

**8 [ ] Are the maps and/or digital data sold to the public?**

Please choose **only one** of the following:

- Yes, all maps are sold
- Not all maps are sold
- No, maps are not sold

**9 [ ] Are the maps and/or digital data free of charge?**

Please choose **only one** of the following:

- Yes, all maps / data are free of charge / Open Data
- Some maps / data are free of charge / Open Data
- No maps / data are available free of charge

**10 [ ]Are maps free of charge to governmental institutions or certain stakeholders?**

Please choose **only one** of the following:

- Yes, all maps are free of charge to governmental institutions or certain stakeholders
- Some maps are free of charge to governmental institutions or certain stakeholders
- No maps are free of charge to governmental institutions or certain stakeholders

**11 [ ]What maps or data are available on the web?**

Please write your answer here:

**12 [ ]Are maps or data that are available on the web free?**

Please choose **only one** of the following:

- Yes
- No

**13 [ ]If applicable, could you indicate what pricing model is being applied to the map products and the digital data?**

Please write your answer here:

**14 [ ]Is there a cycle of map and data revision by:**

Please choose **all** that apply:

- Complete mapping i.e. revision of a national series
- Mapping of changed features or themes across the national series
- Mapping of changed features as they are detected on an ad-hoc basis

**15 [ ]Is the data revision reflected across all map/data scales indicated in Question 1?**

Please choose **only one** of the following:

- Yes
- No

**16 [ ]If not, state the revision cycle for each map and/or data scale**

Please write your answer here:

**17 [ ]By what methods is national data revision and map updating undertaken (if multiple methods, please indicate):**

Please choose **all** that apply:

- Field surveys

- Aerial photography
- Photogrammetric Mapping
- Mapping from Satellite imagery
- Third party data and/or sources
- Crowd sourcing by volunteers and/or other means

**18 [ ]If there is a prevalent method of mapping by category I to VIII for each map scale, please indicate for each.**

Please write your answer here:

**19 [ ]Is mapping and map updating done in-house or by outsourcing?**

Please choose **all** that apply:

- In-house
- Outsourcing

**20 [ ]Where applicable, can you describe the activities, processes and mechanisms by which the outsourcing is conducted?**

Please write your answer here:

**21 [] Does your organization conduct customer surveys on a regular basis?**

Please choose **only one** of the following:

Yes

No

**22 [] If “yes”, how is the mapping and product portfolio (including web applications) of your organization adjusted to the latest customer needs?**

Please write your answer here:

## **PART B (Addition): Urban Mapping**

The 2012 survey included questions on urban mapping scales 1:1000, 1:5000 and 1:10 000, however the lack of answers received suggested that urban mapping is generally not part of the national mapping effort and is carried out by the municipal administrations.

**23 []Please list where (e.g. from which institution) information on the urban mapping effort may be obtained.**

Please write your answer here:

**24 []Estimate the urban mapping coverage as a percentage (%) for the entire country.**

Only numbers may be entered in this field.

Please write your answer here:

**25 []Should no urban maps exist, is the information available as map substitutes, such as ortho imagery?**

Please choose **only one** of the following:

- Yes
- No

**26 []Are utility maps (e.g. electricity, sewage, water, gas) available?**

Please choose **only one** of the following:

- Yes



No

**27 [ ]If utility maps are available, at which scale?**

Please write your answer here:

## **PART C: National Imagery Acquisition**

### **28 [ ] National aerial photography acquisition**

Please choose the appropriate response for each item:

	Yes	No
Does a national aerial photography acquisition program exist?	<input type="radio"/>	<input type="radio"/>
Do you have a domestic aerial imagery capability?	<input type="radio"/>	<input type="radio"/>
Or is it obtained internationally?	<input type="radio"/>	<input type="radio"/>
Is imagery flown at regular time intervals?	<input type="radio"/>	<input type="radio"/>

### **29 [ ] Is analogue or digital photography used?**

Please choose **all** that apply:

- Analog
- Digital

### **30 [ ] Does your organization maintain an archive of historical aerial imagery?**

Please choose **only one** of the following:

- Yes
- No

### **31 [ ] Can this archive be digitally scanned?**

Please choose **only one** of the following:

- Yes
- No

### **32 [ ] National satellite imagery acquisition**

Please choose the appropriate response for each item:

	Yes	No
Does a national satellite imagery acquisition program exist?	<input type="radio"/>	<input type="radio"/>
Do you have a domestic satellite imagery capability?	<input type="radio"/>	<input type="radio"/>
Or is it obtained internationally?	<input type="radio"/>	<input type="radio"/>
Is satellite imagery acquired systematically at regular time intervals?	<input type="radio"/>	<input type="radio"/>
Or is satellite imagery acquired on an 'as needs' basis?	<input type="radio"/>	<input type="radio"/>

**33 [ ] Do you acquire and/or use other imagery types (such as LiDAR, Radar, IFSAR, etc.)?**

Please choose **only one** of the following:

- Yes
- No

**34 [ ] If so, can you please indicate coverage in percentage of area and in resolution? Are the point clouds generated from Lidar sensors converted into DSMs at a particular resolution? (For example: LiDAR along the coastal strip at 15cm pixel resolution).**

Please write your answer here:

**35 []Are any of these new imagery acquisition types (such as LiDAR) being used for the generation of digital elevation models (DEMs), digital terrain models (DTMs), and/or digital surface models (DSMs)? State pts/m2 and the coverage in km2 if possible.**

Please write your answer here:

**36 []Are orthophotos and orthophotomaps produced?**

Please choose **only one** of the following:

- Yes
- No

**37 []Orthophotos and orthophotomaps are produced at what scale? Do you have a digital orthoimagery database? At which ground sample distance?**

Please write your answer here:

**38 []Is there a national digital elevation model (DEM) available?**

Please choose **only one** of the following:

Yes

No

**39 []If applicable, show the resolution and coverage of any sub-national DEM, DTM and DSM data and/or products.**

Please write your answer here:

**40 []Do you produce, or is there the intention to produce, 3D urban and rural landscape models and/or product visualization?**

Please choose **only one** of the following:

Yes

No

**41 []If possible, indicate the coverage of 3D models produced in km<sup>2</sup>:**

Only numbers may be entered in this field.

Please write your answer here:

**42 []What is the type of digital geodatabase for topographic data? If unsure, please leave this question blank.**

Please write your answer here:

**43 []Are there other links with the topographic database, for example from the cadastre or utility database? If yes, please list which.**

Please choose **only one** of the following:

Yes

No

Make a comment on your choice here:

## **PART D: National Surveying and Cadastral Coverage**

**44 []Are there licensed surveyors operating in the country?**

Please choose **only one** of the following:

Yes

No

**45 []Is there national coverage of cadastral maps and/or data available?**

Please choose **only one** of the following:

Yes

No

**46 []Please list the scale of cadastral maps and state the percentage of the land covered by cadastral maps. Also indicate the updating of these maps, e.g. on transaction or at specific time intervals.**

Please write your answer here:

**47 []Is the National Mapping Agency (NMA) responsible for surveying and/or land titles and cadastre?**

Please choose **only one** of the following:

Yes

No

**48 []If the NMA is not responsible for these, please indicate the relevant agency/s that are responsible.**

Please write your answer here:

**49 []What are the cadastral maps and data used for?**

Please choose **all** that apply:

Land registration

Titles

Conveyancing

Taxation

Other:

**50 []Are the cadastral maps based on geodetic control?**

Please choose **only one** of the following:

Yes

No

**51 []If so which reference system is being used?**

Please write your answer here:

**52 []Are the property boundaries monumented in the field?**

Please choose **only one** of the following:

Yes

No



**53 [ ]How are the property maps and/or data updated?**

Please write your answer here:

**54 [ ]Could you list the number of government officials and private surveyors active in cadastral surveys?**

Please write your answer(s) here:

government officials

private surveyors

**55 [ ]What is the type of digital geodatabase for cadastral data? If unsure, please leave blank.**

Please write your answer here:

**56 [ ]Are there links to cadastral data?**

Please choose the appropriate response for each item:

	Yes	No
Are topographic and cadastral data linked?	<input type="radio"/>	<input type="radio"/>
Are there other links with the cadastral database?	<input type="radio"/>	<input type="radio"/>

**57 [ ]Are cadastral and topographical datasets harmonized?**

Please choose **only one** of the following:

Yes

No

**58 []Are they maintained in separate underlying data models and/or data bases or are data maintained in an integrated manner?**

Please choose **only one** of the following:

Yes

No

## **PART E: Organization**

**59 []Are the national topographic mapping, imagery acquisition, surveying and cadastral programs funded by your national Government?**

Please choose **only one** of the following:

Yes

No

**60 []Are you able to provide the annual mapping budget of the National Mapping Organization?**

Please write your answer here:

**61 []What is the number of mapping staff in the Organization, and what is the technical/administration mix? List the number of University educated mapping specialists, the number of engineers and the number of technicians in your organization.**

Please write your answer(s) here:

Number of mapping staff

Percentage of technical staff

Percentage of administration staff

Number of University educated mapping specialists

Number of engineers

Number of technicians

**62 []Is there a national spatial data infrastructure established in your country?**

Please choose **only one** of the following:

Yes

No

**63 []Are there any other agencies in your country producing digital or analogue base topographic data?**

Please choose **only one** of the following:

Yes

No

**64 []If so, could you briefly describe them and if possible list these organizations with their addresses?**

Please write your answer here:

**65 []In terms of approximate percentages (%) how are all of the different map and data products mentioned above delivered? Consider the following channels:**

Comment only when you choose an answer.

Please choose all that apply and provide a comment:

Hard copy paper maps

Digital data

Data and products downloaded online

Via web services

**66 [ ]What is the method of archival for the national data sets?**

Please write your answer here:

**67 [ ]Please describe measures applied in your organization to make sure that a sufficient number of engineers/technicians is constantly available:**

Please choose **all** that apply:

Capacity building in general

Study courses

Vocational training

Other:

## **PART F: Mapping by Private Sector**

**68 [] Do private mapping activities exist in your country?**

Please choose **only one** of the following:

- Yes
- No

**69 [] If possible, please indicate by whom (e.g. by Google, Here, TomTom and Crowd sourcing). You can list up to 5 different providers.**

Please write your answer(s) here:

1.

2.

3.

4.

5.

**70 [] If possible, indicate the percentage of map coverage in your country for each of the listed providers.**

Please write your answer(s) here:

1.

2.

3.

---

4.

5.

**71 [ ]What is the age of these data as compared to the national topographic mapping efforts?**

Please write your answer(s) here:

1.

2.

3.

4.

5.

**72 [ ]Do these private mapping activities use national topographic base data under an agreement?**

Please choose **only one** of the following:

Yes

No

**73 [ ]Are the private mapping efforts being used in updating of national topographic data?**

Please choose **only one** of the following:

Yes

No

## Part G: Legal and Policy

**74 []Are there any regulatory or institutional arrangements in place that mandates your organization to fulfil the role as the lead mapping agency in your country?**

Please choose **only one** of the following:

- Yes
- No

**75 []In your opinion do you think that a sound policy and legal framework (and issued governmental statement, laws, and or regulations) will enhance the national topographic mapping capacity of your nation?**

Please write your answer here:

**76 []Do you operate under a prevailing policy and legal framework?**

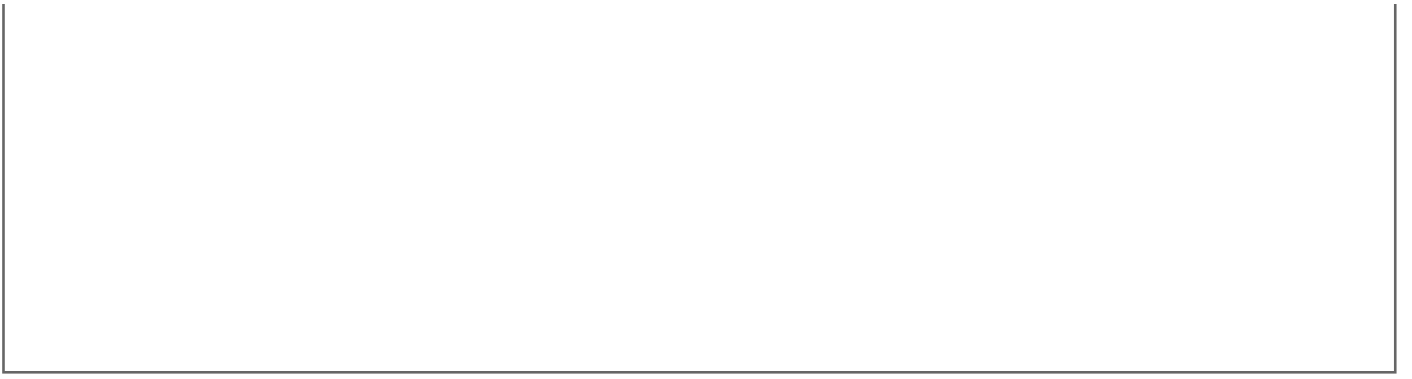
Please choose **only one** of the following:

- Yes
- No

**77 []If yes, please elaborate.**

Please write your answer here:





Thank you for filling out the questionnaire!  
31.03.2020 – 00:00

Submit your survey.  
Thank you for completing this survey.