

# EuroSDR Volunteered Geographic Information (VGI) survey's results

Frédéric Cantat – AGILE 2024 Workshop, June 4<sup>th</sup> 2024, Glasgow (Scotland)

## Acknowledgement

This survey is part of a EuroSDR project (commission 4) started End 2022 and led by the following people:

- Dr Ana-Maria Raimond, Gustave Eiffel University IGN-ENSG, France
- Dr Peter Mooney, Maynooth University, Ireland
- Dr Juha Oksanen, Finnish Geospatial Research Institute and National Land Survey
- Jeremy Morley, Ordnance Survey, Great-Britain
- Frédéric Cantat, EuroSDR and IGN, France

## The survey

- Aim: 14 years after the 1<sup>st</sup> EuroSDR action, to assess the current trends of VGI in NMCAs practices, to see how the field has advanced in this time
- The survey ran last November / December 2023
- On line
- Questionnaire set-up by the Workshop Conveners

### EuroSDR Volunteered Geographic Information (VGI) Survey

Fields marked with \* are mandatory.



For many years, [EuroSDR](#) has monitored the topic of "Volunteered Geographic Information" (VGI) (a phrase coined in 2007 by Goodchild) specifically because National Mapping and Cadastral Agencies (NMCAs) could leverage VGI, at a time when they have to do more with less. The first EuroSDR Workshop took place in 2009 in Wabern, Switzerland ([Crowd Sourcing for Updating National Databases?](#)). In 2012-13, EuroSDR led a joint collaborative workshop and project with the Association of Geographic Information Laboratories in Europe (AGILE) which supported NMCA-driven research into using crowdsourcing in national mapping ([Crowdsourcing in National Mapping](#), Mooney and Morley, EuroSDR official publication n° 64). Further workshops followed on in [2017](#) and [2020](#) in Leuven, Belgium.

Fourteen years after the first action, this survey aims to assess the current trends of VGI in NMCAs practices, to see how the field has advanced in this time. The survey will be online from November 4th to December 15th 2023 and its results will serve as an input for a workshop on Crowd Sourcing in National Mapping scheduled for early June 2024 (04/06) in Scotland (TBC). This workshop will bring together the NMCAs to present and share examples of their practices of VGI and discuss the survey results with representatives of academia and industry.

#### The EuroSDR VGI Programme Committee:

*Frédéric Cantat*, IGN France, chair of EuroSDR commission 4

*Jeremy Morley*, Ordnance Survey Great Britain

*Paul Kane*, Taille Éireann

*Ana-Maria Raimond*, Université Gustave Eiffel, ENSG-Géomatique

*Juha Oksanen*, National Land Survey of Finland, Finnish Geospatial Research Institute (FGI)

*Peter Mooney*, Maynooth University

By completing this survey, I agree that my anonymised data will be processed by EuroSDR. The results of the questionnaire will be processed in accordance with the GDPR regulations.

## The survey results: which organisations answered?

- 100% of EuroSDR members: 19 NMCAs



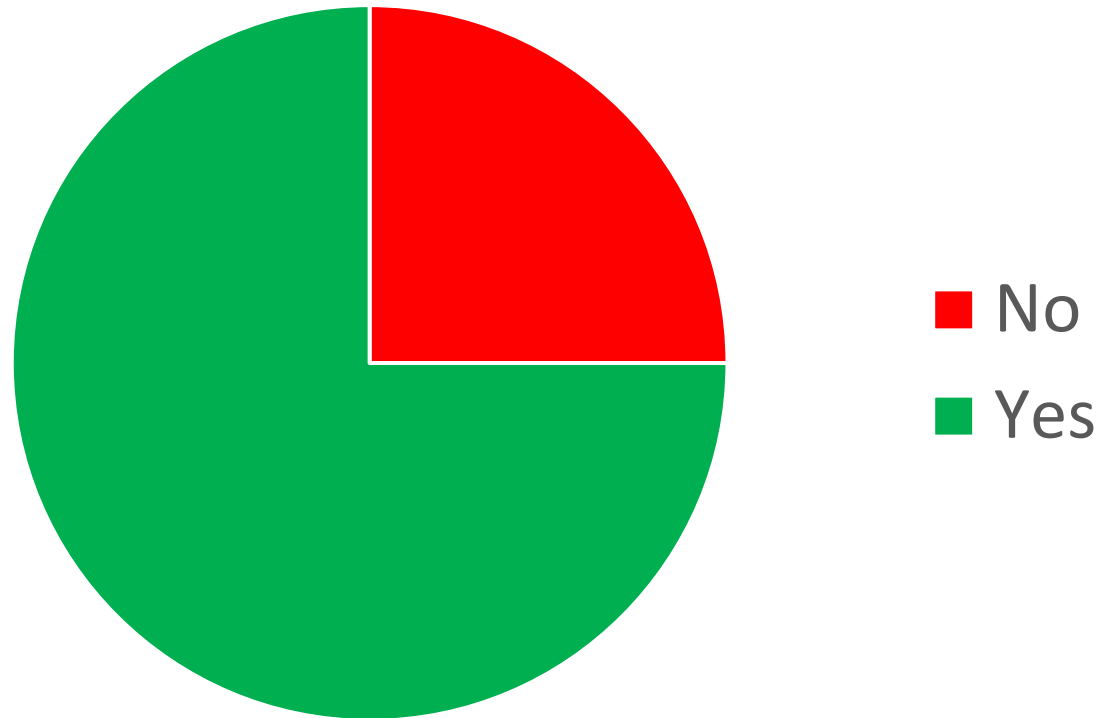
- 23 answers from NMCAs, 2 from ACADEMIA

## The survey results: which people (function) answered?

Head of department (GIS, cartography, surveying, data...)	11
Product manager	3
Associate Professor	2
Advisor	2
Programme manager	1
Manager (production)	1
Police officer	1
Manager (research)	1
Researcher	1
Research assistant (key account manager to OSM community)	1
Teamleader	1










- Production= 17; Strategy= 3; Research and Education= 5

Does your organisation use or has it used VGI in some way?









- Possible choice “*Yes and it is no longer used*”= 0

# Which types of volunteers/communities does your organisation address?

		Answers	Ratio
Hobby volunteers		15	60%
Its own employees		11	44%
Authorities		10	40%
Citizen scientists		8	32%
Academics, universities		7	28%
Private companies		5	20%
Others		5	20%
No Answer		5	20%
Schools		4	16%








- **Private companies:** “utilities, railway infrastructure; Forest /remote sensing companies; Charging station operators”

## When did your organisation first experiment with or use VGI?

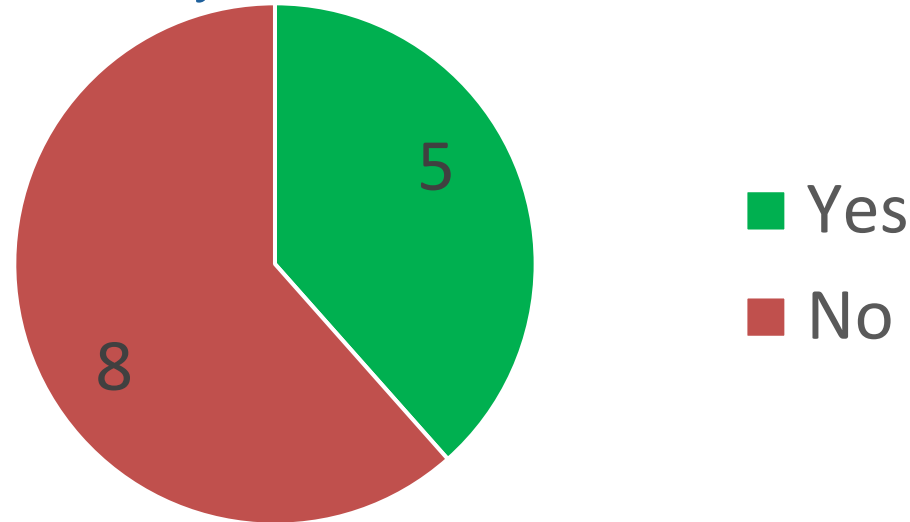
		Answers	Ratio
Before 2010		5	20%
From 2010 to 2015		7	28%
From 2016 to 2020		6	24%
From 2021 to present day		1	4%
Do not know		1	4%
No Answer		5	20%



## How would you assess the level of VGI use maturity of your organisation?






		Answers	Ratio
<b>Pilot phase:</b> VGI is a new concept, and not part of our organisation's culture		3	12%
<b>Project phase:</b> our organisation is willing to experiment with VGI but continuation of project will depend on success of the project		3	12%
<b>Programme phase:</b> organisation sees the advantages of VGI but there are still questions / issues to be addressed		5	20%
VGI is <b>institutionalised</b> within the organisation and has become part of the organisation's culture		5	20%
VGI is not only institutionalised within our organisation, our organisation is also considered to be <b>a leader in the VGI field / a role model</b> for other organisations		0	0%
Other		3	12%
Do not know		1	4%
No Answer		5	20%

Have you ever discontinued any VGI programme? If yes, can you say which one and why?









- *“Location of coastal emergency telephones (more other efficient way)”*
- *“Never published. Too complicated for the Backoffice and fear of overload for the public”*
- *“Collaboration with scouts. Results lower than expected”*
- *“The former platform PAYSAGE has been deactivated due to a lack of maintenance resources”*
- *“Place names reporter application and road blocks reporter drive”*







What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Change detection**

		Answers	Ratio
Not important at all		0	0%
Not very important		1	4%
Neutral		2	8%
Somewhat important		3	12%
<b>Very important</b>		<b>13</b>	<b>52%</b>
No Answer		6	24%







What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Validation**

		Answers	Ratio
Not important at all		2	8%
Not very important		2	8%
Neutral		3	12%
<b>Somewhat important</b>		<b>7</b>	<b>28%</b>
Very important		4	16%
No Answer		7	28%







What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Currency**

		Answers	Ratio
Not important at all		2	8%
Not very important		2	8%
Neutral		5	20%
Somewhat important		4	16%
Very important		4	16%
No Answer		8	32%

What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Added value information**







		Answers	Ratio
Not important at all		1	4%
Not very important		1	4%
Neutral		1	4%
<b>Somewhat important</b>		<b>7</b>	<b>28%</b>
<b>Very important</b>		<b>7</b>	<b>28%</b>
No Answer		8	32%

What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Spatial Accuracy**

		Answers	Ratio
Not important at all		2	8%
Not very important		4	16%
Neutral		4	16%
Somewhat important		5	20%
Very important		2	8%
No Answer		8	32%







What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Attribute**

**Accuracy**







		Answers	Ratio
Not important at all		1	4%
Not very important		1	4%
Neutral		1	4%
Somewhat <b>important</b>		<b>9</b>	<b>36%</b>
Very important		<b>5</b>	<b>20%</b>
No Answer		8	32%












What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Machine learning / AI training data**

		Answers	Ratio
Not important at all		6	24%
<b>Not very important</b>		2	8%
Neutral		4	16%
Somewhat important		3	12%
Very important		2	8%
No Answer		8	32%







What are the reasons/ motivations for VGI usage within your organisation? Indicate How important is the use of VGI for the following activities, within your organisation: **Public engagement**

		Answers	Ratio
Not important at all		1	4%
Not very important		1	4%
Neutral		2	8%
Somewhat important		5	20%
<b>Very important</b>		<b>9</b>	<b>36%</b>
No Answer		7	28%

# What types of information have you collected with VGI? <sup>1/2</sup>

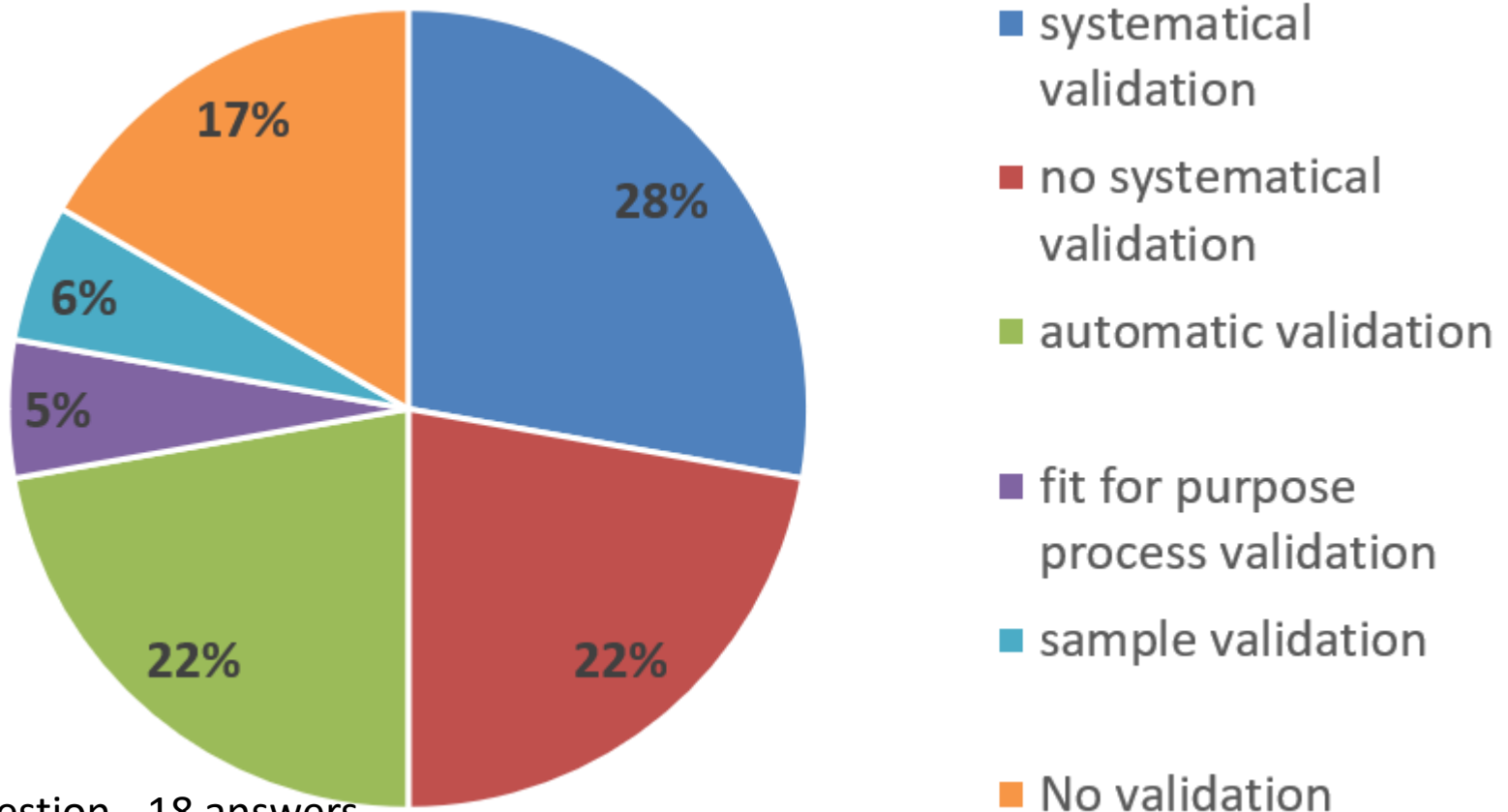
		Answers	Ratio
Buildings		12	48%
Tracks and Paths		12	48%
Points of interest (e.g. tourist attractions, cash machines, public telephones, etc.)		12	48%
Roads		10	40%
Names		10	40%
Land cover		9	36%
Land use		9	36%
Structures (e.g. bridges, pylons, silos, dams, etc.)		8	32%
Natural features (woodland, etc.)		8	32%

## What types of information have you collected with VGI? 2/2

Hydrographic features (e.g. rivers, lakes, canals, etc.)		6	24%
Addresses		6	24%
Other		4	16%
Images (e.g. photography, drone imagery)		3	12%
Elevation and terrain model		1	4%
Do not know		0	0%
No Answer		6	24%

- **Others:** Historical topographical data (e.g. 19th century)
- Georeferencing historical maps
- Condition of geodetical points
- Flood delineation

If possible, could you comment here on how you manage the quality of information received?



Open question - 18 answers

What is your vision of the future of VGI in your organisation?

Key success factor(s) and obstacles to VGI's use?

- **Vision:** *“A shift from “collecting” role of data” and “increase use of VGI” vs “potentially useful but lower priority” and “At the moment “volunteered” and public authority do not match”*
- **Success keys:** data quality, *“Manage to get VGI as an integral part of the organisation’s culture”, “Open collaboration attitude”, “make VGI a permanent part of educational program”*
- **Obstacles:** data quality/reliability (6), lack of resources to implement tools for users and workflows (4), issue with non-compatible open license (CC-BY vs ODbL) (2)

Open question - 25 answers

# Thank you for your attention!



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