

# GGOS-Portal


## General Idea and Community Survey Results

Martin Sehnal<sup>1</sup>, Detlef Angermann<sup>2</sup>, Kirsten Elger<sup>3</sup>, Lena Steiner<sup>4</sup>

<sup>1</sup> BEV - Federal Office of Metrology and Surveying (Austria), <sup>2</sup> DGFI-TUM, Deutsches Geodätisches Forschungsinstitut, Technical University of Munich (Germany), <sup>3</sup> GFZ Potsdam (Germany), <sup>4</sup> TU Wien - Technical University of Vienna (Austria)

GGOS Days 2023  
Thursday, September 21, 2023  
Alcalá de Henares, Spain



 Federal Office  
of Metrology and  
Surveying



[ggos.org/portal](https://ggos.org/portal)

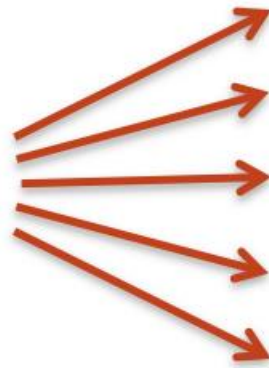
# GGOS-Portal: Metadata Platform

Federal Office  
of Metrology and  
Surveying



*GGOS-Portal: „A unique access point for all data, products and information relevant in the framework of GGOS for Earth Science and applications”*

Now: Users get lost in mountains of information

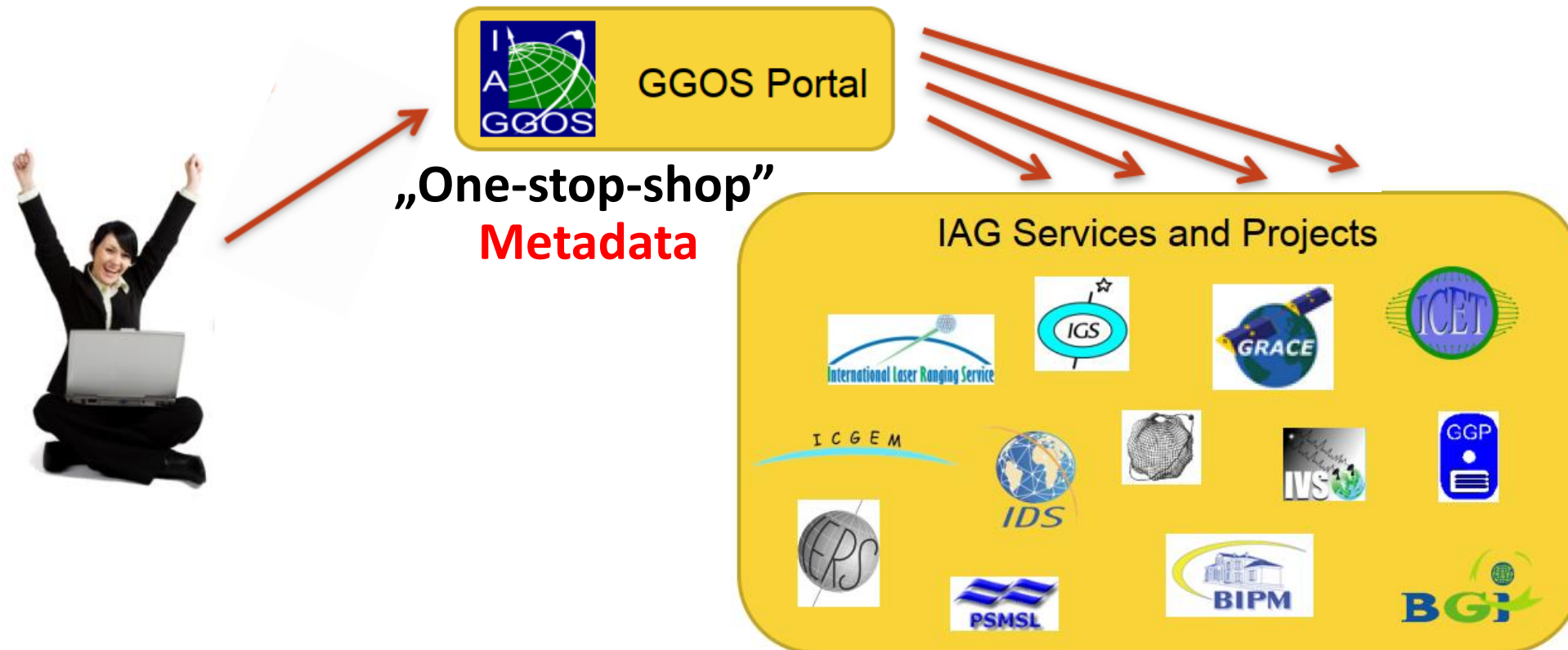


# GGOS-Portal: Metadata Platform

Federal Office  
of Metrology and  
Surveying



*„A unique access point for all data, products and information relevant in the framework of GGOS for Earth Science and applications”*



# GGOS-Portal: Webpage

Federal Office  
of Metrology and  
Surveying



## Webpage GGOS Portal: [ggos.org/portal](http://ggos.org/portal)

- Introduction
- Metadata & DOI in Geodesy
- History of GGOS-Portal



[ggos.org/portal](http://ggos.org/portal)

**GGOS Portal – Community Survey**

GGOS is conducting a survey to inquire the opinions of geodetic data users on data availability and visibility and to identify requirements for a comprehensive and user-friendly GGOS-Portal. In addition GGOS will obtain an overview of the current availability of data products and their metadata.

- Do you work with geodetic data or products?
- Do you produce them?
- Do you provide them via an repository or data center?

If yes, you are in the right place! Please take **10 to 15 minutes** and participate in this survey to help us developing the GGOS-Portal, a future unique access point for geodetic data and products:

[Click here to Start the Survey](#)

Please participate in this survey until **April 28**. Don't miss it ...

3	0	15	56	42
WEEKS	DAYS	HOU...	MIN...	SECO...

**GGOS-Portal – Introduction**  
Idea of a Unique Platform for Geodetic Data and Products

The services of the International Association of Geodesy (IAG) provide very important and valuable geodetic data,

2009



### GGOS Book - Detailed Description of a GGOS-Portal

In a chapter of the "Global Geodetic Observing System" book (Springer) the structure of the GGOS-Portal was defined.

2009-2011



### First GGOS-Portal Prototype

The first prototype of the GGOS portal ([ggos-portal.org](http://ggos-portal.org)) was developed by BKG (Germany) using the GeoNetwork Software Package.



GGOS-Portal Screenshot – IAG Travaux Report 2007-2011

Presentation "GGOS Portal and Meta Data" – Bernd Richter & Carey Noll – PDF File

2012



### Stop of GGOS-Portal developments

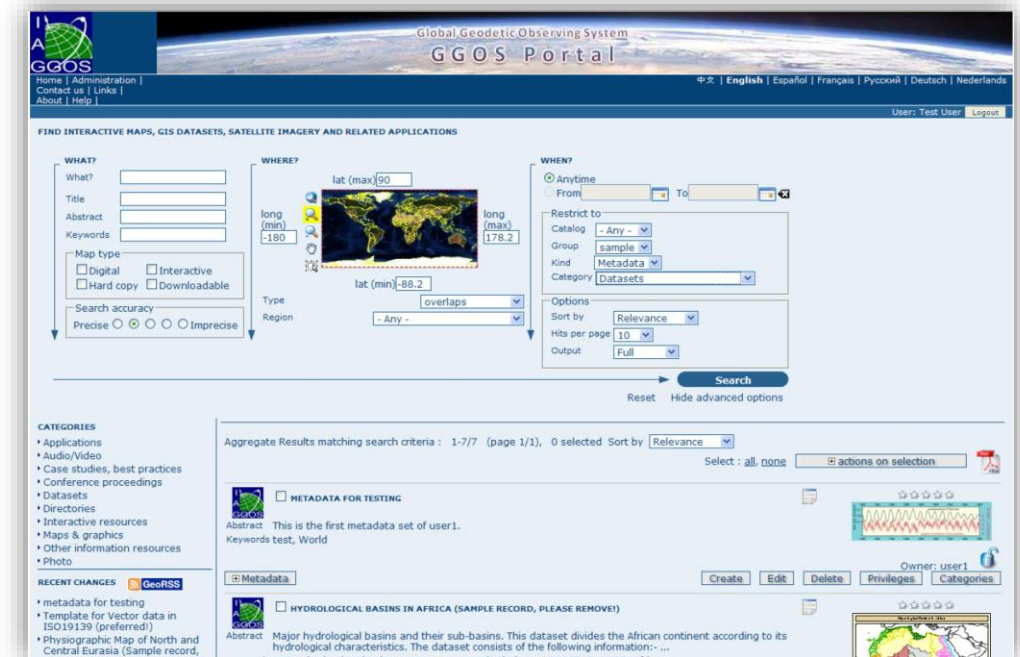
For personnel reasons, the development of the GGOS-Portal at BKG was discontinued.

# History of GGOS Portal

Federal Office  
of Metrology and  
Surveying

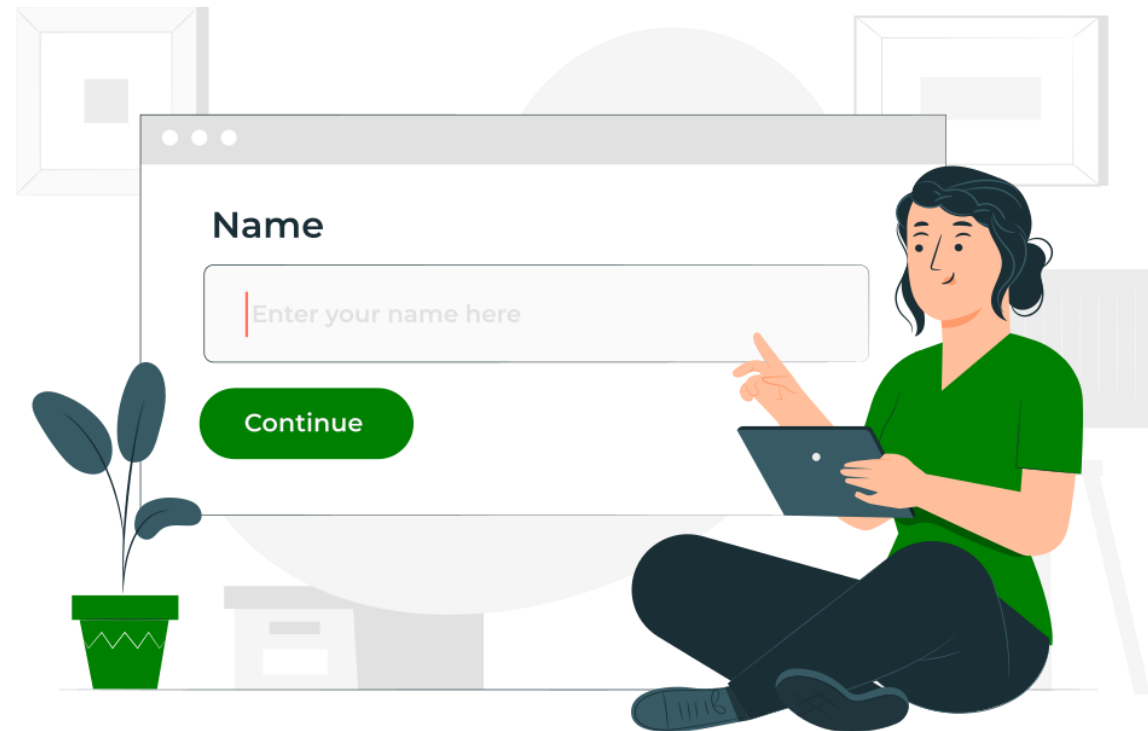


- 2007: **First idea** (UAW)
- 2009-2011: **First prototype** (by Bernd Richter at BKG)
- **2012: Stop of developments**
- 2020: Building up the **GGOS Information Platform** ([www.ggos.org](http://www.ggos.org))
- 2022: Idea to **revive** the GGOS Portal
- **2023: Community survey Feasibility study**



GGOS-Portal Screenshot – IAG Travaux Report 2007-2011

# Community Survey user needs and opinions



# GGOS-Portal: Survey



- Duration: March-April 2023
- Objective - Get overview about:
  - Geodetic data usage (user, producer, provider)
  - Provision of Metadata and DOI's for geodetic data
  - Opinion about a GGOS-Portal and needed functions



# Survey Results

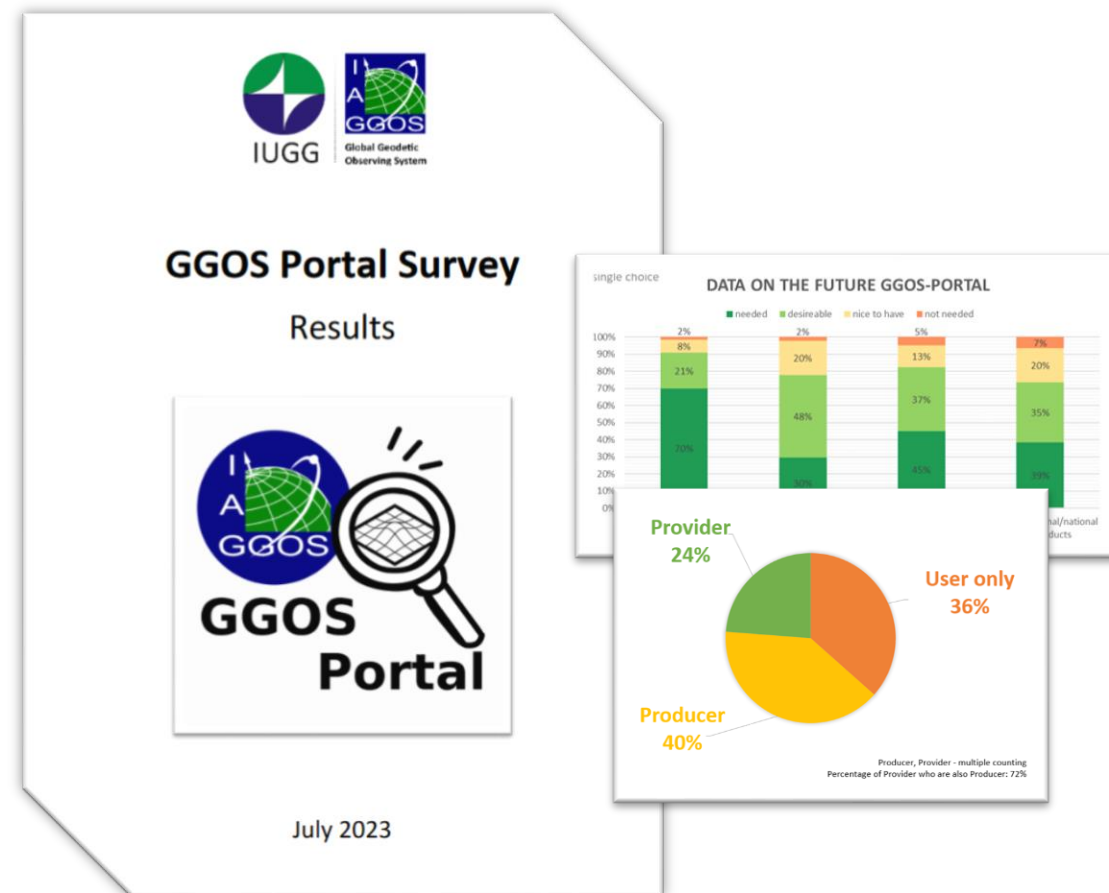
Federal Office  
of Metrology and  
Surveying



- Results: Please visit webpage



[ggos.org/portal](https://ggos.org/portal)



[DOI: 10.5281/zenodo.8113241](https://doi.org/10.5281/zenodo.8113241)

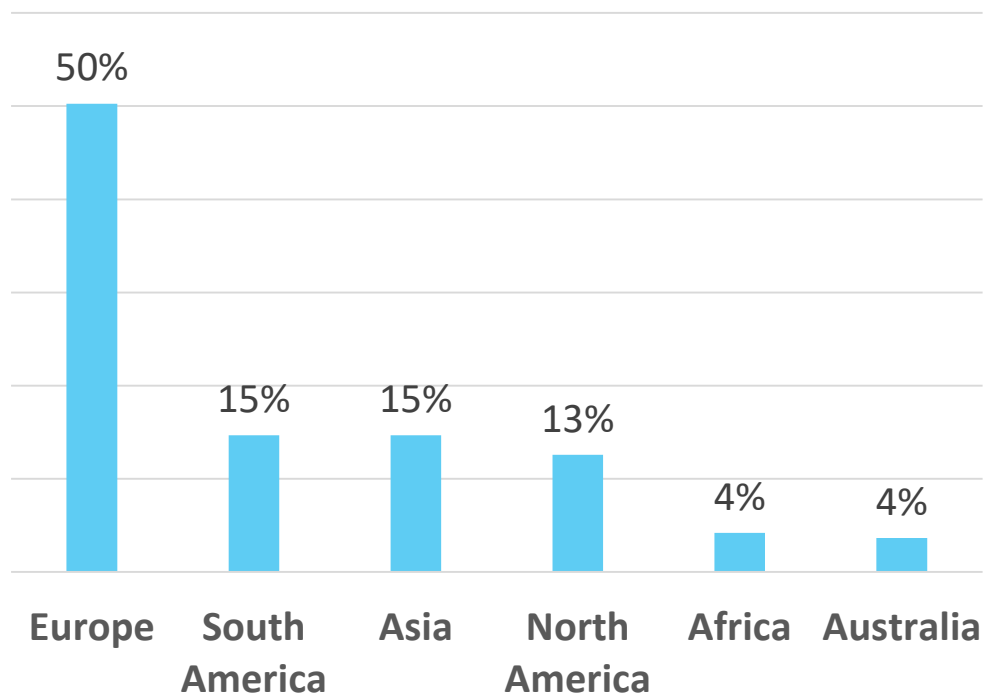
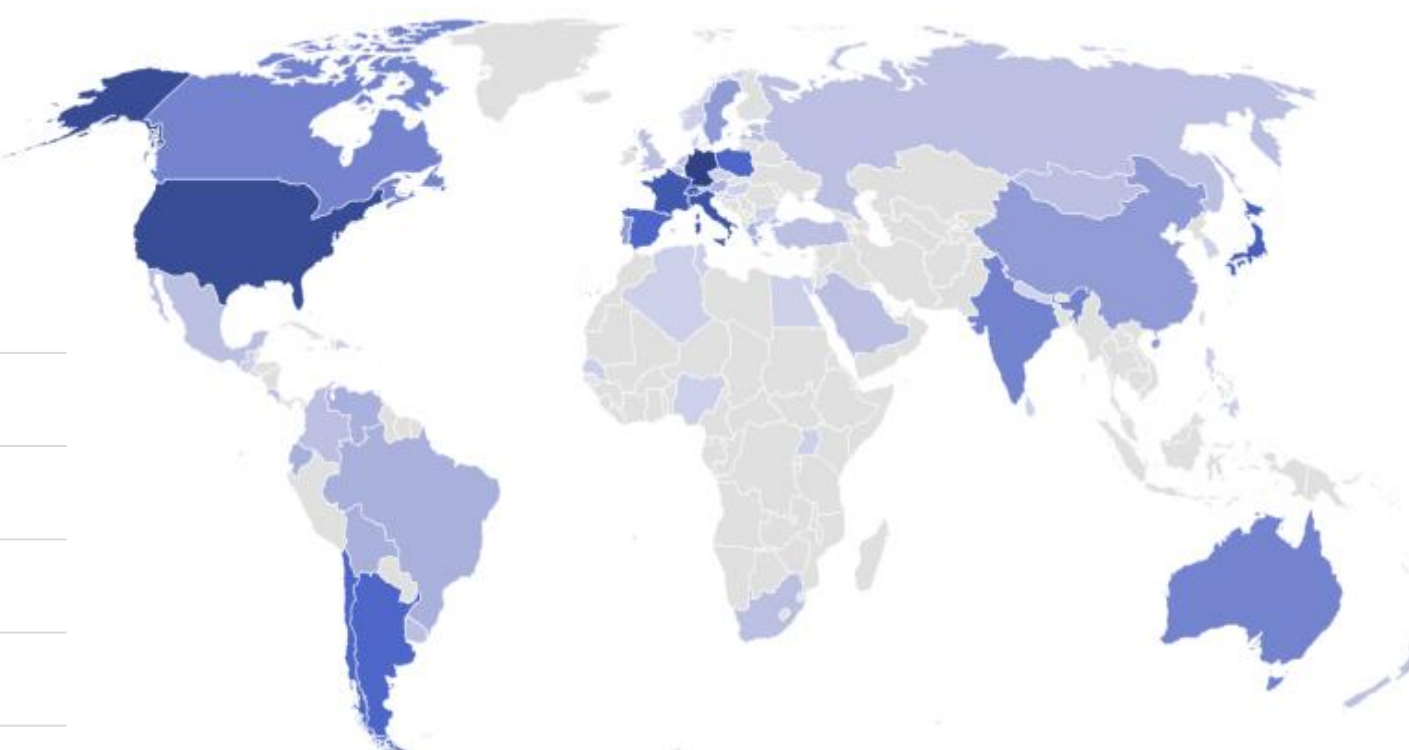


# Participants – Worldwide Coverage

Federal Office  
of Metrology and  
Surveying



**195**  
participants



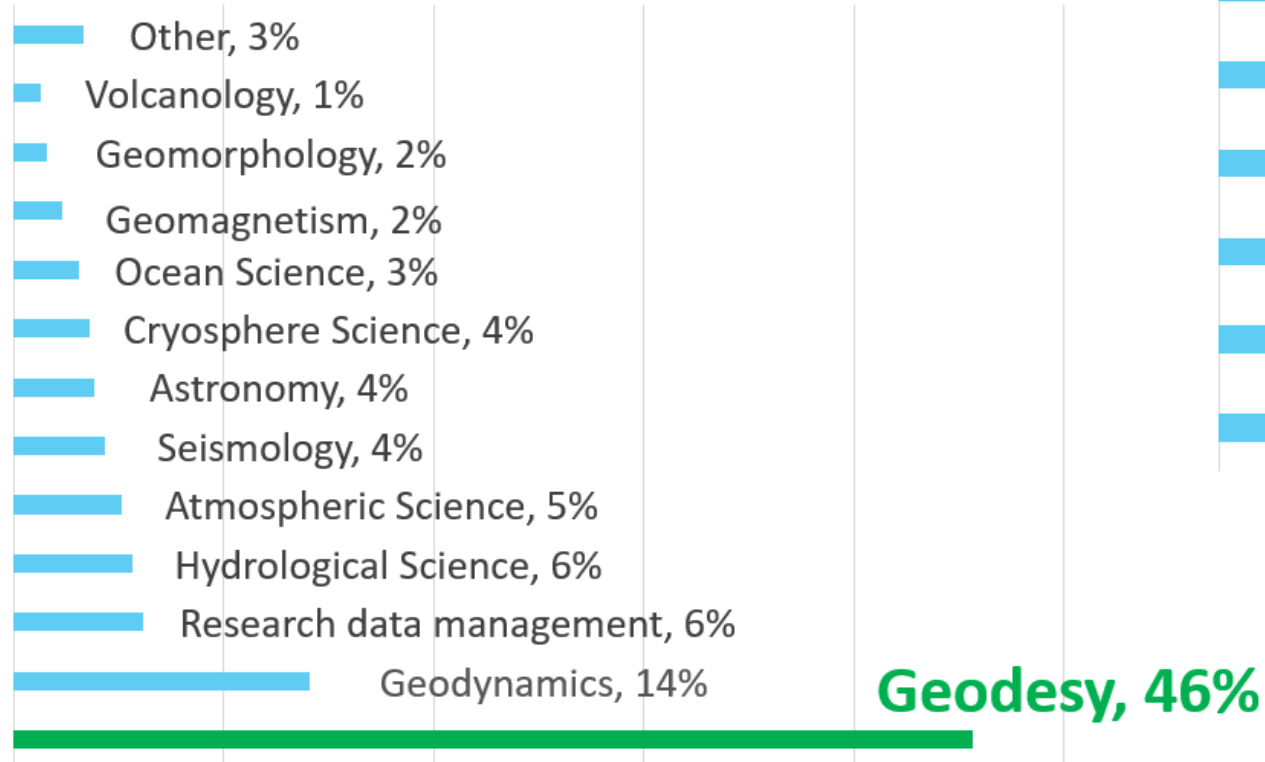
**57**  
countries

GGOS Portal  
Survey Results  
[ggos.org/portal](http://ggos.org/portal)

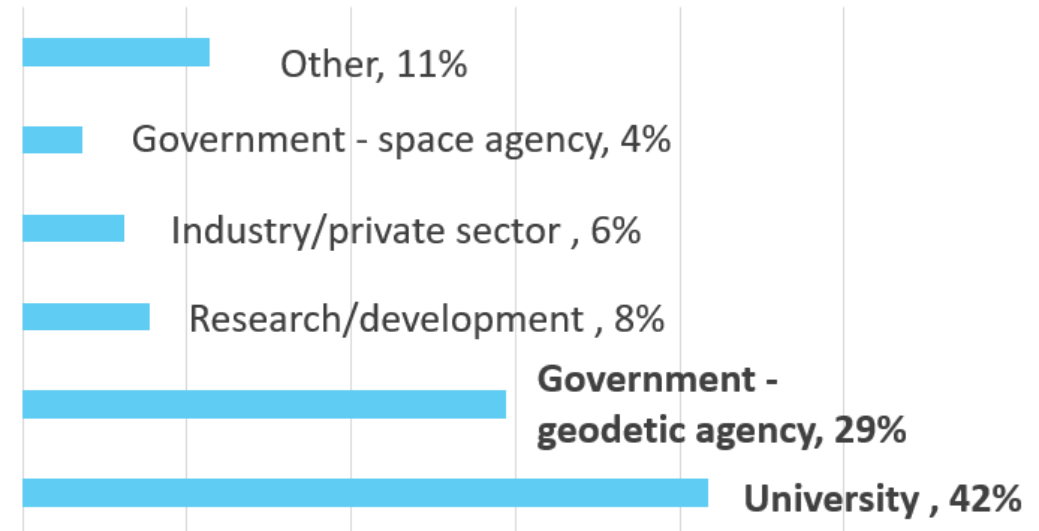


# Participants – Field of Work

## Scientific working field



## Kind of organization

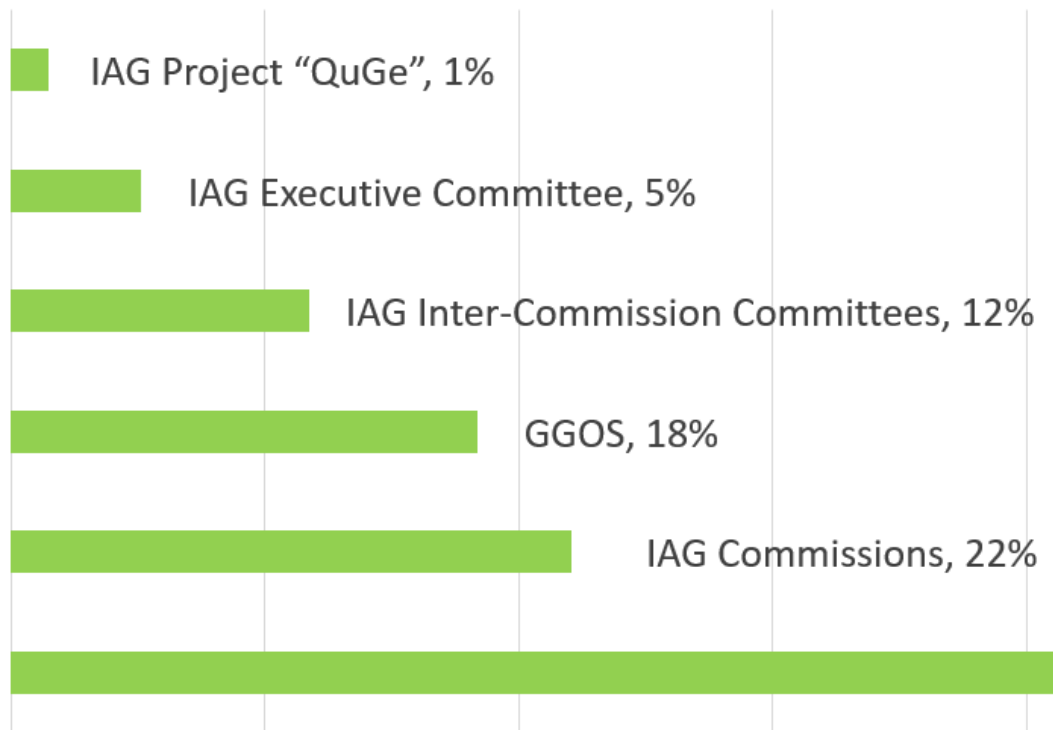


# Participants – IAG Involvement

Federal Office  
of Metrology and  
Surveying



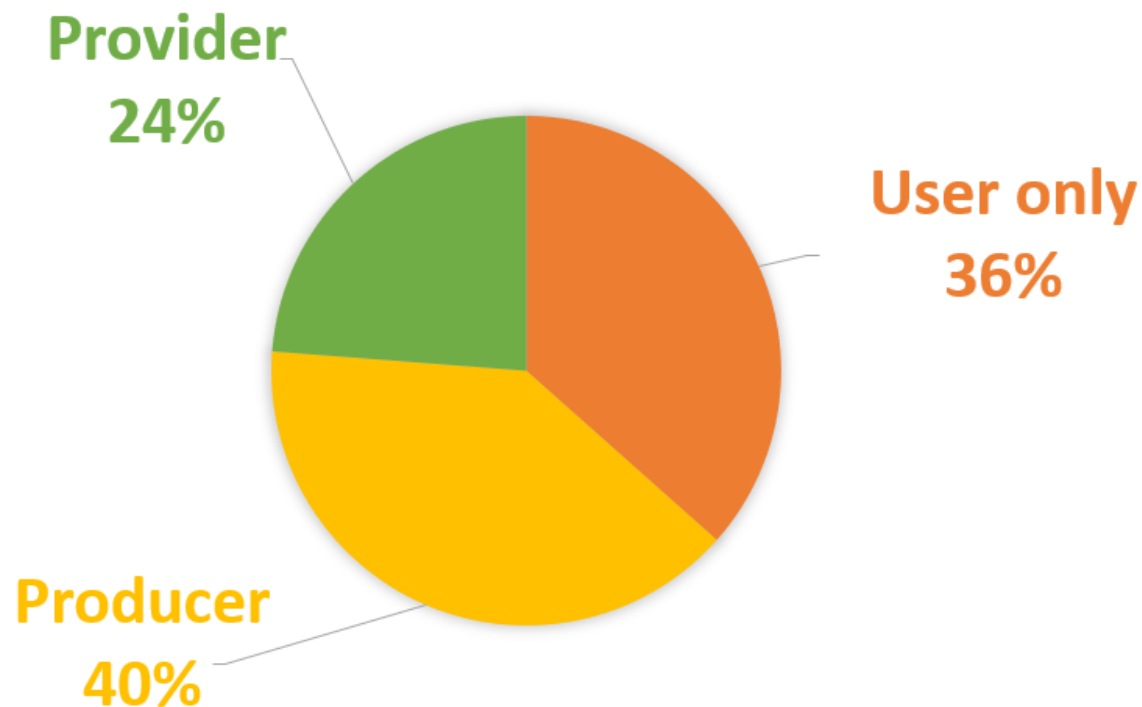
## IAG sub-components



GGOS Portal  
Survey Results  
[ggos.org/portal](https://ggos.org/portal)



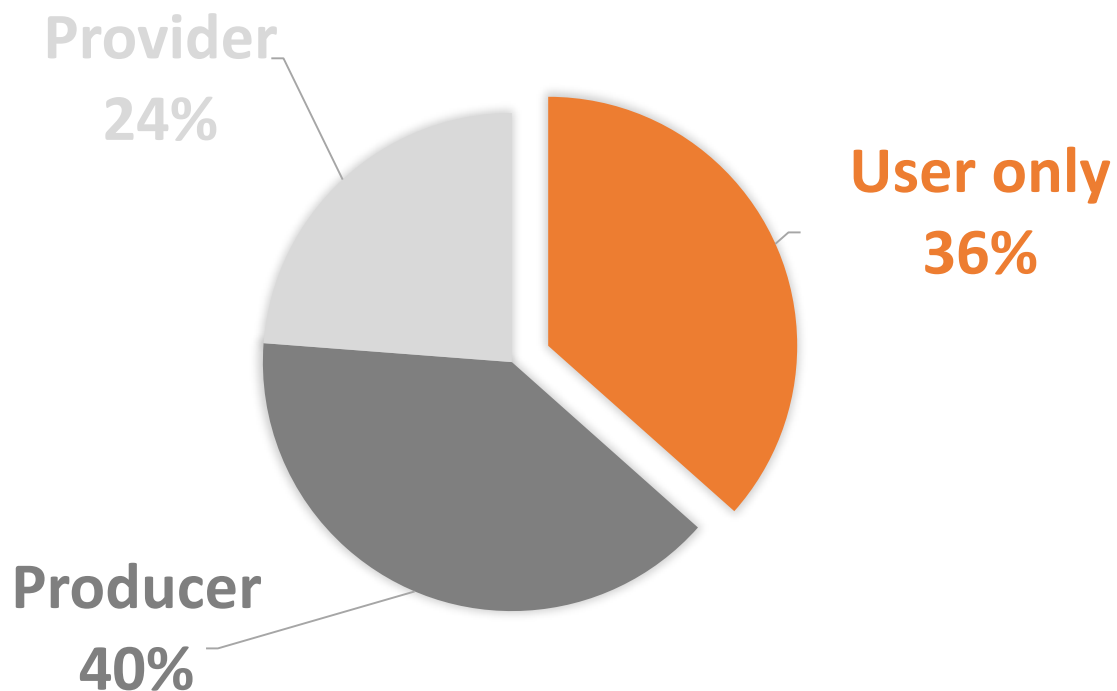
# Geodetic Data - Interaction



Producer, Provider - multiple counting  
Percentage of Provider who are also Producer: 72%



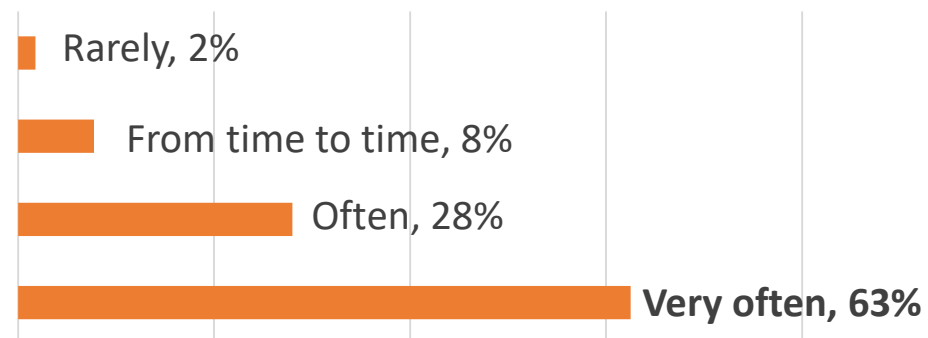
# Geodetic Data - User



## Geodetic Data - Used for:

- 64 % Positioning and navigation
- 63 % Generating further geodetic products
- 51 % Earth System analysis
- 27 % Climate change analysis

## How often used?

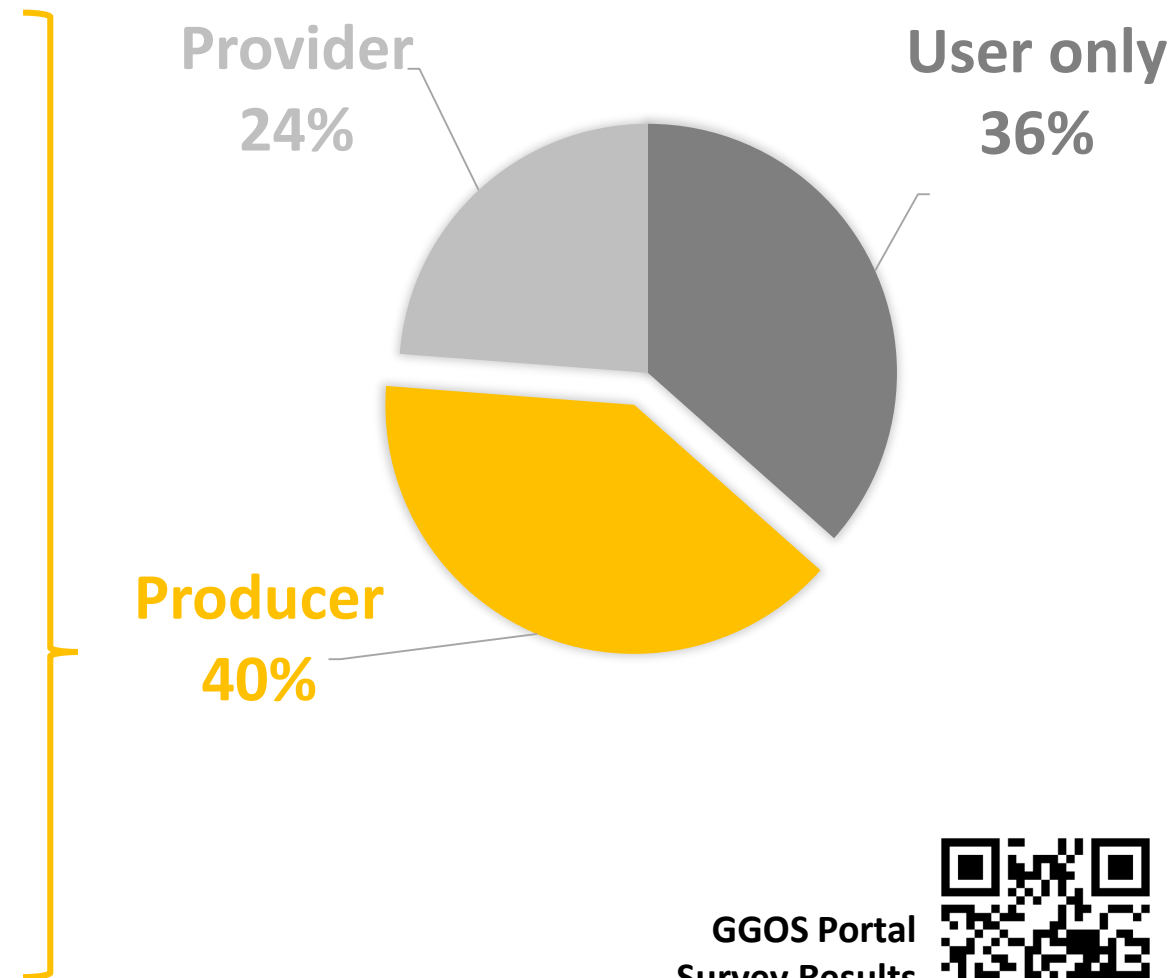
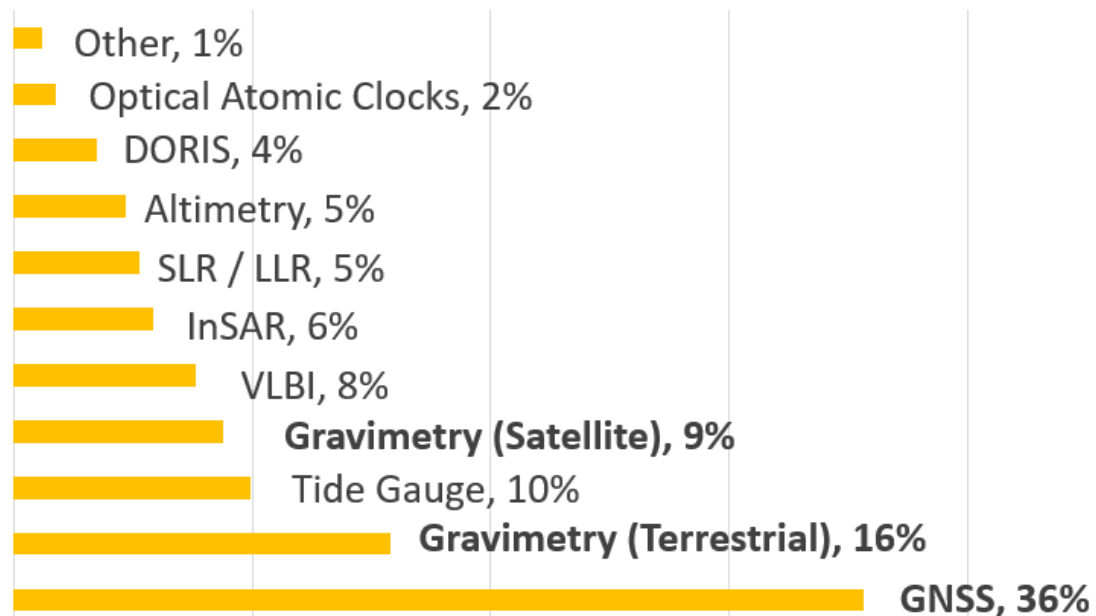


# Geodetic Data - Producer

## Kind of produced data:

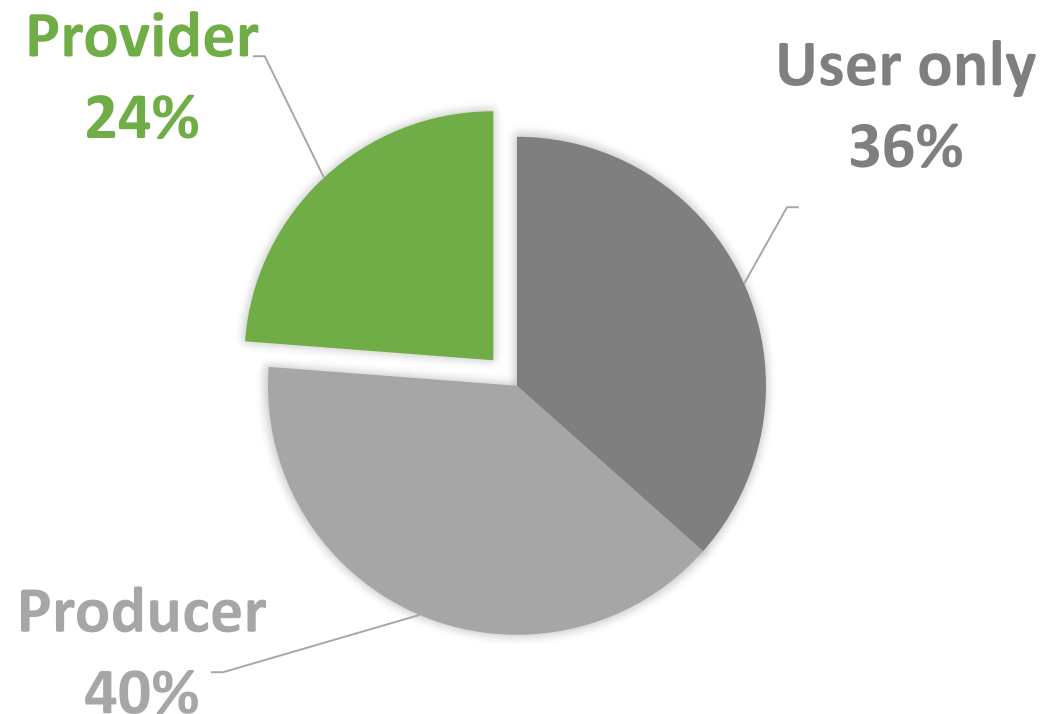
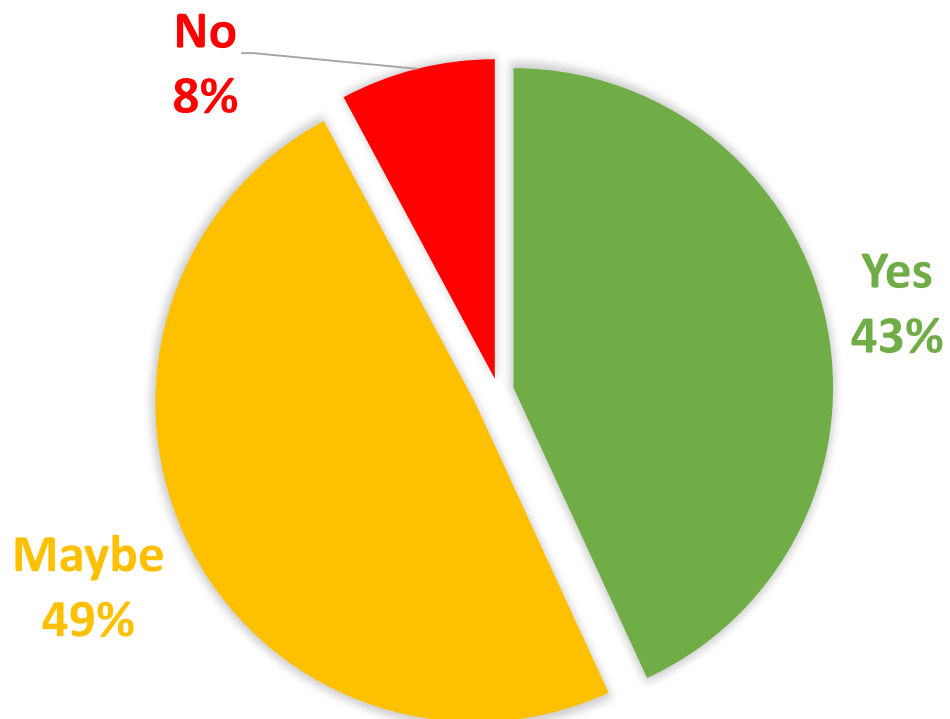
- 49 % **Geodetic Product**
- 43 % **Geodetic Observation Data**
- 8 % **Other Products (derived with geodetic data)**

## Used Observation Technique for Product:

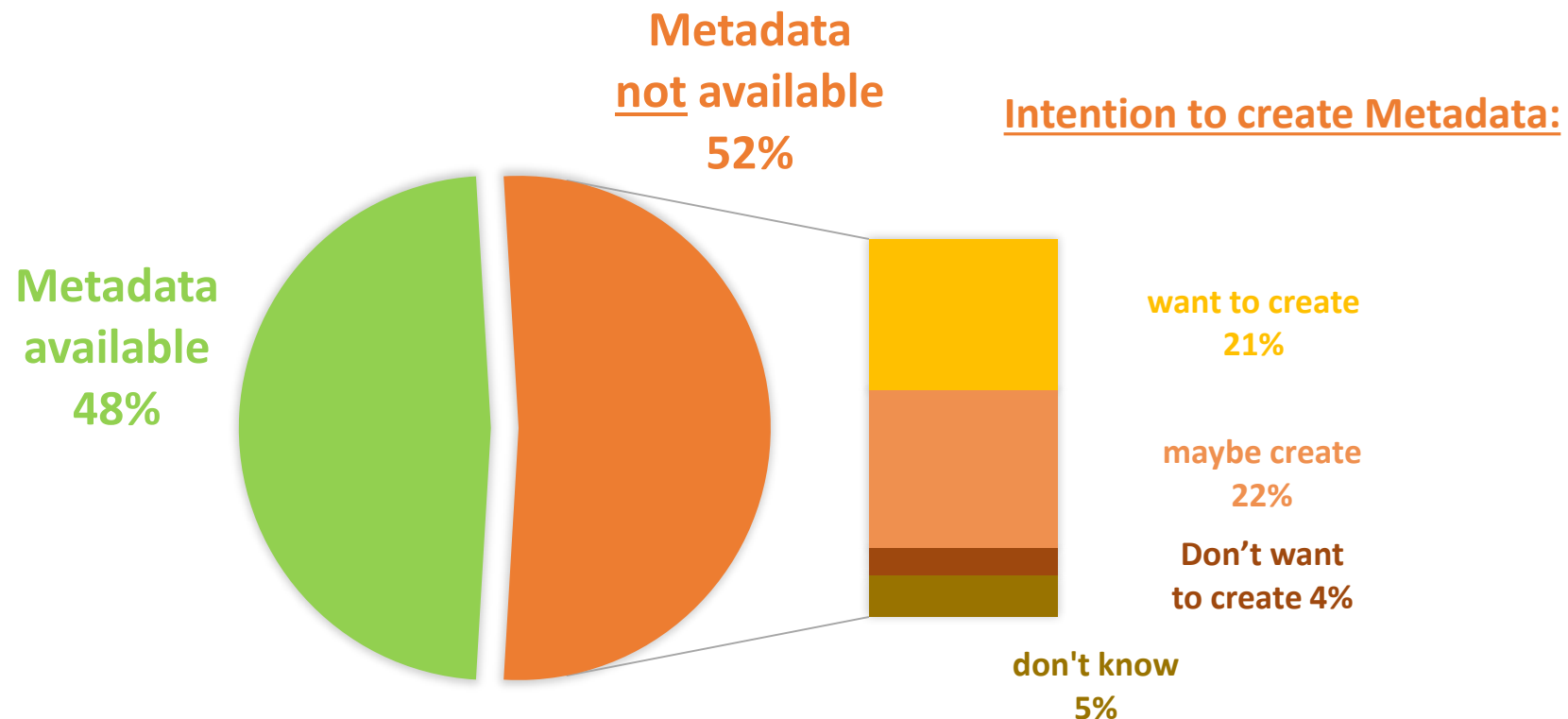


# Geodetic Data - Provider

Interest on publishing data at GGOS Portal?

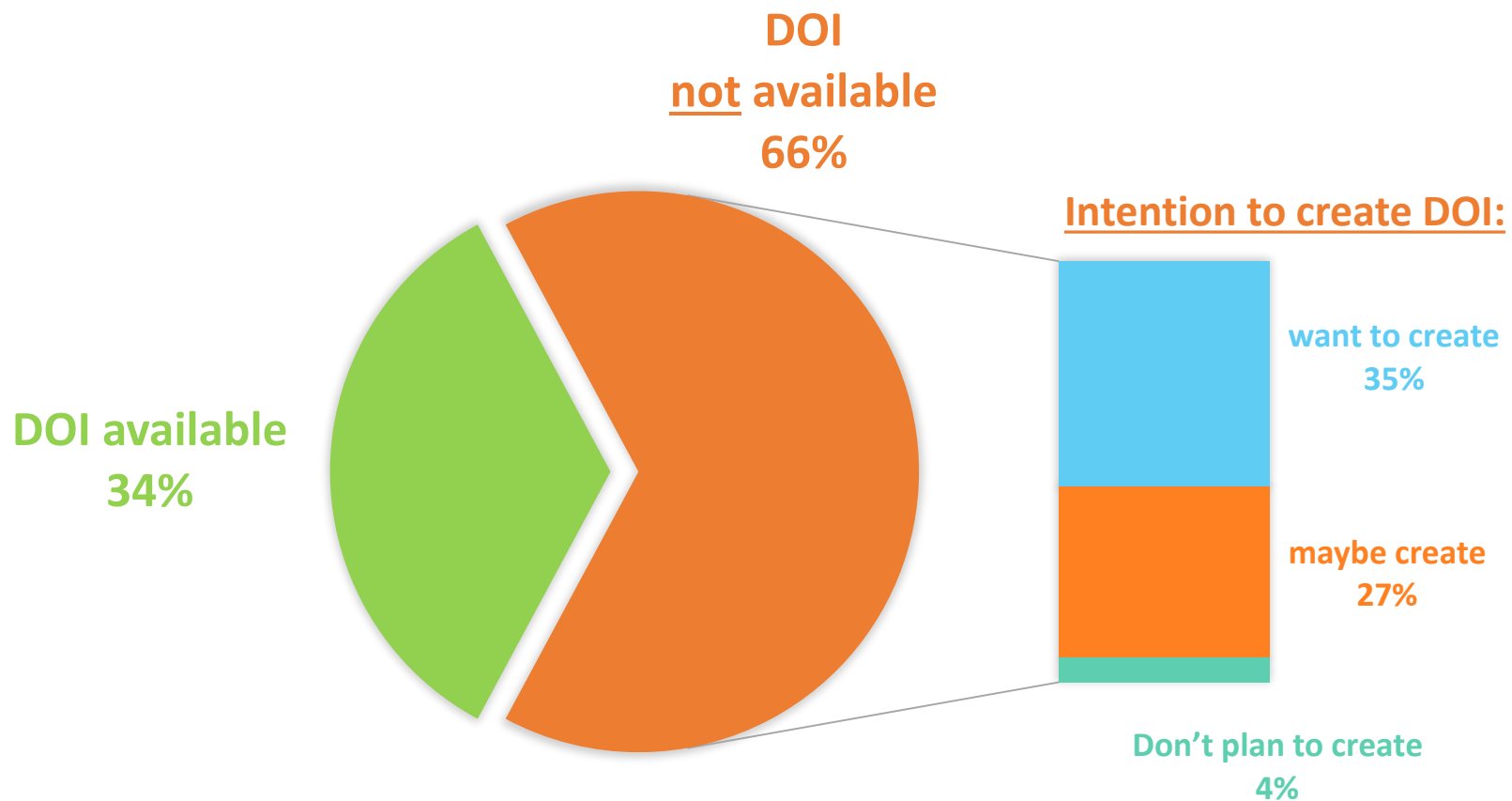


# Geodetic Data Provider - Metadata





# Geodetic Data Provider - DOI

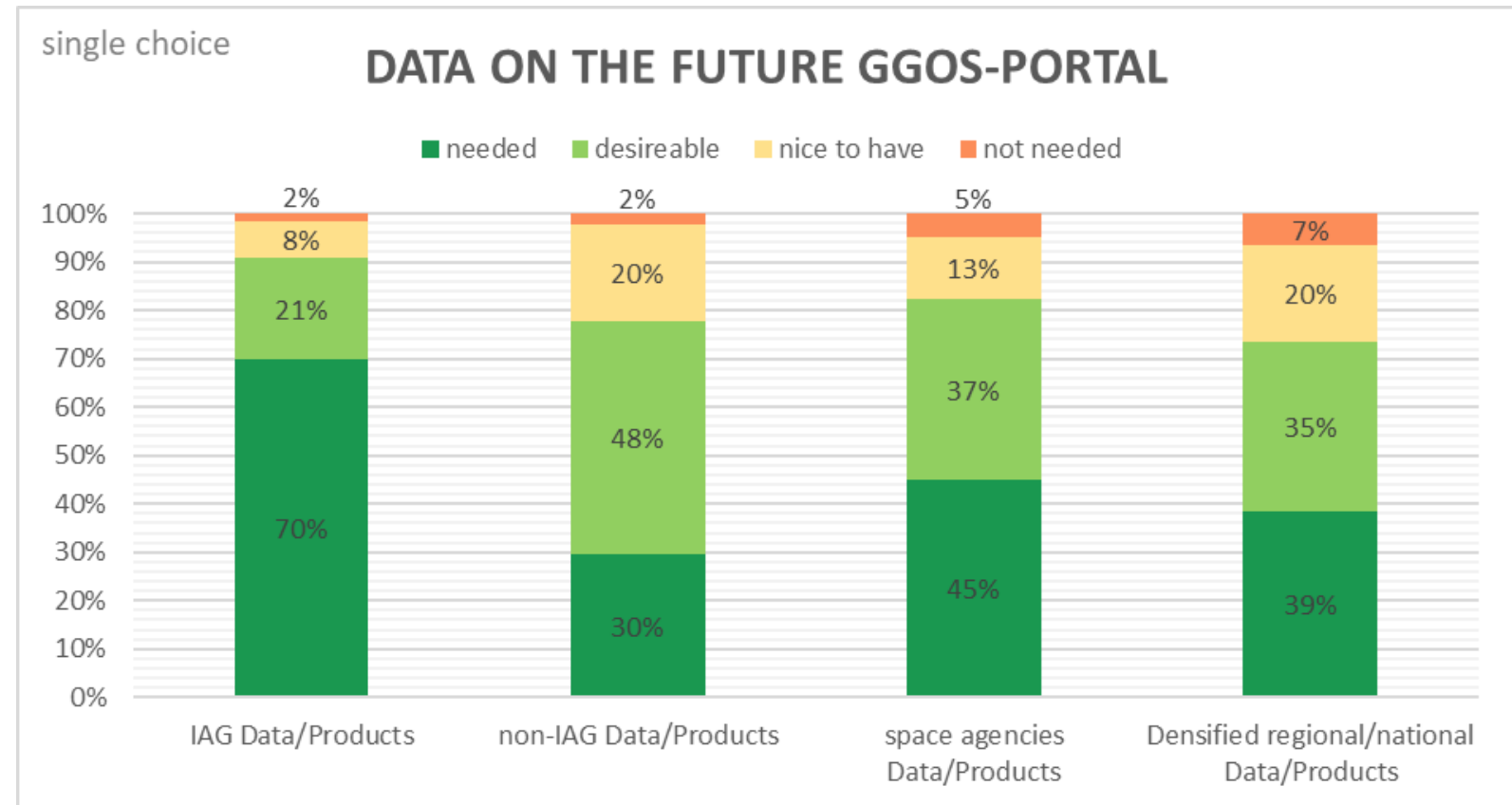


# GGOS-Portal – Kind of provided data

## ➤ Mainly IAG related data

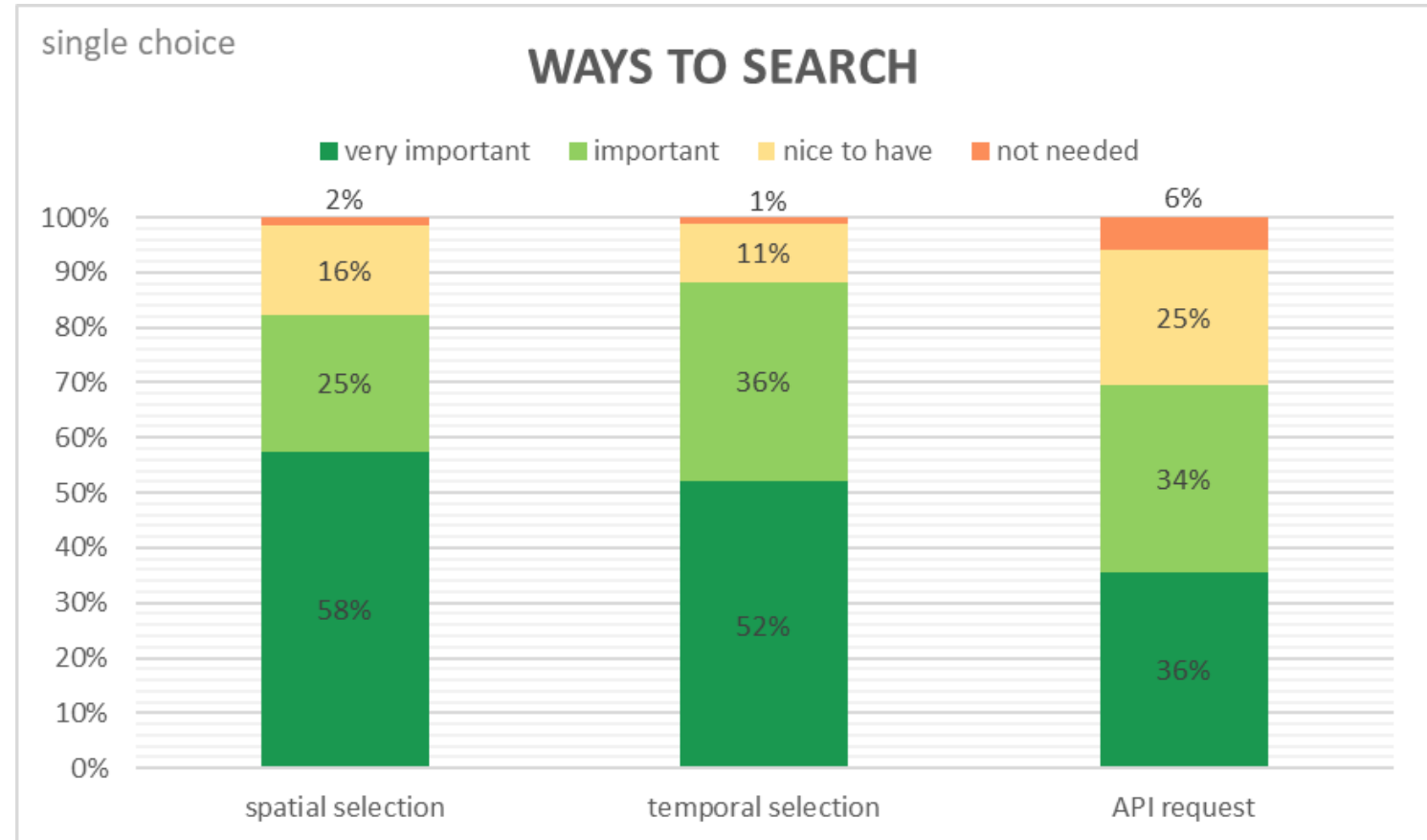
Participant comment:

„focus on one type of data and to do it extremely well. Bad portals try to do too much.”



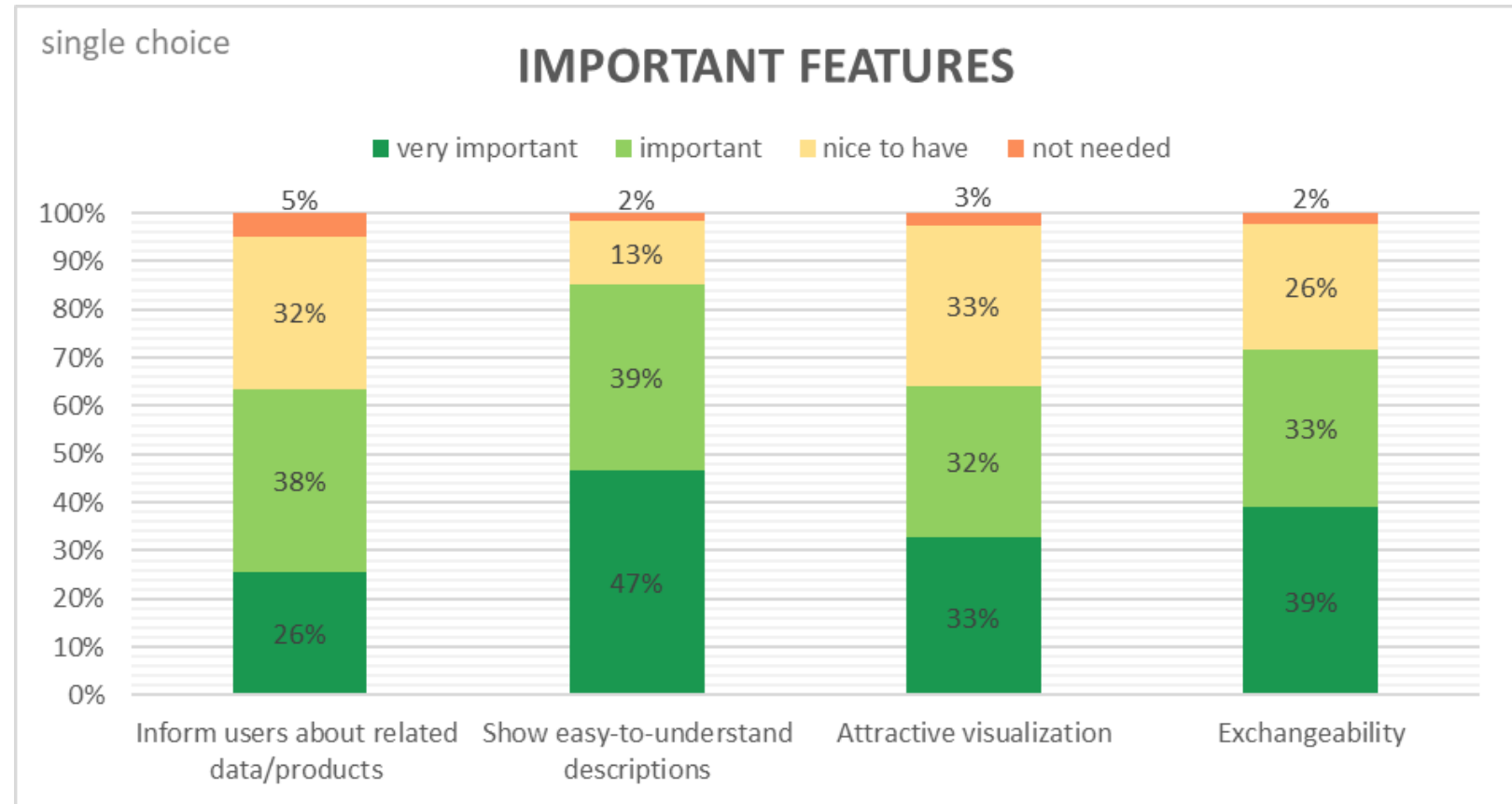
# GGOS-Portal – Search Possibilities

- Search by **spatial and temporal selection** is very appreciated



# GGOS-Portal – Important features

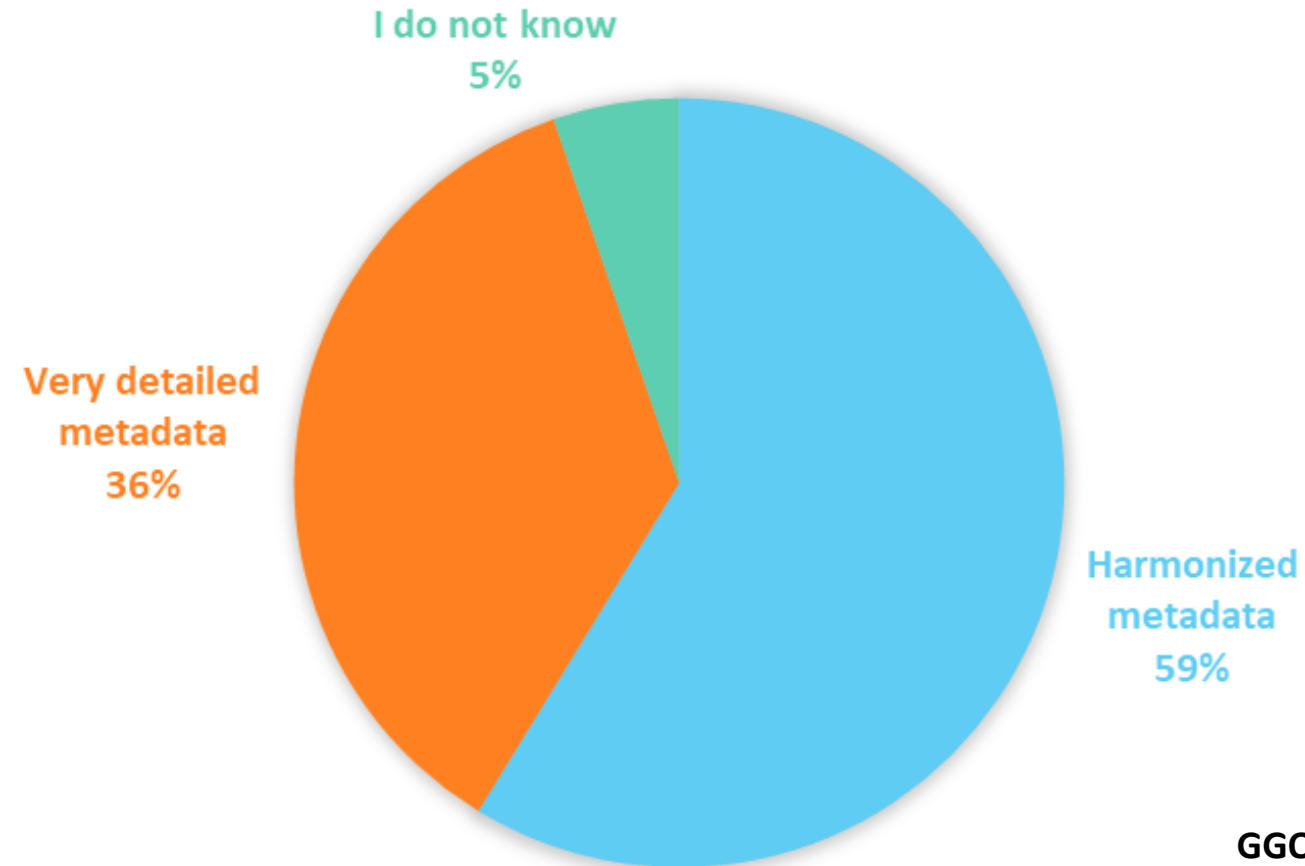
- Show easy understandable descriptions
- User friendliness



# GGOS-Portal – Metadata description

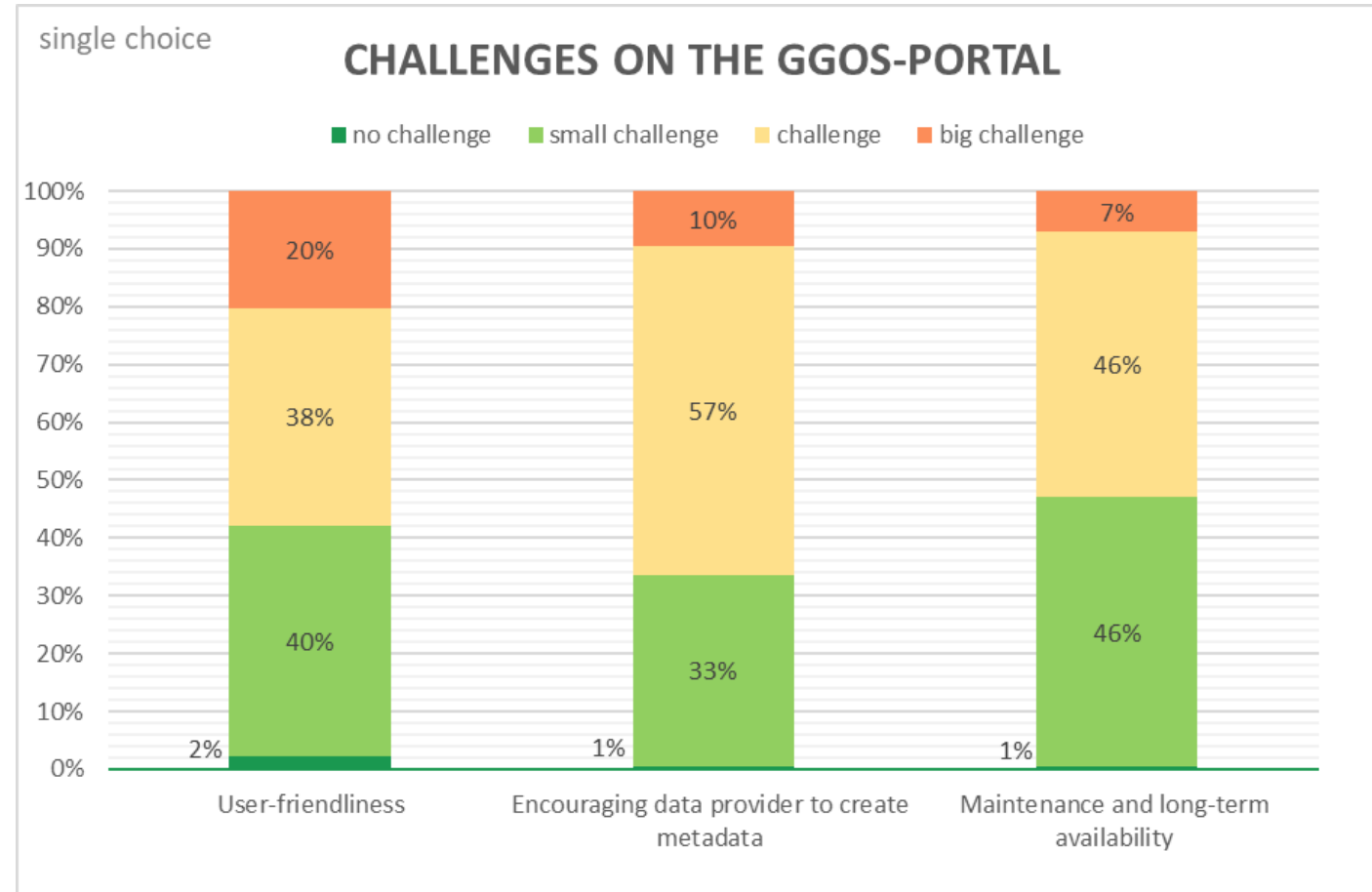
- **Harmonized metadata** is more appreciated

## DETAIL OF THE METADATA DESCRIPTION



# GGOS-Portal – Challenges

- Encourage data provider to create metadata
- User friendliness




# Feasibility Study



-> next presentation by Lena Steiner

# Thank you for your attention!

 Federal Office  
of Metrology and  
Surveying



**Martin Sehnal**  
Director of GGOS Coordinating Office  
BEV Austrian Federal Office of Metrology and Surveying



[co@ggos.org](mailto:co@ggos.org)

More information



[ggos.org/portal](https://ggos.org/portal)