



# GALILEO USER SATISFACTION SURVEY – 2018



The European GNSS Agency (GSA) launched the second Galileo User Satisfaction Survey between 10<sup>th</sup> December 2018 and 18<sup>th</sup> March 2019. The aim is to gather valuable information regarding:

- perception and expectations about Galileo service.
- the specific needs by the users within different market-related segments and use.
- suggestions for improvement of the European GNSS Service Centre (GSC).

This survey is intended to give voice to the growing Galileo User Community and build a continuous dialogue for the improvement of the Galileo system and its services.

Galileo is Europe's Global Navigation Satellite System (GNSS), providing improved positioning and timing information, and serving public authorities, businesses and citizens across Europe and beyond.

**Thanks for your trust and  
contribution to improving the  
Galileo service!**

# GALILEO USER SATISFACTION SURVEY – 2018

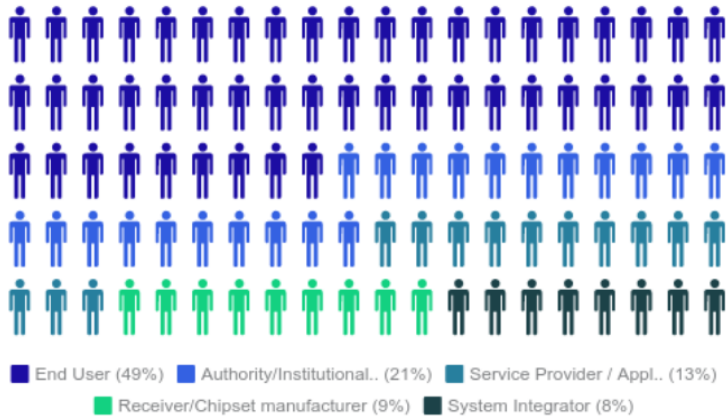
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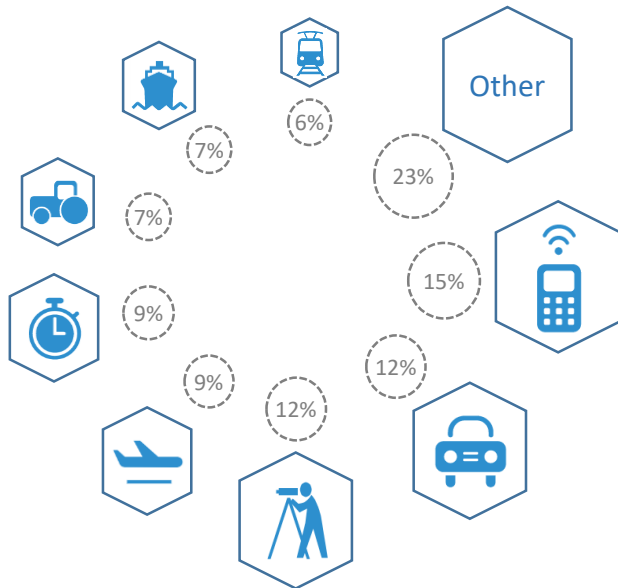
# IDENTIFICATION AND GENERAL GALILEO QUESTIONS

Distribution of the respondents by downstream actor



	2018	2017	
already <b>USING</b> Galileo	62%	55%	↑
are <b>SATISFIED</b> with Galileo	90%	89%	↑
would <b>RECOMMEND</b> Galileo	98%	94%	↑

Distribution of the respondents by market segment



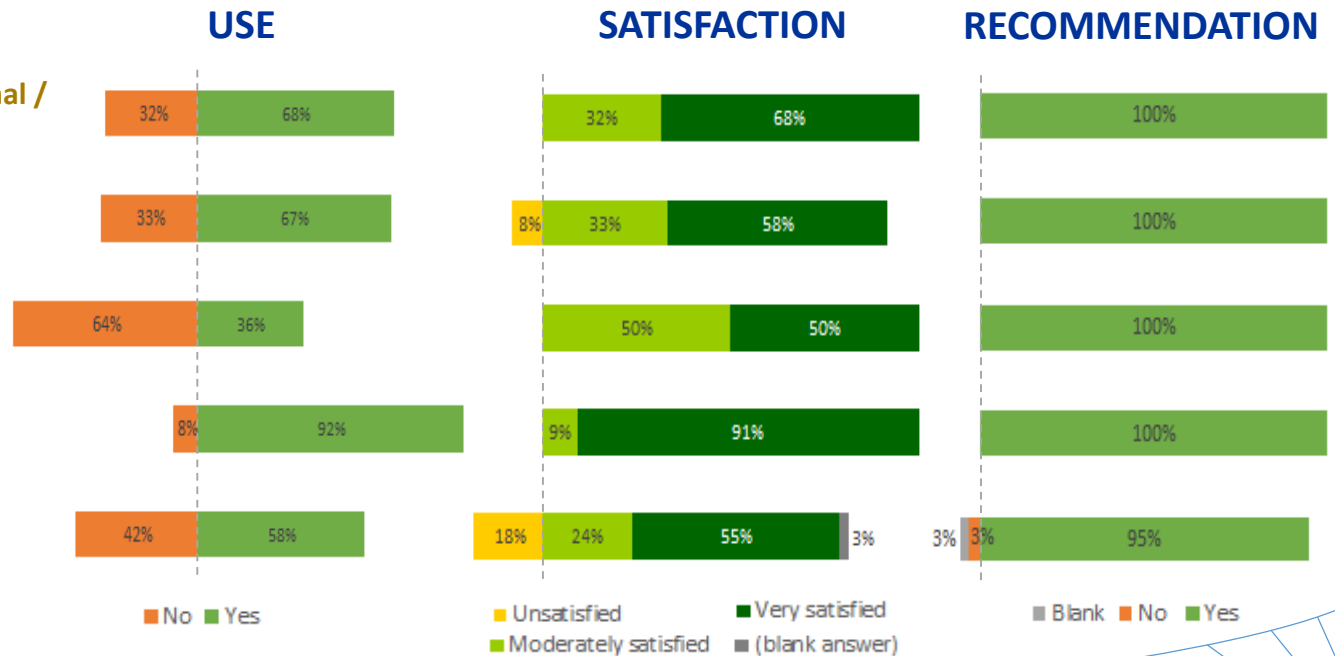
Authority / Institutional / Scientific entities

Service Providers / App. Developers

System Integrators

Rx/Chipset Manufacturers

End Users



# FEEDBACK ABOUT GALILEO

## Galileo Users

### Top-5 reasons to use Galileo

There are more satellites available	60%
I experience better positioning performance	51%
It is a European project designed for civil purposes	46%
Position solution is not lost in harsh environments	31%
My device gets faster position solution	31%

### Top-5 features expected from Galileo

Better performance (accuracy, availability ... )	63%
Strong confidence regarding positioning error	50%
Lower time to obtain the first position	43%
Stronger protection regarding jamming/spoofing	40%
More precise timing/synchronization information	17%

**Most repeated comments:** Users require increasing performance (availability, accuracy) looking at multiconstellation solutions and confirm the need for Galileo differentiators (high accuracy, authentication, integrity)

## Non-Galileo users

### Top-5 reasons to not use Galileo

My device is not Galileo compatible	53%
Other <sup>1</sup>	25%
My device is Galileo compatible but Galileo cannot be activated	22%
I do not experience an improved positioning performance	14%
The positioning performance of my device is degraded	2%

<sup>1</sup> Comments to "other": Waiting for FOC, do not know whether my device receives Galileo, no need of Galileo within my market ...

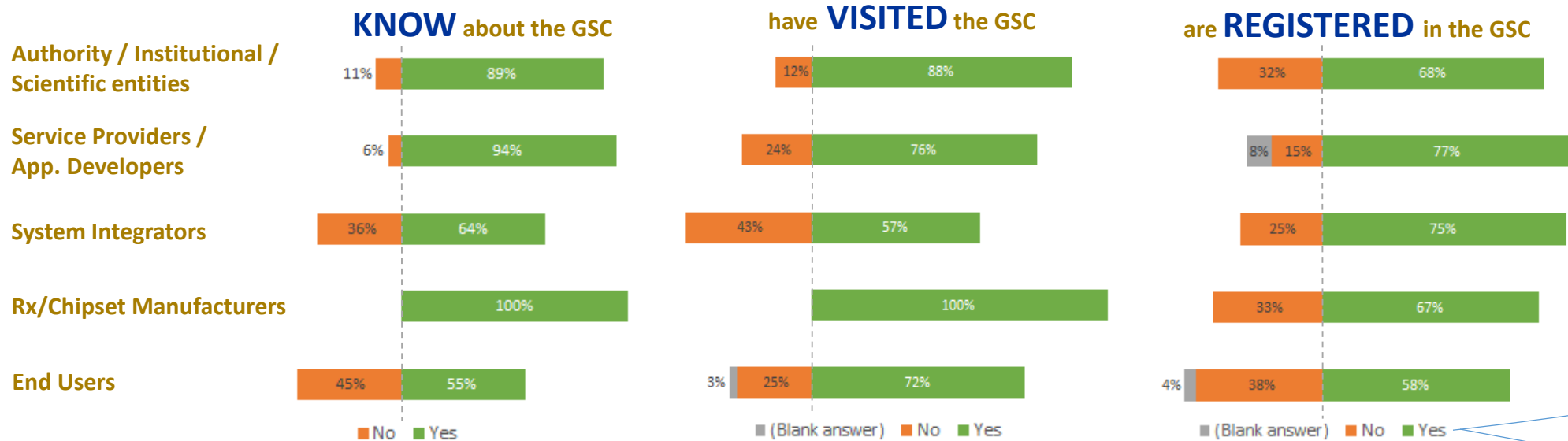
### Top-5 features expected from Galileo

Higher accuracy	65%
Better performance in harsh environments	51%
Higher availability of satellites	51%
Use of a public and civil EU owned infrastructure	47%
Less time needed to fix my first position	41%

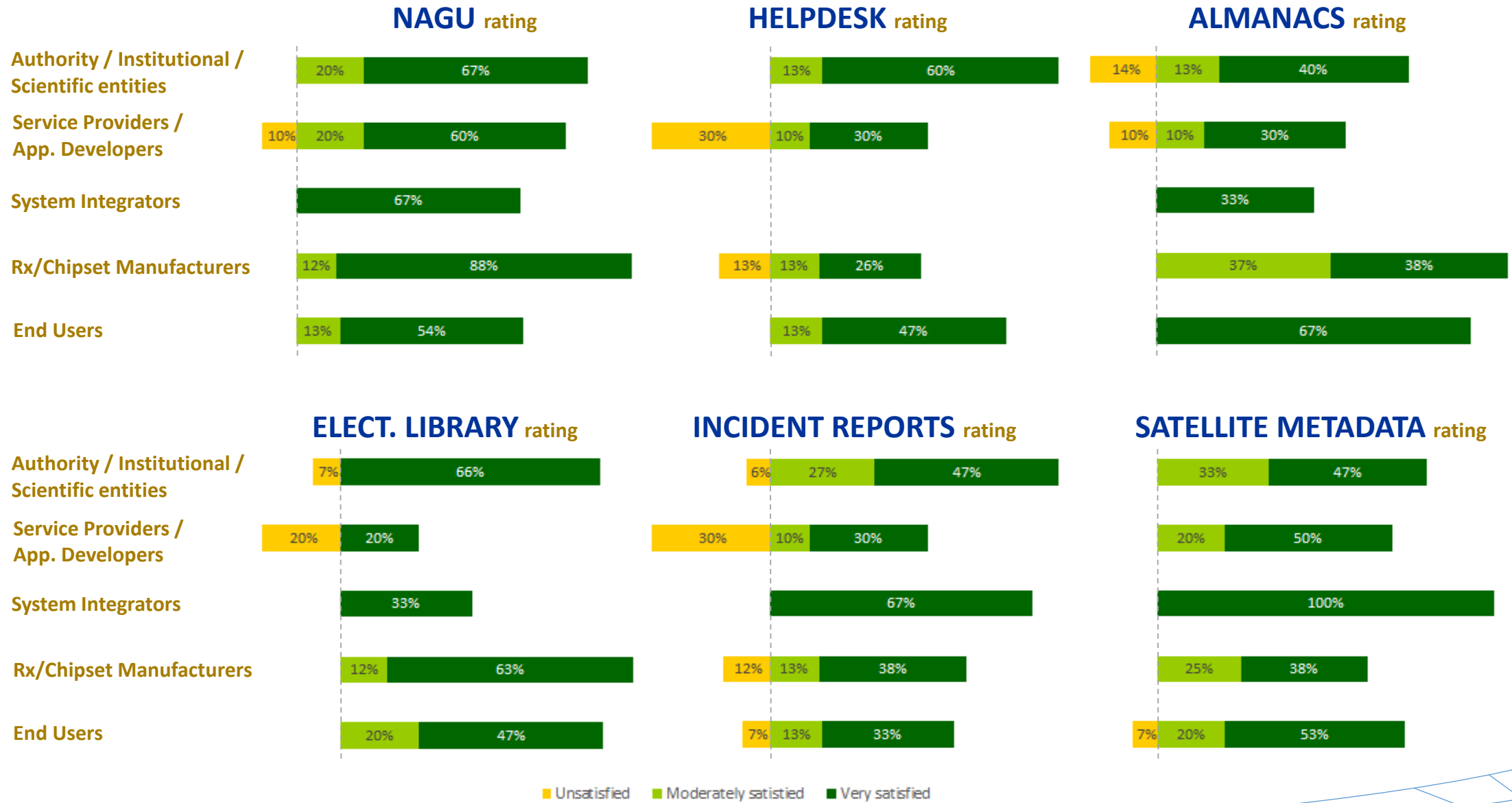
Note: for all questions, users could select one or more answers

## GSC-RELATED QUESTIONS

	2018	2017			2018	2017	
<b>KNOW</b> about the GSC	72%	71%	↑	<b>NAGU</b> satisfaction (1-5 scale)	4.12	4.00	↑
have <b>VISITED</b> the GSC	57%	N/A	↑	<b>HELPDESK</b> satisfaction (1-5 scale)	3.57	3.84	↓
are <b>REGISTERED</b> in the GSC	38%	45%	↓	<b>ALMANACS</b> satisfaction (1-5 scale)	3.91	3.50	↑
				<b>ELECTRONIC LIBRARY</b> satisfaction (1-5 scale)	4.06	3.93	↑
				<b>INCIDENT REPORTS</b> satisfaction (1-5 scale)	3.59	N/A	↑
				<b>SATELLITE METADATA</b> satisfaction (1-5 scale)	4.03	N/A	↑



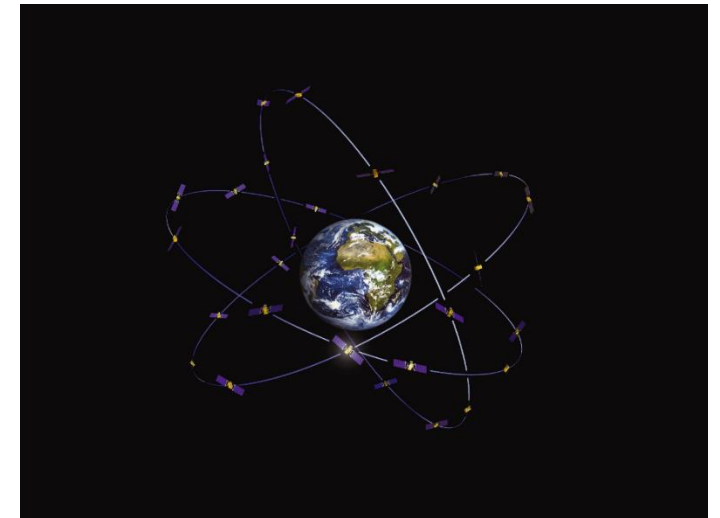
# FEEDBACK ABOUT GSC SERVICES



## PROPOSED ACTIONS TO STRENGTHEN GALILEO IN THE MARKET (SHORT/MEDIUM TERM)

The following actions have been derived from the most repeated comments received in the survey:

1. To spread the message that Galileo is already available and can be used with good performance, while the constellation is being completed in the coming years.
2. To put in place additional communication and training effort within the LBS community to make these users aware of the benefits of using raw measurements.
3. To collect all user related information on EGNSS in a single website, in order to provide users with an integrated interface to support them on application development
4. To continue the collection of user feedback through the Galileo User Satisfaction Survey, since the comments received help us to improve the service.



# PROPOSED ACTIONS TO STRENGTHEN THE USER SUPPORT IN THE GNSS SERVICE CENTRE (GSC) (SHORT/MEDIUM TERM)

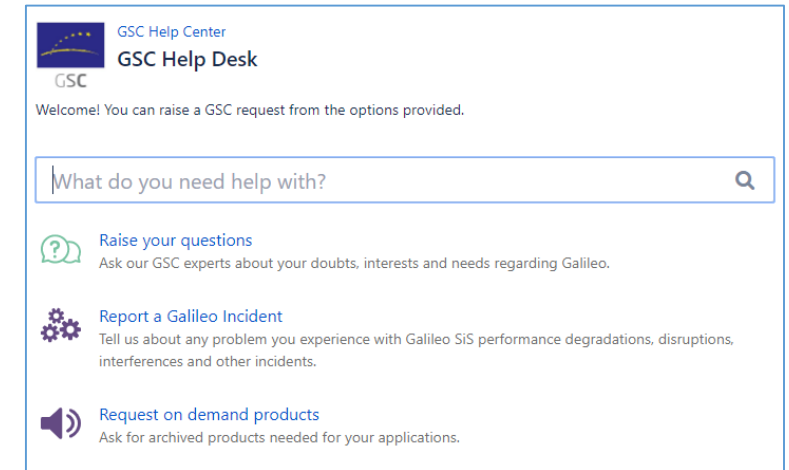
In a similar way, the most repeated comments regarding the European GNSS Service Centre (GSC) have generated the following actions.

## 1. To rename the Incident Reports within the GSC, since this service is usually interpreted as NAGU service.

The Incident Reports have been moved into the Help Desk section and renamed as “Report a Galileo incident”, including also an explanatory text in order to avoid misunderstandings with the NAGU service.

## 2. To define a new format for Almanacs provision, similar to YUMA/SEM, to increase the usability of this service

The GSA and the Galileo Service Operator are working on an update to the GSC Infrastructure in order to publish Almanacs in a text format, which is quite similar to YUMA. This update is expected to be implemented in the coming months.





## PROPOSED ACTIONS TO STRENGTHEN THE USER SUPPORT IN THE GNSS SERVICE CENTRE (GSC) (SHORT/MEDIUM TERM)

### **3. To include in the Electronic Library reporting on Galileo positioning performance in real scenarios.**

In the last months, the GSA and the Galileo Service Operator have been working closely on the analysis of performance indicators targeted to specific user communities, with focus on maritime and UAVs, that will contribute to the definition of specific positioning performance reports. This activity will be extended to other users and market segments and included in the Electronic Library.

### **4. To evaluate the possibility of including additional information into Galileo Satellite Metadata.**

After the latest Galileo satellite launches, the Satellite Metadata published on the GSC website have been updated with new information. Additionally, the GSA and the Galileo Service Operator are currently analysing further improvements to the information that is published under this section.

# THANK YOU!



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GALILEO

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## Linking space to user needs