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EUROPEAN GNSS (GALILEO)

SAR SERVICE

QUARTERLY PERFORMANCE REPORT

JANUARY – MARCH 2023



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1 INTRODUCTION

This document is the *Galileo Enhanced Service Search and Rescue Service (SAR/GALILEO) Public Performance Report* for the period of January, February and March 2023. Following the declaration of the SAR/Galileo Enhanced Services in January 2020, issue 2.0 of [SAR-SDD] was published and is the reference document for the present performance report.

This document reports on the following performance parameters, with respect to their Minimum Performance Levels (MPLs) declared in the [SAR-SDD]:

- ◇ Forward Link Service, Detection and Location Performance;
- ◇ Return Link Service, RLM Delivery Latency and Reception Probability Performance;
- ◇ European MEOLUT and Space Segment Availability Performance.

The document comprises the following sections:

Section 1: is an introduction to this report. It includes the status of Galileo constellation for the Search and Rescue Service over the quarterly reported period.

Section 2: Provides an executive summary of the achieved performance. Details are reported in the following chapters.

Section 3: Provides the detailed performance for the SAR/Galileo Forward Link Service.

Section 4: Provides the detailed performance of the SAR/Galileo Return Link Service.

Section 5: Provides the detailed performance for the SAR/Galileo Space Segment infrastructure availability.

Section 6: Provides supplementary performance metrics of interest, not subject to MPL.

Section 7: Lists the reference documents.

Section 8: Defines the acronyms and abbreviations used in the document.

Table 1 provides the status of the relevant SAR/Galileo space constellation, for which the performance data has been derived for the reported period. Forward Link Service (FLS) and Return Link Service (RLS) columns in the table below show availability of SAR services for each Galileo satellite.

Table 1: Galileo Reported Constellation Information for the SAR/Galileo Service

ID	PRN	Orbit slot	COSPAS-SARSAT ID	Availability for SAR	
				FLS	RLS
GSAT0101	E11	B05	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0102	E12	B06	-	<input type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0103	E19	C04	419	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0104	E20	C14	420	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GSAT0201	E18	Not-nominal ¹	418	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0202	E14	Not-nominal ²	414	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0203	E26	B08	426	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0205	E24	A08	424	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0206	E30	A05	430	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0207	E07	C06	407	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0208	E08	C07	408	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0209	E09	C02	409	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0210	E01	A02	401	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0211	E02	A06	402	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0212	E03	C08	403	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0213	E04	C03	404	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0214	E05	C01	405	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0215	E21	A03	421	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0216	E25	A07	425	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0217	E27	A04	427	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0218	E31	A01	431	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0219	E36	B04	436	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0220	E13	B01	413	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0221	E15	B02	415	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0222	E33	B07	433	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0223	E34	B03	434	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GSAT0224	E10	B15	410	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

For the most up-to-date information, please refer to the European GNSS Service Centre (GSC) web pages listed in Table 2 hereafter.

Table 2: Galileo Service Centre main information web pages for Galileo status

Constellation Status Information
https://www.gsc-europa.eu/system-service-status/constellation-information
Reference Constellation Orbital and Technical Parameters
https://www.gsc-europa.eu/system-service-status/orbital-and-technical-parameters

¹ Although Galileo satellite GSAT-0201 is located in an eccentric orbit, it has been declared operational for the SAR/Galileo Services.

² Although Galileo satellite GSAT-0202 is located in an eccentric orbit, it has been declared operational for the SAR/Galileo Services

Incident Reporting (Galileo Incidents Report Form)

<http://www.gsc-europa.eu/helpdesk> → “Report a Galileo Incident”

Interactive support to users (Galileo Help Desk)

<http://www.gsc-europa.eu/helpdesk> → “Raise your questions”

Note that the Galileo Helpdesk allows close interaction with users, both to support the exploitation of Galileo services and collect relevant information on signal performance as observed by the users.

Finally, GSC provides an important service which consists in the provision of detailed orbit data for the Galileo satellites on a server accessible to the SAR community. Access to this server can be requested via the Galileo Helpdesk.

2 EXECUTIVE SUMMARY

During the reported period, the measured SAR/Galileo Service performance figures exceeded the Minimum Performance Level (MPL) targets specified in the [SAR-SDD] with significant margins except for:

- **SART availability of GSAT-0210 due to events that occurred before the reporting period (May 2022) which affect the long-term availability as well as unplanned event affecting the SART unavailability happening in March 2023.**
- **MASPALOMAS EU MEOLUT facility availability for February and March due to the planned technical refresh activity which took place in February. Note that the unavailability of MASPALOMAS EU MEOLUT did not affect achievement of the Forward Link Service availability MPL.**

The following dashboards (Table 3a and Tale 3b) summarise the compliance with the MPLs, using the colour coding defined in the subsequent legend Table 3c.

Table 3a: MPL Fulfilment Status Dashboard – detection and localisation

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar.
detection (probability), in %				
Valid				
GAL-EU1 – Toulouse	≥ 99	■	■	■
GAL-EU2 – Spitsbergen		■	■	■
GAL-EU3 – Santa Maria		■	■	■
GAL-EU4 – Maspalomas		■	■	■
GAL-EU5 – Larnaca		■	■	■
localisation (quality), in %				
5 km [1–12 B]				
GAL-EU1 – Toulouse	≥ 95	■	■	■
GAL-EU2 – Spitsbergen		■	■	■
GAL-EU3 – Santa Maria		■	■	■
GAL-EU4 – Maspalomas		■	■	■
GAL-EU5 – Larnaca		■	■	■
5 km [SB]				
GAL-EU1 – Toulouse	≥ 90	■	■	■
GAL-EU2 – Spitsbergen		■	■	■
GAL-EU3 – Santa Maria		■	■	■
GAL-EU4 – Maspalomas		■	■	■
GAL-EU5 – Larnaca		■	■	■
L.Prob.[SB]				
GAL-EU1 – Toulouse	≥ 90	■	■	■
GAL-EU2 – Spitsbergen		■	■	■
GAL-EU3 – Santa Maria		■	■	■
GAL-EU4 – Maspalomas		■	■	■
GAL-EU5 – Larnaca		■	■	■
L.Prob.[1–12 B]				
GAL-EU1 – Toulouse	≥ 98	■	■	■
GAL-EU2 – Spitsbergen		■	■	■
GAL-EU3 – Santa Maria		■	■	■

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar.
GAL-EU4 – Maspalomas		■	■	■
GAL-EU5 – Larnaca		■	■	■

Table 3b: MPL Fulfilment Status Dashboard - availability

SAR MPLs	target value	2023			
		Jan.	Feb.	Mar.	
SAR transponder availability, in %					
GSAT0103	E19	≥ 95	■	■	■
GSAT0104	E20		■	■	■
GSAT0201	E18		■	■	■
GSAT0202	E14		■	■	■
GSAT0203	E26		■	■	■
GSAT0205	E24		■	■	■
GSAT0206	E30		■	■	■
GSAT0207	E07		■	■	■
GSAT0208	E08		■	■	■
GSAT0209	E09		■	■	■
GSAT0210	E01		■	■	■
GSAT0211	E02		■	■	■
GSAT0212	E03		■	■	■
GSAT0213	E04		■	■	■
GSAT0214	E05		■	■	■
GSAT0215	E21		■	■	■
GSAT0216	E25		■	■	■
GSAT0217	E27		■	■	■
GSAT0218	E31		■	■	■
GSAT0219	E36		■	■	■
GSAT0220	E13		■	■	■
GSAT0221	E15		■	■	■
GSAT0222	E33		■	■	■
GSAT0223	E34		■	■	■
GSAT0224	E10		■	■	■

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar.
SAR ground segment availability, in %				
MEOLUT nominal status				
Larnaca	≥ 95	■	■	■
Maspalomas		■	■	■
Spitsbergen		■	■	■
MEOLUT nominal + degraded status				

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar
Larnaca	≥ 97.5	■	■	■
Maspalomas		■	■	■
Spitsbergen		■	■	■
SAR service availability, in %				
forward link service	≥ 99	■	■	■
return link service	≥ 95	■	■	■
RLM delivery	latency < 15 min	■	■	■
RLM reception	probability, in %	■	■	■

Table 3c: Dashboards legend colour code

Legend colour	Interpretation
■	target value for MPL is fulfilled
■	target value for MPL is not fulfilled and measurement is less than 10% away from required target
■	target value for MPL is not fulfilled and measurement is more than 10% away from required target

2.1 SUMMARY NOTES ABOUT SEARCH AND RESCUE SERVICE

The SAR/Galileo Forward Link and Return Link Service MPLs are computed based on the five SAR/Galileo Reference Beacons (REFBE) located in the SAR/Galileo Coverage area (SGC) defined in the [SAR-SDD].

The **Availability of the SAR/Galileo Forward Link Service** met the MPL target set to 99% during the reporting period with annually normalised value of **99.95%** in March.

The **Availability of the SAR/Galileo European MEOLUT Facilities** in “Nominal” and “Nominal + Degraded” modes during the reported period remains at excellent levels for Larnaca EU MEOLUT Larnaca (value for March of **99.1%** and **99.7%** for “Nominal” and “Nominal + Degraded” respectively) and Spitsbergen EU MEOLUT (value for March of **97.9%** and **99.6%** for “Nominal” and “Nominal + Degraded” respectively), always above the MPL targets of 95% in “Nominal” and 97.5% in “Nominal + Degraded” modes. The availability of Maspalomas EU MEOLUT was affected by a planned activity, achieving a value for March of **90.5%** and **96.9%** for “Nominal” and “Nominal + Degraded” respectively, below the MPL targets of 95% in “Nominal” and 97.5% in “Nominal + Degraded” modes.

The **Performance of the Detection Service** is above expectations, with monthly values of a valid message detection probability after a single transmitted burst above **99.9%** every month of the reported period, where the MPL target is 99%.

The **Performance of Location Probability** achieved excellent values with monthly values above **99.8%** for single-burst, where the MPL target is 90%, and above **99.9%** after twelve transmitted bursts (multi-burst), where the MPL target is 98%.

The **Performance of Location Accuracy** surpasses the targets with monthly values higher than **98.5%** for single-burst and **99.6%** for multi-burst transmissions with an accuracy better than five kilometres while the MPLs are 90% and 95% respectively.

The **Availability of the SAR/Galileo Return Link Service** was above **99.84%** every month of the reported period for an MPL set to 95%.

The **RLM Delivery Latency within 15 min** was above **99.24%** every month of the reported period for an MPL set to 99%.

The **RLM Reception Probability** was above **99.76%** every month of the reported period for an MPL set to 99%.

The **Availability of the SAR Transponders** achieved excellent levels of performance with satellite transponder long-term availability above the MPL of 95% for all the SAR transponders, except for GSAT-0210 (due to the unplanned anomaly in May 2022 and unplanned outage in March 2023 that affected the long-term availability over the reporting period).

3 SAR/GALILEO FORWARD LINK SERVICE PERFORMANCE

This section reports the following detailed performance figures for the SAR/Galileo Forward Link Service:

- ◇ Service availability in section 3.1
- ◇ European MEOLUT facility availability in section 3.2
- ◇ Detection Probability in section 3.3
- ◇ Location Probability in section 3.4.1
- ◇ Location Accuracy in section 3.4.2

3.1 FORWARD LINK SERVICE AVAILABILITY

The MPL for the Forward Link Service (FLS) availability is defined in the [SAR-SDD]³. The Forward Link Service availability MPL is defined over a period of twelve months (long-term), with a sliding window moving one month ahead every month. Figure 1 below also report the short term (monthly) FLS availability to show the performance trend over time. During the reported period, the monthly FLS availability was **100%**.

The normalised value was **99.95%** every month, compliant with the MPL target of 99% defined over twelve months.

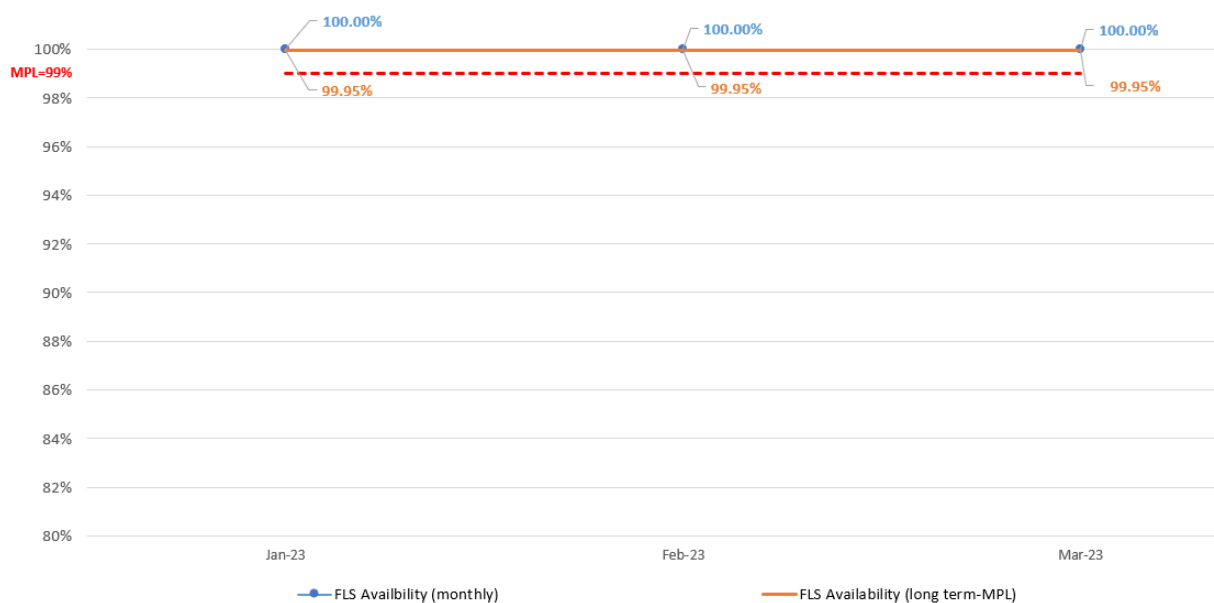


Figure 1: Forward Link Service Availability – monthly and long-term trend

3.2 EUROPEAN MEOLUT FACILITY AVAILABILITY

The MPLs for the availability of the SAR/Galileo European MEOLUT Facility are defined in the [SAR-SDD]⁴ over a period of twelve months (long-term), with a sliding window moving one month ahead every month.

³ Ref.: [SAR-SDD], §5.1.1 (Table 9)

⁴ Ref.: [SAR-SDD], §5.1.2 (Table 10)

Figure 2 and Figure 4, below, also report the short term (monthly) EU MEOLUT Local Facility availability to show the performance trend over time.

During the reported period, Larnaca and Spitsbergen EU MEOLUT Local Facilities show a long-term normalised “Nominal” mode availability performance compliant with the MPL target specified at 95%, achieving in March values of **99.1%** and **97.9%** for respectively Larnaca and Spitsbergen EU MEOLUT Facilities long term availability. Maspalomas EU MEOLUT Local Facility shows a long-term normalised “Nominal” mode availability performance not compliant with the MPL target (95%) in February and March, achieving a value of **90.5%** for March. This is due to a planned technical refresh activity that impacted Maspalomas EU MEOLUT facility availability in February.



Figure 2: MPL per MEOLUT Facility Availability of Nominal Mode (in %)

Figure 3 provides MELOUT Facility Availability of Nominal Mode but not normalised; as such, this performance measure is not subject to an MPL target and is provided for information:

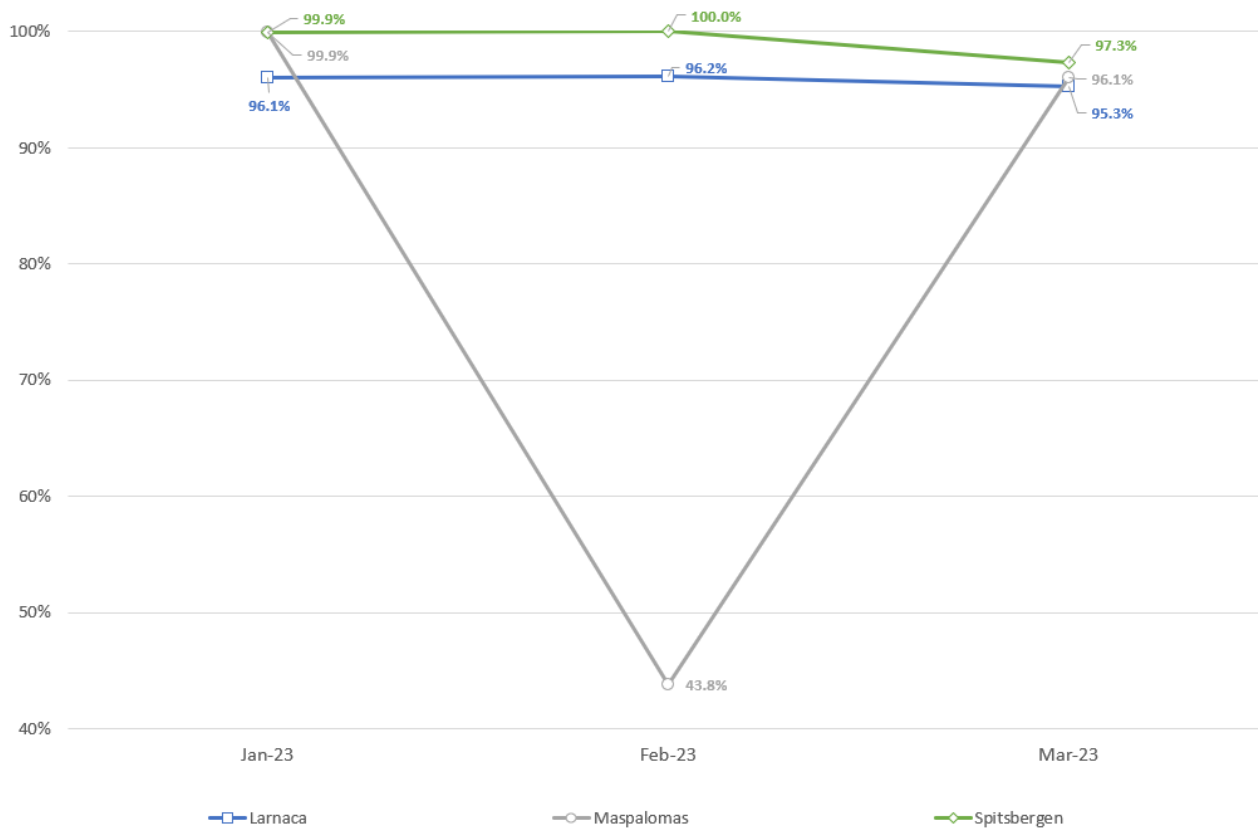


Figure 3: Monthly MEOLUT Facility Availability of Nominal Mode, not normalised (in %)

The “Nominal + Degraded” mode availability is reported in Figure 4 below with annually normalised values obtained per European MEOLUT Facility during the last twelve months of service, with an MPL target specified at 97.5%. The cumulative values always exceed the MPL for Larnaca and Spitsbergen EU MEOLUT Facilities during the reported period achieving in March values of **99.7%** and **99.6%** for respectively Larnaca and Spitsbergen EU MEOLUT Facilities long term availability. The cumulative value does not meet the MPL for Maspalomas EU MEOLUT facility in February and March, achieving in March a value of **96.9%** long term availability. This is due to a planned technical refresh that impacted Maspalomas EU MEOLUT availability in February.

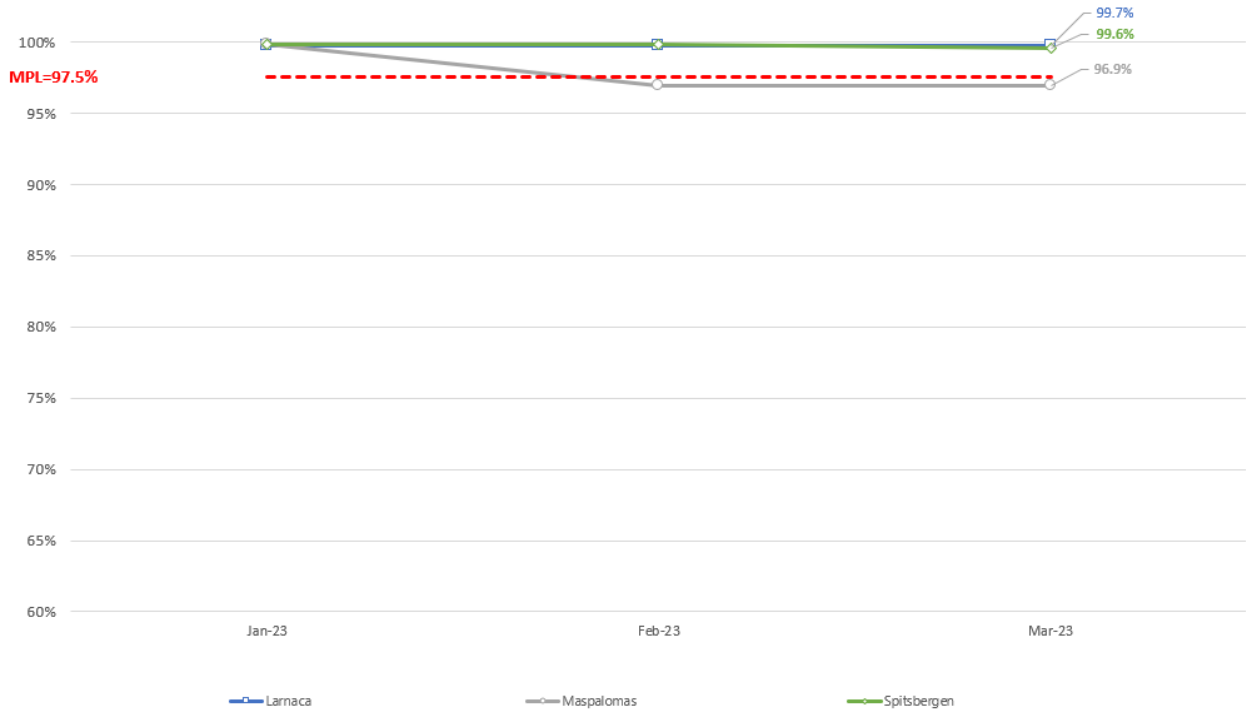


Figure 4: MPL Per MEOLUT Facility Availability of "Nominal + Degraded" Mode (in %)

Figure 5 provides MELOUT Facility Availability of Nominal and Degraded Mode but not normalised; as such, this performance measure is not subject to an MPL target and is provided for information:

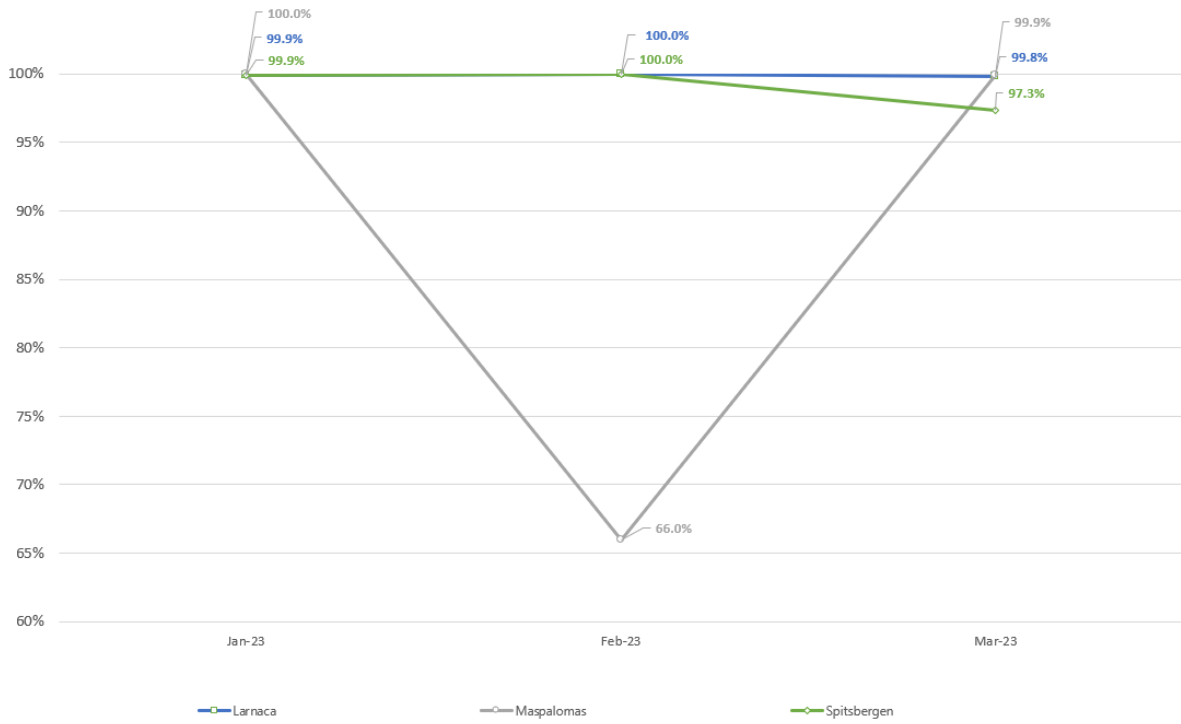


Figure 5: Monthly MEOLUT Facility Availability of Nominal + Degraded Mode, not normalised (in %)

3.3 DETECTION PERFORMANCE

The detection probability performance is computed for each Reference Beacon as the valid message detection probability after 1 transmitted burst. The detailed computation process for this performance parameter is described in the [SAR-SDD]. The MPL specified at 99%⁵ is valid whether the SAR/Galileo MEOLUT Facilities are in Nominal or Degraded mode.

Figure 6 below shows the monthly valid message detection probability for each Reference Beacon which achieved performance above **99.9%** every month during the reported period.

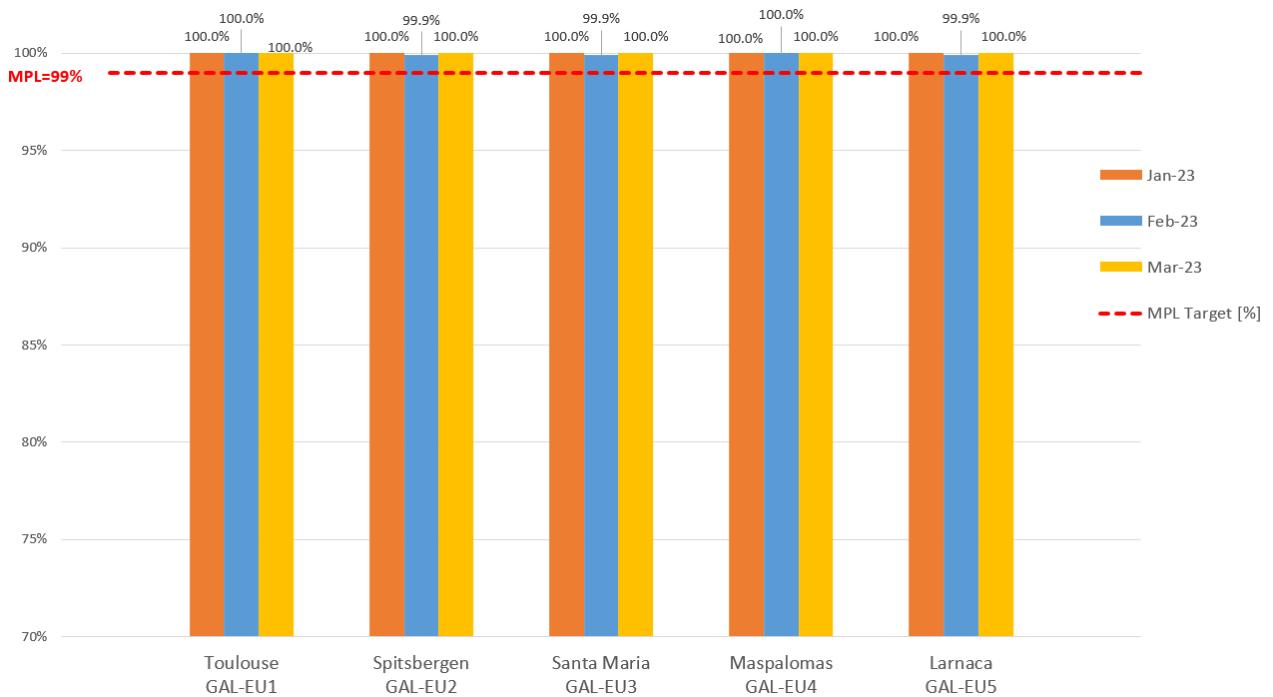


Figure 6: Per Reference Beacon Valid Message Detection Probability (in %)

⁵ Ref.: [SAR-SDD], §5.1.3 (Table 11)

3.4 LOCATION PERFORMANCE

3.4.1 LOCATION PROBABILITY

The location probability performance is computed for each Reference Beacon after 1 transmitted burst (single-burst) and after 12 transmitted bursts (multi-burst). The detailed computation process for this performance parameter is described in the [SAR-SDD] and the MPLs specified at 90%⁶ in single-burst and 98% in multi-burst are valid when the SAR/Galileo MEOLUT Facilities are in Nominal Mode.

Figure 7 below shows the monthly single-burst location probability which achieved performance above **99.8%** every month during the reported period.

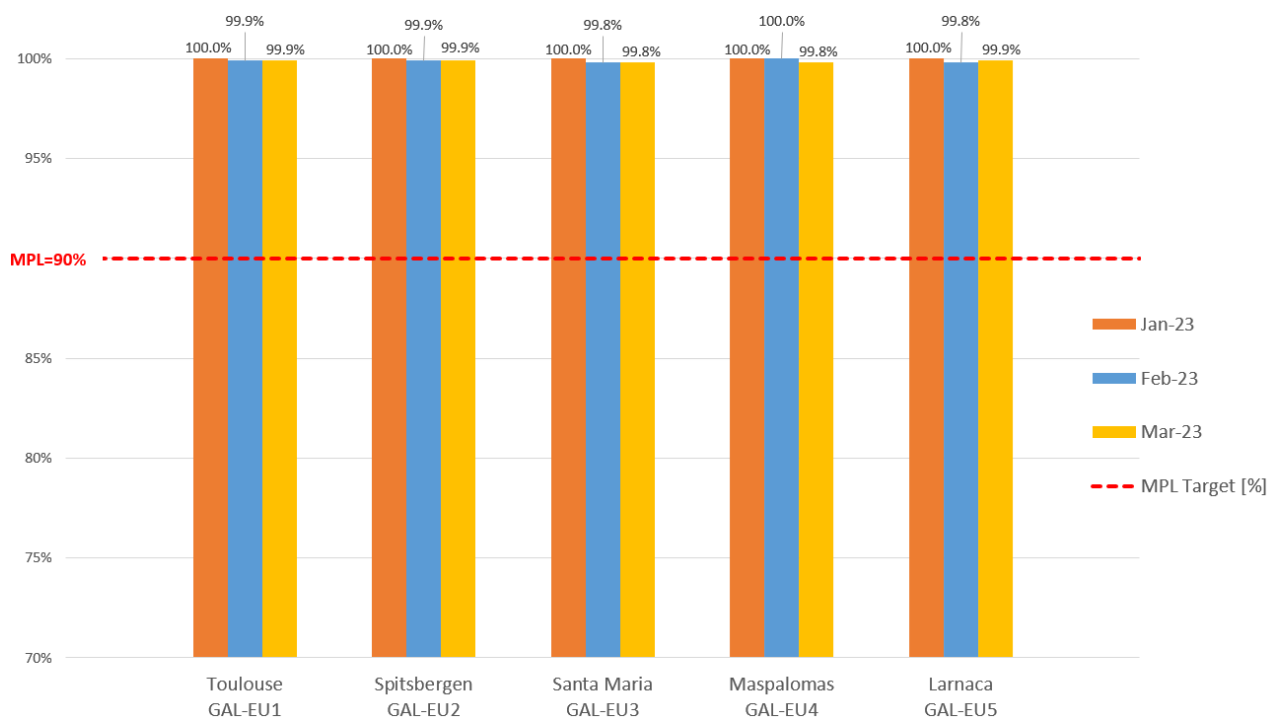


Figure 7: Per Reference Beacon single-burst Location Probability (in %)

Figure 8 below shows the monthly multi-burst location probability which meets the defined MPL of 98% for each of the SAR/Galileo Reference Beacons, with a performance of **100%** for each beacon and each month of the reported period except for the Larnaca REFBE in February 2023 which achieved **99.9%**.

⁶ Ref.: [SAR-SDD], §5.1.4 (Table 12)

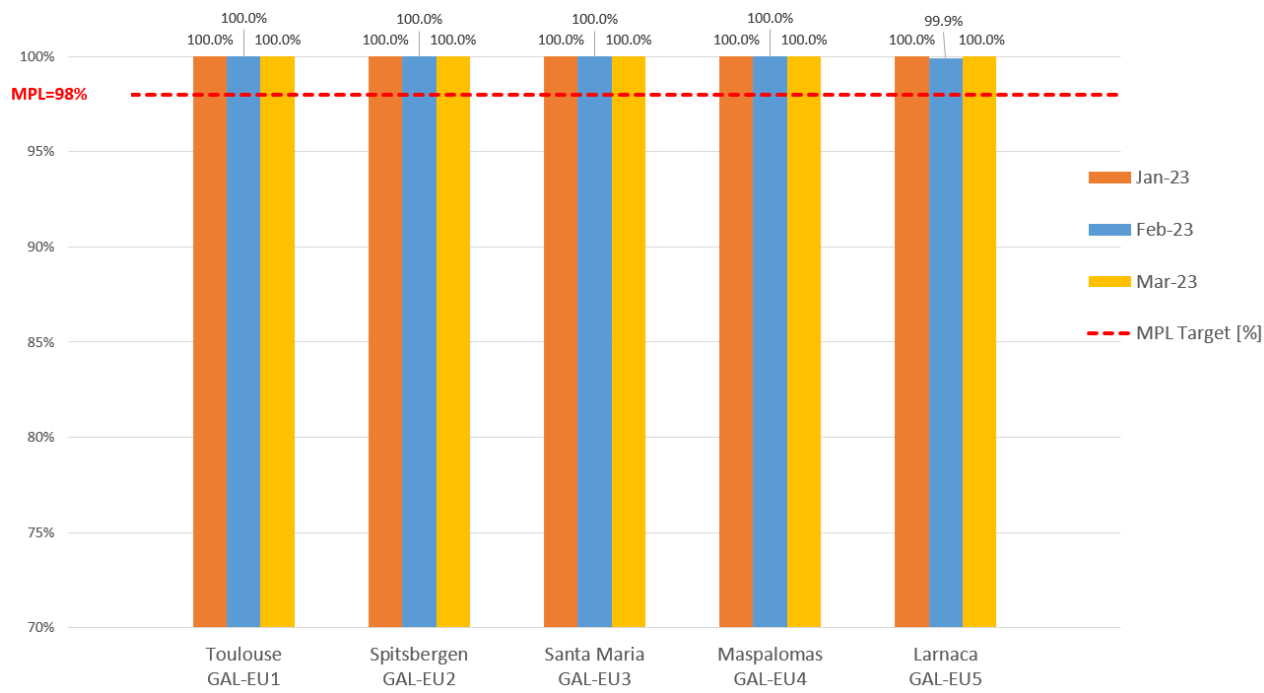


Figure 8: Per Reference Beacon Multi-Burst Location Probability (in %)

3.4.2 LOCATION ACCURACY

The location accuracy performance is defined in the [SAR-SDD] as the probability to produce a location with an error bounded by a given threshold, namely two and five kilometres. The location accuracy MPLs specified in the [SAR-SDD] ⁷ are valid when the MEOLUT is in Nominal mode and the results are presented per Reference Beacon in Figure 9 and Figure 10 for the five kilometres error in single-burst and multi-burst.

Figure 9 below shows the monthly single-burst five kilometres location accuracy which meets the defined MPL of 90% for each of the SAR/Galileo Reference Beacons, with a minimum value of **98.5%**, a best value of **99.9%** and an average over the reported period of **99.4%**.

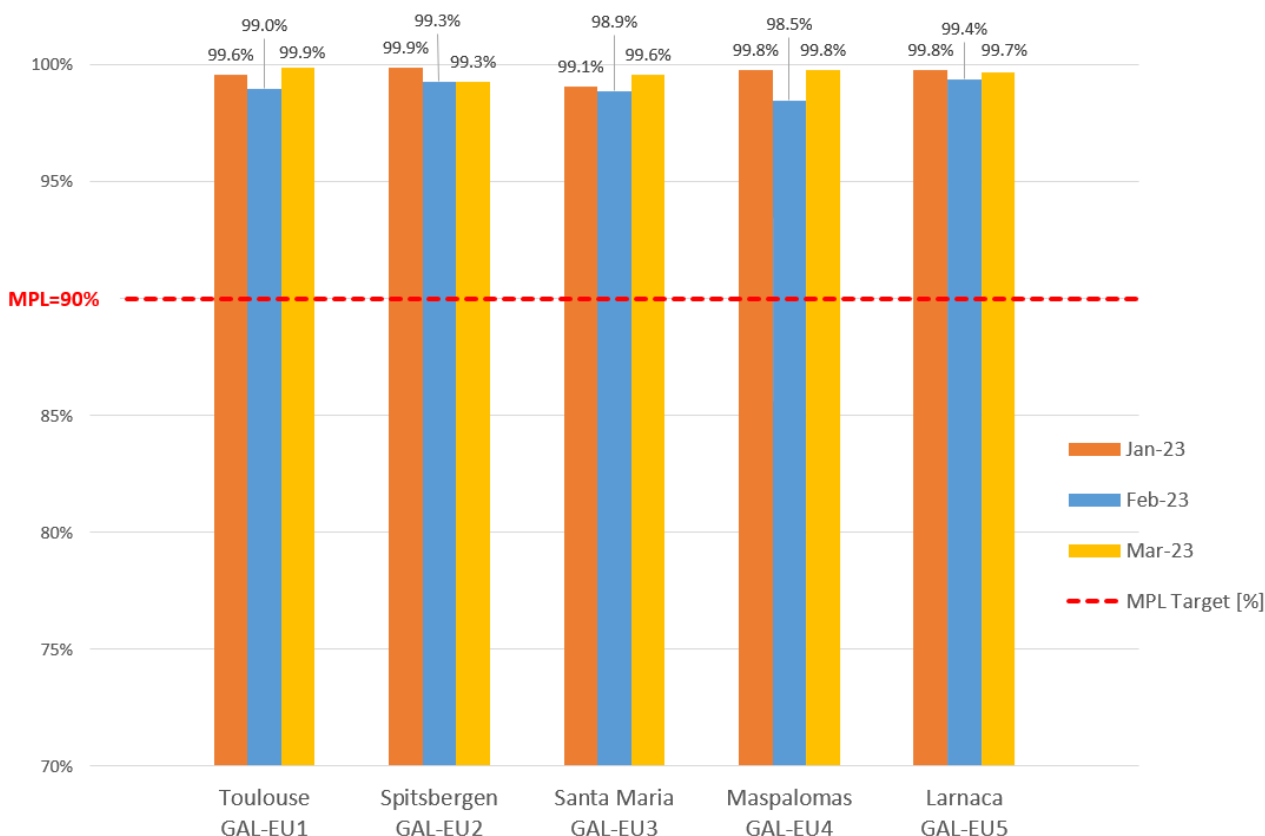


Figure 9: Per Reference Beacon Probability of five kilometre accuracy in single-burst (in %)

Figure 10 below shows the monthly multi-burst five kilometre location accuracy which meets the defined MPL of 95% for each of the SAR/Galileo Reference Beacons, with a minimum value of **99.6%**, a best value of **100%** and an average over the reported period of **99.9%**.

⁷ Ref.: [SAR-SDD], §5.1.4 (Table 12)

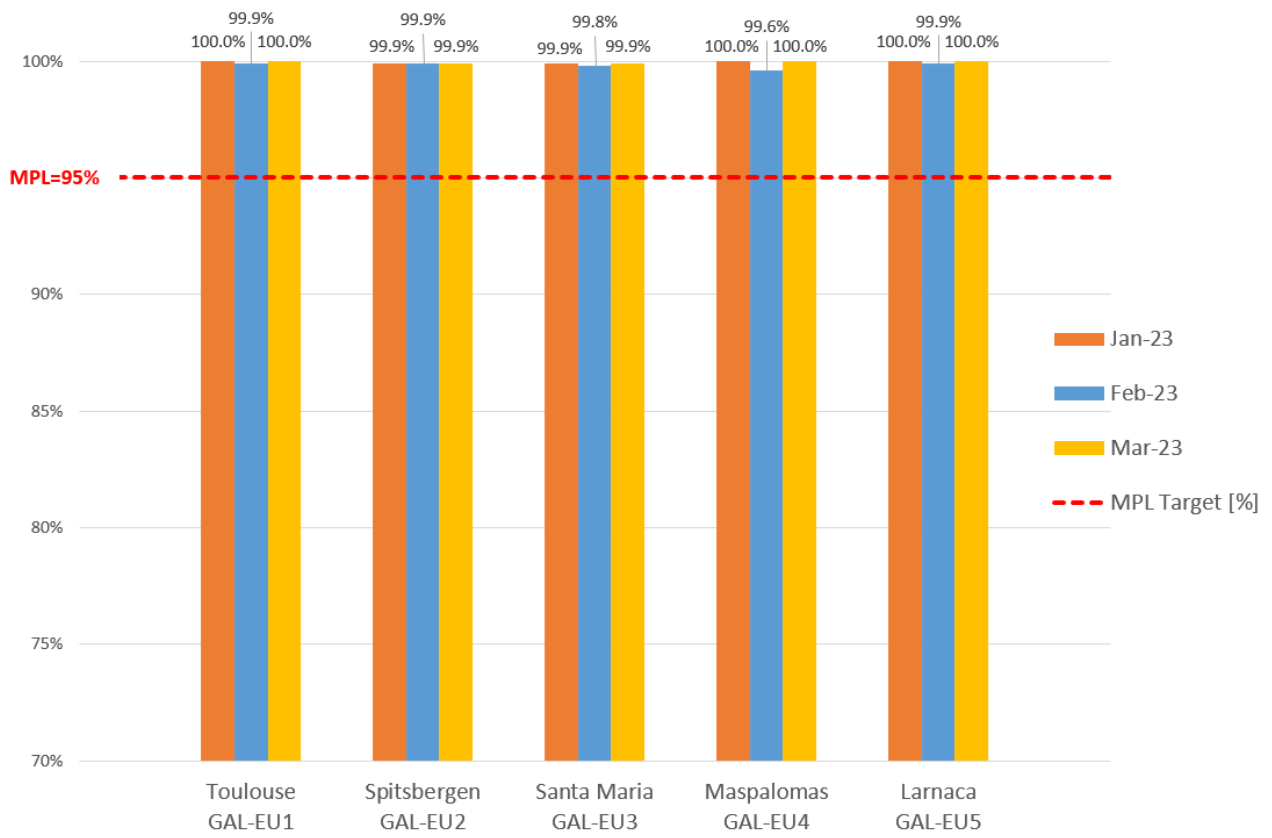


Figure 10: Per Reference Beacon Probability of five kilometres accuracy in multi-burst (in %)

4 RETURN LINK SERVICE PERFORMANCE

4.1 RETURN LINK SERVICE AVAILABILITY

The MPL for the Return Link Service availability is defined in the [SAR-SDD] ⁸.

The Return Link Service availability MPL is defined over a period of twelve months (long-term), with a sliding window moving one month ahead every month.

During the reported period, the monthly RLS availability was **100%** every month of the reported period. The normalised value was above **99.84%** every month, compliant with the MPL target of 95% defined over twelve months.

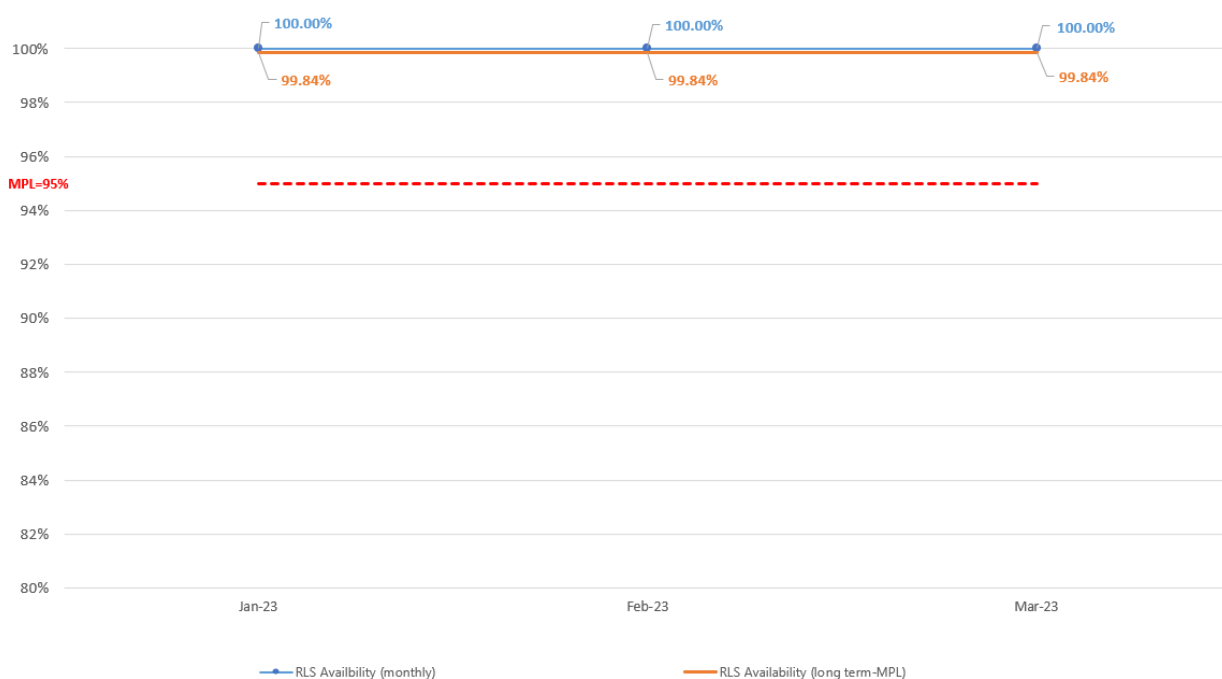


Figure 11: Return Link Service Availability – monthly and long-term trend

⁸ Ref.: [SAR-SDD], §5.2.1 (Table 14)

4.2 RLM DELIVERY LATENCY AND RECEPTION PROBABILITY

The Galileo System delivery latency and RLM Reception Probability MPLs always refer to the percentage of time that the RLS is available and are bounded by transmission of the Galileo Navigation Message in the SIS and the probability of an error free decoding of the RLM fields of the Galileo Navigation Message retrieved from the SIS at the GNSS receiver in, or connected to, the originating alert beacon.

4.2.1 DELIVERY LATENCY

The RLS delivery latency within 15 minutes performance is computed over a calendar month. The boundaries of the monitored loop are defined in the [SAR-SDD] and the MPL is specified at 99%⁹.

During the reported period, the monthly delivery latency was above the MPL with a minimal value of **99.24%** and an average value of **99.62%**.

Table 4: Return Link Service Monthly Delivery Latency within 15 min

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar.
Delivery Latency within 15 min (in %)	≥ 99	100	99.84	99.24

4.2.2 RECEPTION PROBABILITY

The RLS reception probability performance is computed over a calendar month. The MPL defined in the [SAR-SDD] is set to 99%⁹.

During the reported period, the monthly reception probability was above the MPL with a minimal value of **99.76%** and an average value of **99.88%**.

Table 5: Return Link Service Monthly Reception Probability

SAR MPLs	target value	2023		
		Jan.	Feb.	Mar.
Reception probability (in %)	≥ 99	100	99.92	99.76

⁹ Ref.: [SAR-SDD], §4.4 and §5.2.2 (Table 16)

5 SAR/GALILEO SPACE SEGMENT AVAILABILITY

The MPL defined in the [SAR-SDD] is set to 95% ¹⁰ for every single SAR transponder (SART), to be normalised annually.

All the satellites met the SAR Transponder availability MPL for the reporting period with values above **95.37%** except for GSAT-0210 and GSAT-0204.

Satellite GSAT-0210 SAR Transponder normalised availability (over twelve consecutive months) is 91.98% for January and February. The normalised availability for January, February and March is affected by unplanned anomaly of May 2022. GSAT-0210 SAR Transponder normalised availability in March is 90.04% due to unplanned events affecting the SART availability.

¹⁰ Ref.: [SAR-SDD], §5.3 (Table 18)

6 SUPPLEMENTARY METRICS

This section reports relevant performance metrics of the SAR/Galileo Service that are not MPLs.

6.1 LOCATION ACCURACY PERFORMANCE WITHIN 2KM

Multi-burst location accuracy within two kilometres is an expected value defined in the [SAR-SDD] at 90%¹¹.

The expected value is met during the reported period for all the reference beacons as displayed in Figure 12.

Figure 12 below shows the monthly multi-burst two kilometres location accuracy which significantly exceeds the expected value of 90% for each of the SAR/Galileo Reference Beacons, with a minimum value of **95.8%**, a best value of **98.8%** and an average over the reported period of **97.5%**.

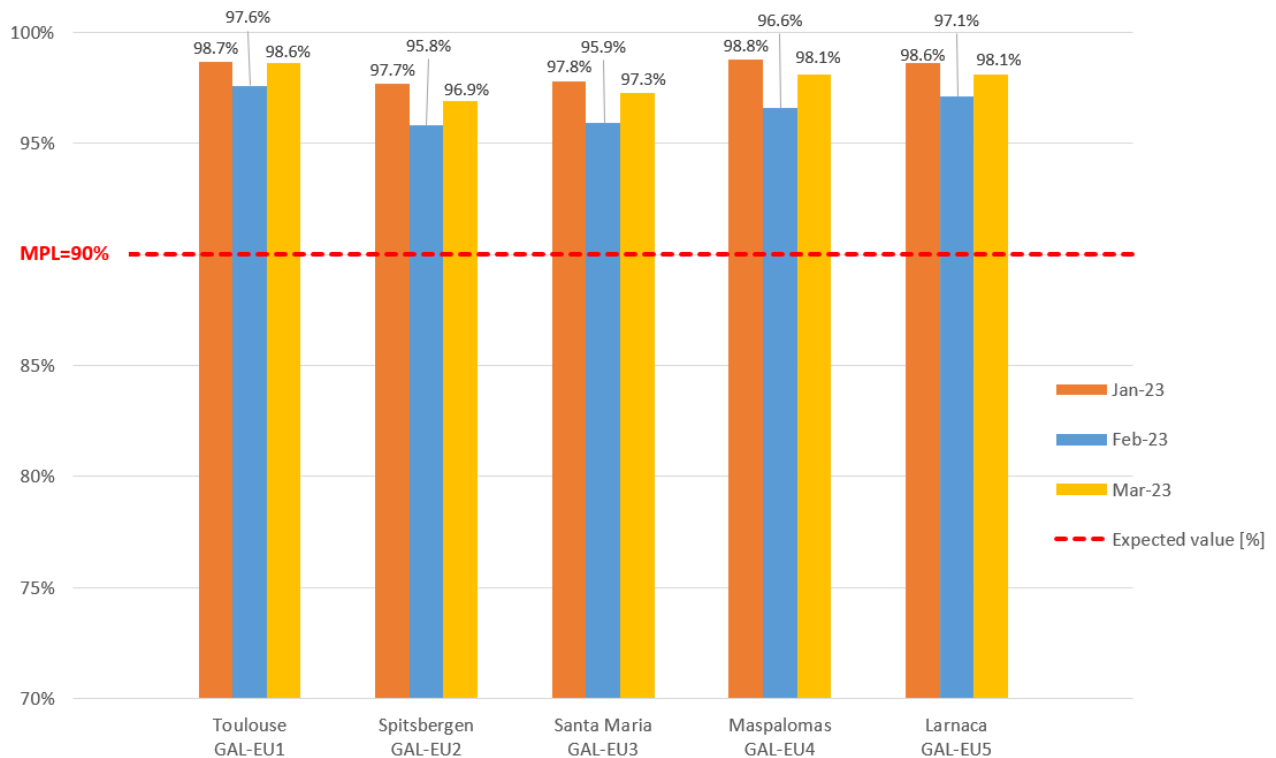


Figure 12: Per Reference Beacon Probability of two kilometres accuracy in multi-burst (in %)

¹¹ Ref.: [SAR-SDD], §5.1.4 (Table 13)

6.2 SAR/GALILEO SERVER AVAILABILITY

The [SAR-SDD] does not define a specific target for the SAR/Galileo Orbit Data Server availability, nevertheless it achieved an average value of **94.21%** during the reported period.

The monthly average availability of orbital data for all Galileo satellites equipped with SAR Transponders and declared available for service is shown in Table 6 for information.

Table 6: SAR/Galileo Orbit Data Server Monthly Availability

Other SAR Ground Segment Elements	2023		
	Jan.	Feb.	Mar.
SAR/Galileo Orbit Data Server Availability (in %)	88.35	97.93	96.35



7 REFERENCES

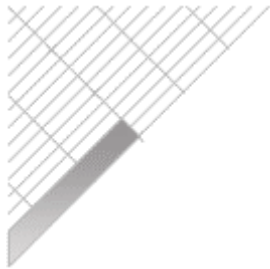
This section identifies the documents explicitly referenced in this SAR/Galileo Enhanced Service Public Performance Report.

[SAR-SDD] *European GNSS (Galileo) SAR/GALILEO Service Definition Document (SAR-SDD), Issue 2.0, European Union, January 2020.*

The [SAR-SDD] defines the SAR/Galileo Enhanced Service and its associated Minimum Performance Levels (MPLs).

8 LIST OF ACRONYMS

Acronym	Definition
Cospas-Sarsat	Cosmicheskaya Sistyema Poiska Avariynich Sudow-Search and Rescue Satellite-Aided Tracking
EU	European Union
EUSPA	European Union Agency for the Space Programme
FLS	Forward Link Service
GSAT	Galileo Satellite
GNSS	Global Navigation Satellite System
GSC	European GNSS Service Centre
MEOLUT	Medium Earth Orbit Local User Terminal
MPL	Minimum Performance Level
MTCF	MEOLUT Tracking Coordination Facility
PRN	Pseudo-Random Noise
REFBE	SAR/Galileo REFERENCE BEacon
RLM	Return Link Message
RLS	Return Link Service
SAR	Search And Rescue
SART	Search And Rescue Transponder
SDD	Service Definition Document
SGC	SAR/Galileo Coverage
SIS	Signal In Space
SV	Space Vehicle



End of Document



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