SURVEY PART III

Questionnaire for potential GOVSATCOM users
who have experience in the use of secure SATCOM services and have been using them for some time

STRUCTURE OF THIS DOCUMENT AND TYPE OF QUESTIONS

- *This survey includes questions divided into the following sections:*

  ENTITY INFORMATION

  A. GENERAL INFORMATION

  B. USER CAPABILITIES AND TECHNOLOGY

  C. USER NEEDS AND REQUIREMENTS

  D. USE CASES

  E.1. USE CASE SPECIFIC REQUIREMENTS

  E.2. BUSINESS IMPACT ASSESSMENTS

  SURVEY ACRONYMS

- *Where necessary, the questions provide short instructions on the content of the fixed lists and scales, definitions of concepts and graphs.*
- *Most of the questions require multiple choice selection of answers e.g.:*

B.1	☒
B.2	☐
Other, which?:	☐

- *There are also matrix type questions were the respondent will be asked to choose his answers from the drop-down list in relation to column A and row B e.g.:*

	A.1	A.2
B.1	List of answers	List of answers
B.2	List of answers	List of answers

a
b
c

- *In many cases there is a possibility to provide an answer to an open question or option e.g.:*

Other, which?:

ENTRUSTED project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 870330.

ENTITY INFORMATION

INSTITUTION AND PERSONAL DATA

a.	**Name**	
b.	**Job function**	
c.	**Activity domain**	
d.	**Organisation**	
e.	**Country**	
f.	**E-mail address**	
g.	**ENTRUSTED PoC**	

			Activities your entity is involved in:	*Is this your main area of activities?*
h.	**User community** *(if you mark more than one community, please mark the checkbox of your main area of activity)*	Border Authorities	☐	☐
		Maritime Authorities	☐	☐
		Civil Protection	☐	☐
		Humanitarian Aid	☐	☐
		EU External Action	☐	☐
		Law Enforcement Bodies	☐	☐
		Military Forces	☐	☐
		Key Infrastructure Operators	☐	☐
		Other, please specify here:	☐	☐

CLASSIFIED INFORMATION

Please read the survey first. Dependently if the answers to survey would contain classified information. Please mark the relevant box and proceed accordingly?

NO ☐ *Please proceed to answer the survey.*

YES ☐ *Please inform your PoC who will indicate you how to proceed.*

GENERAL REGULATION ON DATA PROTECTION

☐ *The collection of personal data is the sole responsibility of ENTRUSTED project consortium members, who guarantee their protection in compliance with the General Data Protection Regulation (EU) 2016/679 and regulation (EU) 2018/1725, and arises within the scope of the project and activity to which this questionnaire reports to. To learn more about the ENTRUSTED project's Data Privacy Policy, please visit the website: https://entrusted.eu*

☐ *By completing this form, I consent the ENTRUSTED project PoC to contact me via email to provide more information about the project. I have read and agree with the Data Privacy Policy of the ENTRUSTED project available at https://entrusted.eu.*

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A. GENERAL INFORMATION

1. What are the main barriers (if any) when using SATCOM services, including secure SATCOM?

Please provide information on your barriers according to you experience:

- *User specific barriers e.g.: lack of technical know-how, necessary equipment or people trained*

- *Legal and institutional barriers e.g.: national procurement rules, legal constrains (e.g. national radio landing rights)*

- *Service specific barriers e.g.: delays to procure/deploy services, high cost of services*

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2. Considering the geographical regions in which your entity operates or plans to operate, please indicated the current / future level of priority to have secure SATCOM services in the Areas Of Operation (AOO) identified in Figure 1.

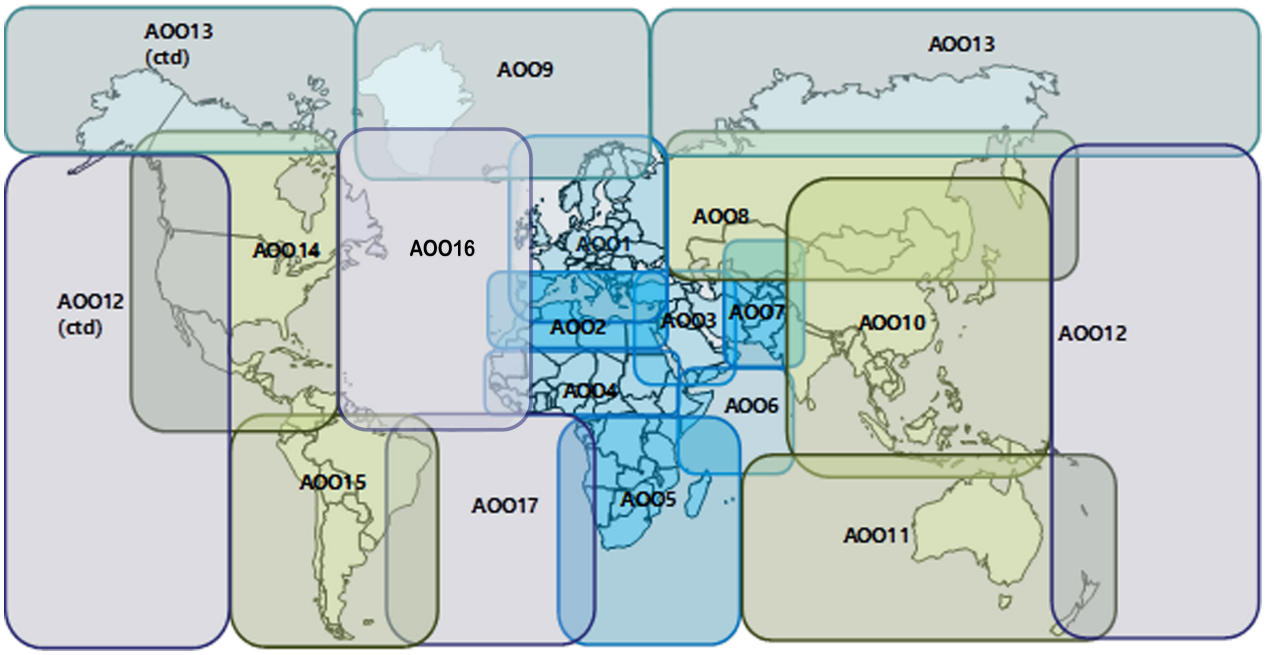

Figure 1- Geographical areas of operation (© EDA)

- *Please select level of priority: Priority 1 - top priority, Priority 3 - the low priority.*

AOO	Geographical Area	Today	Medium-long term (after 2027)
AOO1	Continental Europe	Please select priority level.	Please select priority level.
AOO2	Mediterranean and North Africa	Please select priority level.	Please select priority level.
AOO3	Cyprus and the Middle East	Please select priority level.	Please select priority level.
AOO4	Central Africa	Please select priority level.	Please select priority level.
AOO5	Southern Africa	Please select priority level.	Please select priority level.
AOO6	Arabian Sea and gulf of Aden	Please select priority level.	Please select priority level.
AOO7	South-West Asia	Please select priority level.	Please select priority level.
AOO8	Russia and Central Asia	Please select priority level.	Please select priority level.
AOO9	Greenland and Artic (above European territories)	Please select priority level.	Please select priority level.
AOO10	China and South-East Asia	Please select priority level.	Please select priority level.
AOO11	Oceania and Indian Ocean	Please select priority level.	Please select priority level.
AOO12	Pacific Ocean	Please select priority level.	Please select priority level.
AOO13	Rest of the Arctic	Please select priority level.	Please select priority level.
AOO14	North and Central America	Please select priority level.	Please select priority level.
AOO15	South America	Please select priority level.	Please select priority level.
AOO16	North Atlantic	Please select priority level.	Please select priority level.
AOO17	South Atlantic	Please select priority level.	Please select priority level.

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B. USER CAPABILITIES AND TECHNOLOGY

3. Which of the following SATCOM services is your entity currently using or is planning to use?

	Currently use it	Planned to use it
Voice-only services *(including in remote locations, fixed and on-the-move)*	☐	☐
Transmission of content in one direction (Broadcast or Multicast services) *(e.g. TV)*	☐	☐
High-speed data connection (Fixed Broadband services) *(e.g., high-speed internet, B2B, OTT, DHT)*	☐	☐
High-speed data connection on the move (Mobile Broadband services) *(e.g., onboard airplanes, vessels, trucks or other vehicles)*	☐	☐
Low data-rate services *(e.g. IoT, machine-to-machine (M2M) services, fixed and on-the move)*	☐	☐
If other, which?:	☐	☐

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4. What data/applications does your entity usually / plan to transmit/use via SATCOM services?
Please, mark the relevant checkbox(es) corresponding to each type of satellite service used for each type of data/application, i.e.,:

- *Fixed Satellite Services (FSS): radiocommunication service between earth stations at given positions, when one or more satellite are used.*
- *Mobile Satellite Services (MSS): radiocommunication service between mobile earth stations and one or more space stations, or between space stations used by this service, or between mobile earth stations by means of one or more space stations.*
- *Broadcast Satellite Services (BSS): radiocommunication service in which signals transmitted or retransmitted by space stations are intended for direct reception by the general public.*

Currently use it:	**FSS**	**MSS**	**BSS**
Real-time video streaming	☐	☐	☐
Video conferencing (2 directions)	☐	☐	☐
Video non-real time (e.g. TV)	☐	☐	☐
Voice calls (e.g. teleconference, phone)	☐	☐	☐
Voice over IP	☐	☐	☐
Radio services (e.g. voice messaging, push-to-talk)	☐	☐	☐
Real-time content sharing (e.g. images, messaging)	☐	☐	☐
Other non-real time data transmission (e.g. email, Internet access)	☐	☐	☐
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	☐	☐	☐
Remote and secured access to specific information systems or databases	☐	☐	☐
IoT applications	☐	☐	☐
Network backhauling (e.g. satellite backhaul for 5G networks)	☐	☐	☐
Other, please specify:	☐	☐	☐

Planned to use it:	**FSS**	**MSS**	**BSS**
Real-time video streaming	☐	☐	☐
Video conferencing (2 directions)	☐	☐	☐
Video non-real time (e.g. TV)	☐	☐	☐
Voice calls (e.g. teleconference, phone)	☐	☐	☐
Voice over IP	☐	☐	☐
Radio services (e.g. voice messaging, push-to-talk)	☐	☐	☐
Real-time content sharing (e.g. images, messaging)	☐	☐	☐
Other non-real time data transmission (e.g. email, Internet access)	☐	☐	☐
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	☐	☐	☐
Remote and secured access to specific information systems or databases	☐	☐	☐
IoT applications	☐	☐	☐
Network backhauling (e.g. satellite backhaul for 5G networks)	☐	☐	☐
Other, please specify:	☐	☐	☐

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5. For the applications you are familiar with, can you use today Open satellite systems? What would be the option that you expect in the future?

- ***Open systems:*** *any satellite system allowing the use of any user terminal and associated sub-systems (e.g. modem) within the frequency band of the satellite system e.g. SES.*
- ***Closed systems:*** *any satellite system which requires the user to utilize a proprietary user terminal and associated sub-systems (e.g. modem) e.g. WGS.*

Remark:

This question considers the use of Open/Closed systems per application.
If you consider any other relevant remark, for instance, to take into account the context where the satcom service is used, please provide a specific comment in section E.3.

Type of different applications	**Today**	**Is it acceptable in the medium-long terms? (after 2027)**	
		Open Systems	Closed Systems
Real-time video streaming	Select	Select	Select
Video conferencing (2 directions)	Select	Select	Select
Video non-real time (e.g. TV)	Select	Select	Select
Voice calls (e.g. teleconference, phone)	Select	Select	Select
Voice over IP	Select	Select	Select
Radio services (e.g. voice messaging, push-to-talk)	Select	Select	Select
Real-time content sharing (e.g. images, messaging)	Select	Select	Select
Other non-real time data transmission (e.g. email, Internet access)	Select	Select	Select
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Select	Select	Select
Remote and secured access to specific information systems or databases	Select	Select	Select
IoT applications	Select	Select	Select
Network backhauling (e.g. satellite backhaul for 5G networks)	Select	Select	Select
Other, please specify:	Select	Select	Select

6. Please select the current and expected use of secure SATCOM services over your current communications systems:

	Today	**Medium-long term (after 2027)**
Expected use of secure SATCOM services	Select Use	Select Use

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7. SATCOM systems can be owned by commercial or governmental entities. In your plans to use SATCOM services, please select your preferences with respect to the ownership of the systems, and thus the service provision.

	Today	Medium-long term (after 2027)
Expected use of secure SATCOM services by ownership	Select Provider	Select Provider

8. Does your entity use national commercial or nationally-owned SATCOM capacity?

Yes ☐

Space segment	Ground Segment
Select	Select

No ☐

9. Are you aware of any initiative at national level to make available nationally-owned teleports for GOVSATCOM?

Yes ☐ if yes, please specify:

No ☐

10. Does your entity have an approach to the procurement and operation of SATCOM terminals?

- *Build, procurement to develop specific terminals in line with specification from user*
- *Buy, procurement to buy terminals from established supply catalogues*
- *Lease, procurement to access to SATCOM terminals through lease agreements with suppliers*
- *Gov2Gov, access to SATCOM terminals through agreements with other governments or institutions such as EDA or NATO*

SATCOM Terminal Procurement	Today	Medium-long term (after 2027)
Build	Please select answer	Please select answer
Buy	Please select answer	Please select answer
Lease	Please select answer	Please select answer
Gov2Gov	Please select answer	Please select answer

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11. Do you foresee the need for technical interoperability of terminals with other radio equipment?

Specific standards	☐ If Yes, please specify:
Terrestrial ground radio	☐ If Yes, please specify:
Data	☐ If Yes, please specify:
Switching / flexibility	☐ If Yes, please specify:
Local network hub / gateway capabilities	☐ If Yes, please specify:

12. Do you foresee any other kind of interoperability for secure SATCOM services?

- Technical (e.g. interoperability with other systems), if yes, which
- Procedural (e.g. standardization of capabilities among users involved, terminology), if yes, which?
- Organisational (e.g. logistics to put in operations services), if yes, which?

13. In your opinion, how are LEO/MEO constellations expected to impact the supply of your SATCOM services?

Please, select one of the following options and justify your answer. Some examples include: latency, coverage, availability, etc.

High impact	☐
Moderate impact	☐
Low impact	☐
No impact	☐

Please justify your choice:

14. Does your entity in the short or medium-term have any SATCOM development activity planned?

Please, consider development in the space, ground and user (terminals, services) segments. Examples include NATO PCN support for SATCOM, federated mission support, etc.

Short term (2021-2027)	☒ if yes, please specify
Medium-Long term (After 2027)	☐ if yes, please specify
We do not know:	☐

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15. **Are you aware of any secure SATCOM development plans at national level?**
If yes, please specify:

16. **Is your entity involved, or planning to be involved, in Research & Innovation initiatives related to secure SATCOM, and if so, could you tell us which?**
If yes, please specify:

17. **Are you aware of Research & Innovation initiatives related to secure SATCOM that are implemented at national level, and that you think we may not yet be aware of? If so, could you list them?**
If yes, please specify:

18. **Would your entity be interested in a collaborative approach to develop secure SATCOM capabilities?**
If yes, please specify:

19. **Apart from technical features limiting the selection of a service provider of SATCOM services (e.g. coverage, type of service), are there any other pre-existing constraints or obligations (political, financial, contractual, etc.) that may impact the choice of a particular SATCOM operator or provider?**

No ☐
Yes ☐

If yes, please explain which ones:

- Priority of use of national capacity/operators ☐
- Established G2G agreements ☐
- Financial limitations forcing to make the selection based on price ☐
- Security limitations forcing to use a specific system ☐
- Other, please specify

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C. USER NEEDS AND REQUIREMENTS

20. In general terms, what is / would be the level of importance that your entity gives to the following quality criteria in the framework of the secure SATCOM services?

- *Please rank each use case from 5 – very important and 1 – not important.*

Functional criteria	Definition	Today	Medium-long term (After 2027)
Coverage	Earth area from/towards which a SATCOM transmission can be set up.	Select importance.	Select importance.
Flexibility	The ability of the proposed solution to meet unexpected or new demands or change to meet evolving user needs.	Select importance.	Select importance.
Interoperability	Capability of a SATCOM service to be set up on different SATCOM systems (potentially from different providers) without any major disruption.	Select importance.	Select importance.
Latency	The time it takes a bit of information to traverse an end-to-end network from its originating point to its final destination (end to end service time).	Select importance.	Select importance.
Network Management Capability	The ability for a SATCOM network to offer an overview of its current state in real-time.	Select importance.	Select importance.
Ease of Deployment	Level of complexity when deploying ground terminals to get the service operational (e.g. preconfigured terminals, default configuration, etc.)	Select importance.	Select importance.

Quality criteria	Definition	Today	Medium-long term (After 2027)
Availability	Ensuring that authorised users have access to information and associated assets and can use them when required. The availability may be defined for each segment/equipment and for the whole system.	Select importance.	Select importance.
Resilience	Measures the capacity of assurance of continued access in front of unexpected disruption or degradation of the service.	Select importance.	Select importance.
Responsiveness	Delay between the time a satcom service action is inputted and the time that it is executed and effective.	Select importance.	Select importance.
Scalability	Capability to consider/implement new requirements and/or new SATCOM services and/or new SATCOM users within the SATCOM systems.	Select importance.	Select importance.
Security	The achieved state where protection measures are efficient to face and counter threats and attacks to guarantee the confidentiality and integrity of the information.	Select importance.	Select importance.

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21. Considering the potential use of SATCOM services in your entity today and in the future, please select the configurations that would be the most suitable to satisfy your needs indicating, in case more than one configuration is valid, how much it would be used.

Total use: =100% of SATCOM services in this configuration, High use: ~75% of SATCOM services in this configuration; Average use: ~50% of SATCOM services in this configuration; Low use: 25%; No use: 0%; Configuration considered, but % of use not known.

	Today	Medium-long term (after 2027)
Bandwidth (BW) only	Select % of use	Select % of use
Anchoring services	Select % of use	Select % of use
End-to-end service	Select % of use	Select % of use
Backhauling services	Select % of use	Select % of use
Total use of SatCom over the period	***100%***	***100%***

Definitions:

- ***Bandwidth (BW) only (Space capacity)*** *- raw bandwidth and equivalent power apportioned.*
- ***Anchoring services -*** *services provided to integrate SatCom access with terrestrial networks through anchor stations that serve as switching and routing centers facilitating interface between satellite traffic and fixed networks.*
- ***SatCom generic services (End-to-end service)*** *- requests end-to-end user services directly that includes the lease of space capacity anchoring services, ground segment or associated services.*
- ***Backhauling services –*** *connection between terrestrial core or backbone networks and other subnetworks.*

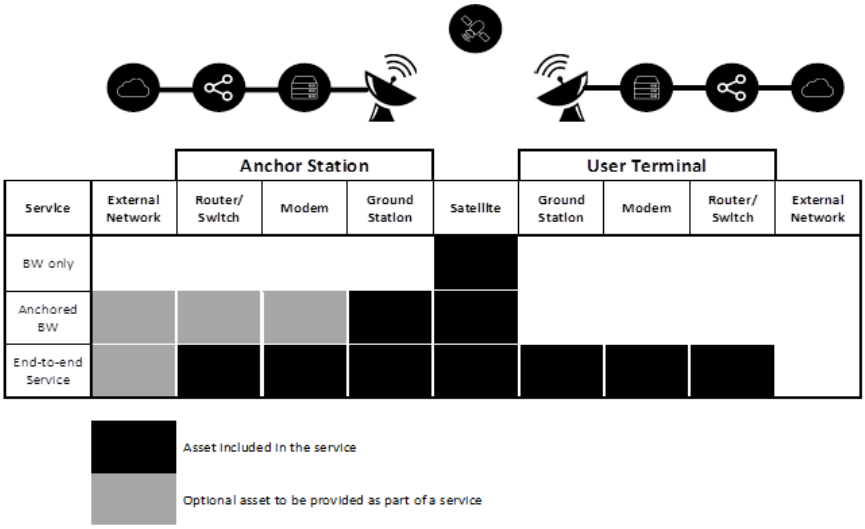

Figure 2- Secure SatCom Service configuration options

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22. Is your entity interested in a Pan-European mesh network topology that allows all remote stations (i.e. ground stations and/or anchor stations) to talk to each other if necessary (this can be very useful in case of main emergency / manoeuvrers / actions where several different actors are engaged)?

Yes ☐

No ☐

23. Which frequency bands do you consider important to implement the applications listed in the table below?

Please, bear in mind bands such as Q-band in the „Other" column, relevant for aviation, RPAS, IoT or other Beyond Line-of-sight applications among others.

For definition of the frequency bands, please refer to the section „CLARIFICATIONS AND REFERENCES" at the end of this questionnaire.

Today

Applications	Frequency Bands										Relevance
	Narrow bands			High frequencies							
	UHF	L	S	C	X	Ku	Ka	Ka Mil	V	Other, which?	Most relevant bands for the application?
Today											
Real-time video streaming	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Video conferencing (2 directions)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Video non-real time (e.g. TV)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Voice calls (e.g. teleconference, phone)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Voice over IP	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Radio services (e.g. voice messaging, push-to-talk)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Real-time content sharing (e.g. images, messaging)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Other non-real time data transmission (e.g. email, Internet access)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Remote and secured access to specific information systems or databases	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IoT applications	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Network backhauling (e.g. satellite backhaul for 5G networks)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Other, which?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

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Question 23 (cont')

Mid-long Term (2021-2027)

Applications	Frequency Bands										Relevance
	Narrow bands			High frequencies							
	UHF	L	S	C	X	Ku	Ka	Ka Mil	V	Other, which?	Most relevant bands for the application?
Today											
Real-time video streaming	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Video conferencing (2 directions)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Video non-real time (e.g. TV)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Voice calls (e.g. teleconference, phone)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Voice over IP	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Radio services (e.g. voice messaging, push-to-talk)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Real-time content sharing (e.g. images, messaging)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Other non-real time data transmission (e.g. email, Internet access)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Remote and secured access to specific information systems or databases	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
IoT applications	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Network backhauling (e.g. satellite backhaul for 5G networks)	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
Other, which?	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

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24. In general terms, which of the following information protection aspects would your entity expect while using secure and guaranteed SATCOM services?

- *Please choose your answer according to the following scale: 1 – not important, 5 – very important.*

[confidentiality] Possibility to transmit EU Classified Information (EUCI)	Choose from 1 to 5
[confidentiality] Possibility to transmit National Classified information	Choose from 1 to 5
[confidentiality] Levels of security guaranteed by accreditation entities	Choose from 1 to 5
[confidentiality] Protection of user location	Choose from 1 to 5
[integrity] Integrity and non-repudiation of transmitted information	Choose from 1 to 5
[integrity] Resilience and protection against jamming and interference	Choose from 1 to 5
[integrity] Monitoring of communication link status (Link status service)	Choose from 1 to 5
[availability] Geographical coverage and ensured capability (e.g. bandwidth)	Choose from 1 to 5
[availability] Tailored access by type of user community	Choose from 1 to 5
[authenticity] Authenticity	Choose from 1 to 5
[non-repudiation] Non-repudiation	Choose from 1 to 5
Other, which?	Choose from 1 to 5

25. Does your entity expect dedicated EU-S/S-EU network requirements for up to SECRET satellite links?

E.g. US SPRNet (Secret Internet Protocol Router Network) used within NATO or similar

Yes ☐ If yes, please specify

No ☐

26. Select the current / future intensity of use of SATCOM user terminals, according to its configuration

High use >66%; Moderate use: 33% - 66%; Limited use: >0% & <33%; No *use: 0%*

Type of user terminal	**Type of users** *(select only if needed, to specify needs for different domains)*	**Today**	**Medium-long term (after 2027)**
Fixed base	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
Deployable base	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
Mobile terminal	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
	Select type of user	Select intensity of use	Select intensity of use
Total		***100%***	***100%***

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27. With respect to SATCOM terminals, what requirements would you consider important to facilitate its usage within your entity?

Certification / standardization	☐	
Reliability	☐	
Weight	☐	
Waterproof	☐	
Battery duration / power consumption	☐	
Interoperability	☐	
Cybersecurity (access to user terminals)	☐	
Cost	☐	
Multi-band capabilities	☐	
Multi-orbit capabilities	☐	
Easy-to-use and easy-to-deploy technology and interface	☐	
Information protection at the terminal level	Select	Select EUCI level.
Availability	☐	
Confidentiality	☐	
Integrity	☐	
Authenticity	☐	
Non-repudiation	☐	
Other, which?	☐	

28. Does/will your entity use multi-band terminals?

Yes ☐

No ☐

If yes, please comment in which circumstances:

29. How would you expect to get access to the future GOVSATCOM services?

This question refers to the way users expect to put in place a service request. Please, select as many options as you consider relevant.

Via website, directly contracting services from there	☐
Via phone call, directly contracting services by calling to a unique service access point	☐
Having access to a catalogue of pre-defined services and prices	☐
Having access to multiple offers for the same service request (i.e. competitiveness)	☐
Other, which?:	☐

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30. Which means would you expect to interact with the customer support service of secure SATCOM services?

This question refers to the expected interface with the potential support service of the SATCOM service provider, once the SATCOM service is in place. Please, select as many options as you consider necessary

Via website (e.g. live chat)	☐
Via direct contact by phone	☐
Via email	☐
Other, which?:	☐

31. Which of the following customer services would be of interest for your entity?

365/7/24 Customer support (Hotline/Help Desk)	☐
Online technical support	☐
On-site/In-field technical support	☐
Lease/Logistic & supply of pre-configured SATCOM terminals	☐
Training services to use / deploy services	☐
Reference materials (e.g. handbooks on secure communications)	☐
Framework agreement (Pooling and sharing platform)	☐
Tailored Service Level Agreement (SLA)	☐
Other which?	☐

32. If your entity would consider accessing the SATCOM services through a Service Level Agreement (SLA), which features would be relevant to be included in this SLA? Please, select the information relevant for you from the drop-down lists.

Access to different service packages depending on the need (e.g. basic, enhanced, premium)	Select
Access to customer portal for SW updates/documentation	Select
Specific reaction time to issues	Select
Hotline customer support	Select
System Health Check	Select
Top priority to access services	Select
Regular reporting of service status	Select
Other, which?:	

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D. USE CASES

33. The ENTRUSTED project has identified a preliminary set of Use Cases for secure SATCOM services. Based on the tasks, duties and activities of your entity, please select from the following list the Use Cases for which your entity could use SATCOM services:

The use cases are grouped by 3 Fields of Application: (1) Surveillance, (2) Crisis Management and (3) Key Infrastructure, and respectively in Use Case Families within each FoA.

There are also 3 Specific Use Cases: (a) Polar regions users, (b) UAV/RPAS/Beyond Line-of-Sight Communication – Aerial SATCOM and (c) Machine to Machine communications and IoT.

S. SURVEILLANCE

S.1. Border surveillance

- S.1.1. Sea border scenarios ☐
- S.1.2. Land border scenarios ☐
- S.1.3. Pre-frontier scenarios ☐
- S.1.4. Military missions and operations (CSDP & national) ☐
- Other, which?: ☐

S.2. Maritime surveillance & control

- S.2.1. Maritime safety and surveillance ☐
- S.2.2. Maritime security: illegal activities ☐
- S.2.3. Fisheries Monitoring Control and Surveillance ☐
- S.2.4. Protection of shore and maritime resources ☐
- S.2.5. Protection of subaquatic cultural heritage ☐
- S.2.6. Military missions and operations ☐
- Other, which?: ☐

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C. CRISIS MANAGEMENT

C.1. Maritime Emergency

- C.1.1. Maritime Search and Rescue (SAR) ☐
- C.1.2. Response to maritime disasters – civil ☐
- C.1.3. Response to maritime disasters – military ☐
- C.1.4. Telemedicine (onboard ships) ☐
- Other, which?: ☐

C.2. Humanitarian Aid

- C.2.1. Assistance in case of disasters and armed conflicts ☐
- C.2.2. Telemedicine ☐
- C.2.3. Refugee camps main communication ☐
- C.2.4. Refugee camps welfare services (e.g. videoconference) ☐
- C.2.5. Peacekeeping mission communications ☐
- Other, which?: ☐

C.3. Civil Protection

- C.3.1. Response to natural and man-made disasters ☐
- C.3.2. Ambulance and fire risk rescue response within EU ☐
- C.3.3. Information dissemination (e.g. open messages comms) ☐
- C.3.4. Forest fires early-warning video surveillance ☐
- C.3.5. External Public protection ☐
- Other, which?: ☐

C.4. Law Enforcement Interventions

- C.4.1. Fight against international drug traffic ☐
- C.4.2. Fight against international Organized Crime Groups (OCG) ☐
- C.4.3. National police missions within EU ☐
- C.4.4. Fight against environmental crimes (e.g. illegal waste dumping). ☐
- Other, which?: ☐

C.5. EU External Action

- C.5.1. Civilian CSDP missions ☐
- C.5.2. Election observation ☐
- C.5.3. EU Diplomatic representation in foreign countries ☐
- C.5.4. Intelligence ☐
- C.5.5. UN missions ☐
- C.5.6. NATO missions ☐
- Other, which?: ☐

C.6. Forces deployment

- C.6.1. Defence National Territory ☐
- C. 6.2. Support Air Defence systems ☐
- C.6.3. Joint military C2 network resilience – secondary links ☐
- C.6.4. Support to other governmental bodies ☐
- C.6.5. HQ Operations connection ☐
- C.6.6. Air alternative communications ☐
- C.6.7. Maritime military research – ship communications ☐

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K. KEY INFRASTRUCTURES

K.1. Transport infrastructures

- K.1.1. Air traffic management ☐
- K.1.2. Rail traffic management ☐
- K.1.3. Road traffic management ☐
- K.1.4. Maritime traffic management ☐
- Other, which?: ☐

K.2. Space Infrastructures

- K.2.1. Space segment infrastructure protection and service enhancement ☐
- K.2.2. Ground segment infrastructure protection and service enhancement ☐
- K.2.3. Launch segment infrastructures enhancement (e.g. CGS) ☐
- K.2.4. Service synergies (e.g. Copernicus, Galileo, SSA) ☐
- K.2.5. Military space segment infrastructure protection and enhancement ☐
- K.2.6. Military ground segment infrastructure protection and enhancement ☐
- Other, which?: ☐

K.3. Institutional Communications

- K.3.1. National diplomacy (e.g. connectivity between HQ and remote sites, dedicated secure lines of communication) ☐
- K.3.2. EU delegations out of the EU ☐
- K.3.3. Connectivity to the ECHO field offices out of the EU ☐
- K.3.4. EU High & Special Representatives ☐
- K.3.5. EUROPOL network ☐
- K.3.6. Police routine operations ☐
- Other, which?: ☐

K.4. Other Critical Infrastructures

- K.4.1. Energy grid infrastructures – backup communication link ☐
- K.4.2. CBNR Infrastructures – backup communication link ☐
- K.4.3. Financial Infrastructures (e.g. National or EU institutions) – backup communication link ☐
- K.4.4. Telecommunications Infrastructure (e.g. secure backup link, interconnection between systems) ☐
- K.4.5. ICT infrastructure ☐
- Other, which?: ☐

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SU. SPECIFIC USE CASES FOR CIVIL AND MILITARY USERS

SU-P. Polar Regions

- SU-P.1. Surveillance services ☐
- SU-P.2. Diplomatic activity e.g. international actions ☐
- SU-P.3. Protection of space infrastructure ☐
- SU-P..4. Air Traffic Management (ATM) ☐
- SU-P.5. Crisis management missions ☐
- SU-P.6. Military operations in the Arctic ☐
- SU-P.7. Dissemination of space data in the Arctic regions ☐
- Other, which?: ☐

SU-R. UAV/RPAS Beyond Line-of-Sight Communication – Aerial SATCOM

- SU-R.1 UAV/RPAS Command & Control communications ☐
- SU-R.2. UAV/RPAS sensor data transmission ☐
- Other, which?: ☐

SU-M. M2M & IoT communication

- SU-M.1. Secure and cost-effective M2M communications ☐
- SU-M.2. IoT secure applications ☐
- Other, which?: ☐

Other use cases:

Please, provide details on other use cases of GOVSATCOM services not identified above that might be of intersest for your entity.

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E.1. USE CASE SPECIFIC REQUIREMENTS

The following questions should be answered considering the specific Use Cases of interest for your entity selected in previous section D, with the aim of tailoring future services the most accurately possible to the user's needs.

(please duplicate the sections E.1 and E.2 below if you need to answer for more than one use case)

USE CASE
Please choose from the list, ▪ or indicate other:

34. What parameters would be the key to use the secure SATCOM services for this use case?

Please choose from the options presented for each parameter.

Proposed breakdown of the Word in reference Areas of Operations (AOO) for modelling in the Forecast tool

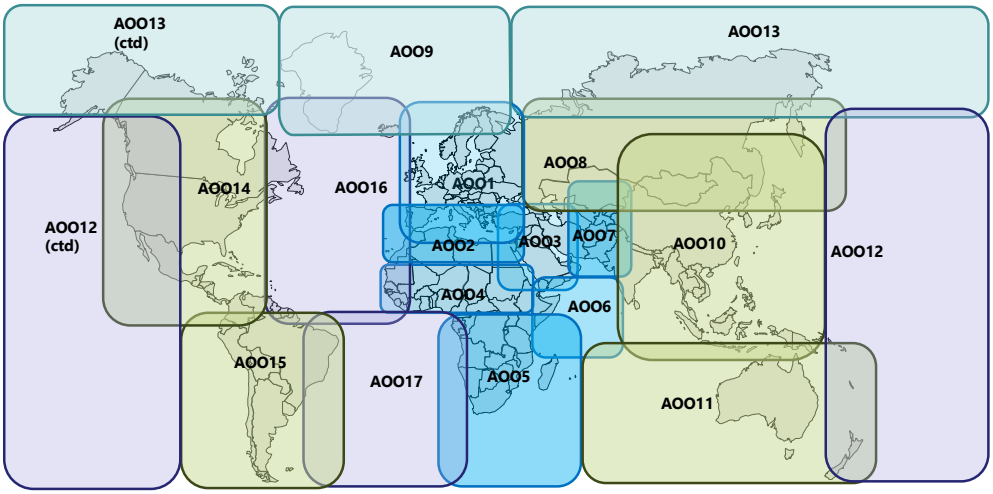

Figure 3- Geographical areas of operation (@EDA)

Geographical coverage *(please, refer to Figure 1 to select the areas of coverage or, if more than 3, specify in "other" the coverage expected for the use case)*	Area of interest: Choose geographical area, Area of interest: Choose geographical area, Area of interest: Choose geographical area. If other (e.g. global, continent), which?:
Capacity (Data rate (Kbps))	Choose capacity need,
Frequency band (if known) *(refer to CLARIFICATIONS AND REFERENCES for frequency band allocation)*	Choose frequency band If Other, please specify:
Is latency a critical parameter for this use case? Do you know which latency would be adequate for the services foreseen?	Select… If yes, Choose latency need

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Service availability	Choose availability %,
Seamless continuous service (i.e. handover)	No ☐ Yes ☐
Expected deployment time of the service (i.e. time from service ordering to the service being operational)?	Select the deployment time
How long do you need the system to be deployed for	Choose service duration
What kind of terminals do you need for the specific use case?	Choose type of terminal
Is occasional data loss in transmission acceptable, or is it vital that every message get through reliably?	Occasional data loss: Acceptable ☐ Not acceptable ☐
Do you need to have the data in real time or some delay is acceptable?	Real-time ☐ Some delay acceptable ☐ Do not know ☐
If you plan to transmit video content in this use case, what option would you need?	Choose video transmission need
Is the link recovery function important for this use case?	Select… If yes, which information would you expect?:
Do you see the need of any protected waveforms for this use case? E. g. specific waveform could be essential for the anti-jamming capabilities	Select… If yes, please provide any relevant standard or reference:
Could the current service costs of secure SATCOM be a barrier for its usage in the use case	Select… If yes, what would be the reduction in cost that would prevent your entity from not using them? % reduction with respect to current cost

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35. What security aspects would be important for this use case?

	Check if relevant	Required classification level in operations
Resilience and protection against jamming and interference:		
- resilience *(technical and procedural means for quick remedy any interference and interruption occurring on a service)*	☐	
- robustness to interference *(elimination of unwanted signals during communication)*	☐	
- anti-jamming *(prevention against signal disruption)*	☐	
Cyber resilience and protection *(elimination of entry points for cyberattacks on users information systems)*	☐	
Data encryption	☐	Select EUCI level.
Controlled access to services	☐	Select EUCI level.
Controlled access to infrastructures and control centres	☐	Select EUCI level.
Non-dependence from third parties	☐	
Authenticity	☐	
Non-repudiation	☐	
Others, which?:	☐	

In case your use case is linked to safety related applications, please provide any specific security aspect to be considered (e.g. EGNOS (ARAIM), ATM (SESAR)):

36. What type of applications and associated type of services would your entity need for this specific use case? Please, select as many as you might consider.

	FSS	MSS	BSS
Real-time video streaming	☐	☐	☐
Video conferencing (2 directions)	☐	☐	☐
Video non-real time (e.g. TV)	☐	☐	☐
Voice calls (e.g. teleconference, phone)	☐	☐	☐
Voice over IP	☐	☐	☐
Radio services (e.g. voice messaging, push-to-talk)	☐	☐	☐
Real-time content sharing (e.g. images, messaging)	☐	☐	☐
Other non-real time data transmission (e.g. email, Internet access)	☐	☐	☐
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	☐	☐	☐
Remote and secured access to specific information systems or databases	☐	☐	☐
IoT applications	☐	☐	☐
Network backhauling (e.g. satellite backhaul for 5G networks)	☐	☐	☐
Other, which?	☐	☐	☐

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37. If you have already used SATCOM services for this use case, could you specify the most common frequency bands used and the associated bandwidth?

Application (fill only the ones applicable to your use case)	Select Frequency Band	Indicate Bandwidth
Real-time video streaming	Choose frequency band If Other, which?:	MHz
Video conferencing (2 directions)	Choose frequency band If Other, which?:	MHz
Video non-real time (e.g. TV)	Choose frequency band If Other, which?:	MHz
Voice calls (e.g. teleconference, phone)	Choose frequency band If Other, which?:	MHz
Voice over IP	Choose frequency band If Other, which?:	MHz
Radio services (e.g. voice messaging, push-to-talk)	Choose frequency band If Other, which?:	MHz
Real-time content sharing (e.g. images, messaging)	Choose frequency band If Other, which?:	MHz
Other non-real time data transmission (e.g. email, Internet access)	Choose frequency band If Other, which?:	MHz
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Choose frequency band If Other, which?:	MHz
Remote and secured access to specific information systems or databases	Choose frequency band If Other, which?:	MHz
IoT applications	Choose frequency band If Other, which?:	MHz
Network backhauling (e.g. satellite backhaul for 5G networks)	Choose frequency band If Other, which?:	MHz
Other, which?	Choose frequency band If Other, which?:	MHz

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38. What is / would be the minimum acceptable level of security for each of the following applications? In case that you need to exchange EUCI, what is / would be the classification level for each of the following services?

- *Please select the minimum acceptable level of security:*
  - *Not Applicable*
  - *Authorization & Access Control (e.g. DAC, FBAC, MAC, RBAC),*
  - *Authentication (e.g. Password, Challenge-Response, Biometric, Kerberos),*
  - *Communications Layer Security (e.g. VPN, IPsec, SSL/TLS, S/MIME, Firewalls),*
  - *Cryptography (e.g. Hazing, Ciphers, Digital Signatures, Certificates)*
  - ***if you have other level of security, please indicate, which?:***

Today	**Level of Security required**	**EUCI level need**
Real-time video streaming	Select the level of security.	Select EUCI level.
Video conferencing (2 directions)	Select the level of security.	Select EUCI level.
Video non-real time (e.g. TV)	Select the level of security.	Select EUCI level.
Voice calls (e.g. teleconference, phone)	Select the level of security.	Select EUCI level.
Voice over IP	Select the level of security.	Select EUCI level.
Radio services (e.g. voice messaging, push-to-talk)	Select the level of security.	Select EUCI level.
Real-time content sharing (e.g. images, messaging)	Select the level of security.	Select EUCI level.
Other non-real time data transmission (e.g. email, Internet access)	Select the level of security.	Select EUCI level.
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Select the level of security.	Select EUCI level.
Remote and secured access to specific information systems or databases	Select the level of security.	Select EUCI level.
IoT applications	Select the level of security.	Select EUCI level.
Network backhauling (e.g. satellite backhaul for 5G networks)	Select the level of security.	Select EUCI level.
Other, which?	Select the level of security.	Select EUCI level.

Medium/Long-term (After 2027)		
Real-time video streaming	Select the level of security.	Select EUCI level.
Video conferencing (2 directions)	Select the level of security.	Select EUCI level.
Video non-real time (e.g. TV)	Select the level of security.	Select EUCI level.
Voice calls (e.g. teleconference, phone)	Select the level of security.	Select EUCI level.
Voice over IP	Select the level of security.	Select EUCI level.
Radio services (e.g. voice messaging, push-to-talk)	Select the level of security.	Select EUCI level.
Real-time content sharing (e.g. images, messaging)	Select the level of security.	Select EUCI level.
Other non-real time data transmission (e.g. email, Internet access)	Select the level of security.	Select EUCI level.
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Select the level of security.	Select EUCI level.
Remote and secured access to specific information systems or databases	Select the level of security.	Select EUCI level.
IoT applications	Select the level of security.	Select EUCI level.
Network backhauling (e.g. satellite backhaul for 5G networks)	Select the level of security.	Select EUCI level.
Other, which?	Select the level of security.	Select EUCI level.

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39. Do you see any benefit on the following service-provision modalities for GOVSATCOM services?

Service Level Agreement (SLA)	☐
Memorandum of understanding	☐
Monthly/annual supply contracts	☐
Framework contract	☐
Other, which?	☐

40. Considering the SATCOM traffic, what are / would be the minimum and the desired latency requirements for each service?

Low latency: <50 ms; Medium latency: >50 & <500 ms; High latency: >500 ms;

Type of different applications (ill in only the ones relevant for your use case)	Today		Medium-Long term (after 2027)	
	Minimun required latency	Desirable latency	Minimun required latency	Desirable latency
Real-time video streaming	Select	Select	Select	Select
Video conferencing (2 directions)	Select	Select	Select	Select
Video non-real time (e.g. TV)	Select	Select	Select	Select
Voice calls (e.g. teleconference, phone)	Select	Select	Select	Select
Voice over IP	Select	Select	Select	Select
Radio services (e.g. voice messaging, push-to-talk)	Select	Select	Select	Select
Real-time content sharing (e.g. images, messaging)	Select	Select	Select	Select
Other non-real time data transmission (e.g. email, Internet access)	Select	Select	Select	Select
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Select	Select	Select	Select
Remote and secured access to specific information systems or databases	Select	Select	Select	Select
IoT applications	Select	Select	Select	Select
Network backhauling (e.g. satellite backhaul for 5G networks)	Select	Select	Select	Select
Other, please specify:	Select	Select	Select	Select

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41. Do you have any connectivity topology requirement for this particular use case, for any specific application?

If so, for each application select which communications topology for (point-to-point, star, mesh) is expected to be used.

Type of different applications	Today	Medium-long term (after 2027)
Real-time video streaming	Select topology	Select topology
Video conferencing (2 directions)	Select topology	Select topology
Video non-real time (e.g. TV)	Select topology	Select topology
Voice calls (e.g. teleconference, phone)	Select topology	Select topology
Voice over IP	Select topology	Select topology
Radio services (e.g. voice messaging, push-to-talk)	Select topology	Select topology
Real-time content sharing (e.g. images, messaging)	Select topology	Select topology
Other non-real time data transmission (e.g. email, Internet access)	Select topology	Select topology
Inter-systems data transmission (e.g. satellite/UAV payload data transmission, satellite/UAV telemetry and telecommand links)	Select topology	Select topology
Remote and secured access to specific information systems or databases	Select topology	Select topology
IoT applications	Select topology	Select topology
Network backhauling (e.g. satellite backhaul for 5G networks)	Select topology	Select topology
Other, please specify:	Select topology	Select topology

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42. Based on your experience and future needs, please indicate what would be the necessary duration of the service provision for this specific use case and for the relevant frequency bands.

- *Service provision might happen either from a service supplier or from a MoU in the case of a Gov2Gov agreement*
- *Remark: Memorandum of Understanding (MoU) is frequently used between MS governments for satellite access and spectrum availability.*

  Example, 30% of contracts in UHF band are of more than one year, 60% of one year and 10% of one/several months.

Frequency Band	> 1 year	1 year	1-11 months	1-4 weeks	Other	Total
Today						
UHF						100%
L-Band						100%
C						100%
X						100%
Ku						100%
Ka Commercial						100%
Ka Military						100%
V						100%
Other, which?						100%
Medium-Long term (After 2027)						
UHF						100%
L-Band						100%
C						100%
X						100%
Ku						100%
Ka Commercial						100%
Ka Military						100%
V						100%
Other, which?						100%

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E.2. BUSINESS IMPACT ASSESSMENTS

The purpose of these questions is to assess the impact in case of service disruption or in case of performance degradation for a certain period of time, for the use case selected in previous section.

43. How do you rate the impact criticality of service interruption for your mission/operations?

e.g. is SATCOM a back-up communication means or a primary one? Do you have redundancy?
Please choose your answer according to the following scale: 1 – not critical, 5 – catastrophic.

For 1 hour	Choose from 1 to 5
For 12 hours	Choose from 1 to 5
For 24 hours	Choose from 1 to 5
For more than 24 hours	Choose from 1 to 5

44. How do you rate the impact criticality of service degradation for your mission/operations?

e.g. is SATCOM a back-up communication means or a primary one? Do you have redundancy?
Please choose your answer according to the following scale: 1 – not critical, 5 – catastrophic.

For 1 hour	Choose from 1 to 5
For 12 hours	Choose from 1 to 5
For 24 hours	Choose from 1 to 5
For more than 24 hours	Choose from 1 to 5

45. In case of service interruption or degradation, what is the most critical service element for your mission/operations?

Please choose your answer according to the following scale: 1 – not important, 5 – very critical.

Accessibility	Select the level of criticality.
Confidentiality	Select the level of criticality.
Integrity	Select the level of criticality.
Availability	Select the level of criticality.
Bandwidth	Select the level of criticality.
Resilience to jamming or spoofing	Select the level of criticality.
Other, which?:	Select the level of criticality.

46. What is the overall impact for you mission/operations in case of service interruption or degradation?

Safety of citizens (e.g. people' life or health at risk)	☐
Economic impact (e.g. mission costs, assets at stake, etc.)	☐
Disruption in critical service provision (e.g. critical infrastructures)	☐
Security (e.g. uncontrolled borders)	☐
Interruption of critical communications (e.g. loss of critical data)	☐
Risk of accident (e.g. loss of control links)	☐
Political (e.g. diplomacy)	☐
Other, which?	☐

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E.3. ADDITIONAL INFORMATION TO BE CONSIDERED

The purpose of this section is to give the users the possibility of including any additional information considered relevant to specify the future secure SATCOM services in the context of GOVSATCOM Space Programme component.

Enter below any additional input that you consider relevant for future GOVSATCOM services definition.

Your inputs can be related either to a specific Use Case, to a specific question of the survey or to general aspects.

Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	
Please, select….	

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CLARIFICATIONS AND REFERENCES

- **Information Protection:**
  In the present context, it shall be understood as the preservation of confidentiality, integrity and availability of information (known as the CIA triad). In addition, authenticity and non-repudiation shall be ensured.

  Questions related: Q24, Q27

- **Security Aspects of SATCOM services:**
  This term makes reference to potential threats and vulnerabilities of the system in different segments, including space, ground (control and data) and user segments.

  Questions related: Q35, Q38

- **(Network) Level of Security:**
  These are security levels related to the physical implementation of the services. Therefore, when answering to this question, the user shall consider the needs and requirements related to the future systems to access the services. The levels considered include:
  - Authorization & Access Control: this level includes control to access the system/service, and determines what this user is allowed to do, once logged into the system/service.
  - Authentication: this levels requires proving the identity of a system user.
  - Communications Layer Security: this is a physical layer of security to protect data traffic streams. Examples of implementation of this level include VPN, IPsec, SSL/TLS, S/MIME, Firewalls, etc.
  - Cryptography: this level includes methods to protect information through the use of codes, so that only those for whom the information is intended can read and process it. Examples include methods and tools as Hazing, Ciphers, Digital Signatures, Certificates, etc.

  Questions related: Q38

- **EUCI Information:**
  The Council decision[1] on the security rules for protecting EU classified information (EUCI) stipulates that communication and information systems need to handle EUCI in accordance with the concept of information assurance. Information assurance in the field of communication and information systems is defined as the confidence that such systems will protect the information they handle and will function as they need to, when they need to, under the control of legitimate users. Effective information assurance must ensure appropriate levels of confidentiality, integrity, availability, non-repudiation and authenticity.

  Questions related: Q27, Q35, Q38

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013D0488&from=EN

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- **EUCI Classification Levels:**
  - TRÈS SECRET UE/EU TOP SECRET: unauthorised disclosure could cause exceptionally grave prejudice to essential EU or member state interests
  - SECRET UE/EU SECRET: unauthorised disclosure could seriously harm essential EU or member state interests
  - CONFIDENTIEL UE/EU CONFIDENTIAL: unauthorised disclosure could harm essential EU or member state interests
  - RESTREINT UE/EU RESTRICTED: unauthorised disclosure could be disadvantageous to EU or member state interests

Questions related: Q27, Q35, Q38

- **Radio spectrum and Frequency bands for SATCOM:**
  The radio spectrum is the part of the electromagnetic spectrum with frequencies from 30 Hz to 300 GHz. Parts of the radio spectrum are allocated by the International Telecommunications Union for different radio transmission technologies and applications.
  In this questionnaire, it is considered the parts of the radio spectrum allocated to satellite communication services, with the following frequency bands classification (IEEE radar-frequency bands, modified to include Q band and Ka-band military):

HF	0.003 – 0.03 GHz
VHF	0.03 – 0.3 GHz
UHF	0.3 – 1 GHz
L	1 – 2 GHz
S	2 – 4 GHz
C	4 – 8 GHz
X	8 – 12 GHz
Ku	12 – 18GHz
K and Ka	18 to 40 GHz (Ka-band military 30 – 31 GHz uplink, 20.2 – 21.2 GHz downlink)
Q	36 – 46 GHz
V	40 – 75 GHz

Questions related: Q23, Q34

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SURVEY ACRONYMS

ARAIM	*Advanced Receiver Autonomous Integrity Monitoring*
AOO	*Area Of Operation*
ATC	*Air Traffic Control*
ATM	*Air Traffic Management*
BLoS	*Beyond Line-of-sight*
BW	*Bandwidth*
CBNR	*Chemical Bacteriological Nuclear and Radiological*
CFSP	*Common Foreign and Security Policy*
CSDP	*Common Security and Defence Policy*
CSG	*Centre Spatial Guyannais*
DHT	*Direct-to-home TV*
EC	*European Commission*
EGNOS	*European Geostationary Navigation Overlay Service*
ESOC	*European Satellite Operation Center*
EU	*European Union*
EUCI	*European Union Classified Information*
EUSST	*European Space Surveillance and Tracking*
FoA	*Field of Application*
G2G	*Government to Government*
GNSS	*Global Navigation Satellite System*
Gov2Gov	*Government to Government*
GOVSATCOM	*Governmental Satellite Communications*
HLUN	*High-Level User Needs document*
HQ	*Headquarters*
IoT	*Internet of Things*
IPsec	*Internet Protocol security*
M2M	*Machine to Machine*
MIME	*Multipurpose Internet Mail Extensions*
MS	*Member State*
OTT	*Over-the-top messaging*
PoC	*Point of Contact*
RBAC	*Role-Based Access Control*
RPAS	*Remotely Piloted Aerial System (same as UAV)*
SAR	*Search and Rescue*
SATCOM	*Satellite Communication*
SESAR	*Single European Sky ATM Research*
SLA	*Service Level Agreement*
SSL	*Secure Sockets Layer*
TBC	*To Be Confirmed*
TBD	*To Be Defined*
TLS	*Transport Layer Security*

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TT&C	*Telemetry, Tracking and Command*
TV	*Television*
UAV	*Unmanned Aerial Vehicle*
URD	*User Requirements Document (this document)*
VPN	*Virtual Private Network*
VSAT	*Very small aperture terminal*

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