

NCIA/ACQ/2025/07244 Tuesday, 09 September 2025

# NCIA Request for Information (RFI)

To: National Delegations

Subject: PREPARE PROVISION OF EXTENDED CORE SATCOM

SERVICES, 2016/0CM03104

MS-424274-SATCOM

- 1. The NATO Communications and Information Agency (NCIA) is conducting market research to gain understanding of the marketplace, and to gather input on potential solutions to support the upcoming acquisition of on-demand, short-term notice and limited duration Military SATCOM Transmission services, to augment existing long-term and standing NATO military space segment and NATO anchoring capabilities. To that end, NCIA is issuing the attached Request for Information (RFI) MS-424274-SATCOM to solicit feedback from Nations, as well as from capable and interested industry partners.
- 2. This RFI is issued for planning purposes only. It shall not be considered a request for bids. It is part of NCIA's effort to ensure a clear understanding of the available capabilities, and to gain full visibility of the potential acquisition strategies.
- 3. NCIA values your insight and invite you to:
  - a. Share relevant national/corporate capabilities and experience;
  - b. Review and comment on our draft requirements (Annexes A and B) with a view in providing recommendations for improving performance outcomes, competition, and efficiency; and identifying any risks or concerns that should be considered during planning.
- 4. Submission instructions and additional details can be found in the enclosure to this RFI.
- **5.** Only NATO member countries and their industry can participate in or respond to this RFI (<a href="https://www.nato.int/cps/en/natohq/nato">https://www.nato.int/cps/en/natohq/nato</a> countries.htm).
- **6.** Should you have any questions or need clarification, please contact Ms Viktorija Navikaitė at MS-424274-P4SATCOM@ncia.nato.int.
- 7. We thank you in advance for your time and input, and we look forward to engaging with you as we shape this potential acquisition.

Tof the Office of Acquisition.	
Viktorija Navikaitė Senior Contracting Officer	

For the Chief of Acquicition:



# **Enclosures:**

- Request for Information with Annexes A and B
- Distribution List

# **Distribution List**

1.	NATO	Delegation	(Attn:	Infrastructure	Adviser)
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1.	Albania	12. Greece	23. Poland
2.	Belgium	13. Hungary	24. Portugal
3.	Bulgaria	14. Iceland	25. Romania
4.	Canada	<b>15.</b> Italy	26. Slovakia
5.	Croatia	16. Latvia	27. Slovenia
6.	Czechia	17. Lithuania	<b>28.</b> Spain
7.	Denmark	18. Luxembourg	29. Sweden
8.	Estonia	19. Montenegro	30. Türkiye
9.	Finland	20. Netherlands	<b>31.</b> United Kingdom
10.	. France	21. North Macedonia	32. United States
11.	. Germany	22. Norway	

# 2. All NATEXs



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# REQUEST FOR INFORMATION

### Introduction

- 1. The NATO Communications and Information Agency (NCIA) is conducting market research to identify potential sources and to gather information regarding government and commercial capabilities to provide access to military SATCOM (MILSATCOM) resources on short notice, in response to operational requirements outside the scope already being fulfilled by MILSATCOM assets that are permanently committed for NATO use, including NATO's organic anchoring capability. Access shall rely on contract vehicles¹ built upon service catalogues, quantizing and mapping those resources to costed services, with given reservation, activation and utilization fees (if and when applicable).
- 2. This Request for Information (RFI) is intended to inform Nations and prospective commercial Service Providers on the opportunity to engage their MILSATCOM resources to augment NATO's extant SATCOM capabilities, on demand, while seeking their views on the mechanisms to guarantee both, the timely availability of those resources, from an operational perspective, and the viability of any commercial endeavour, from a financial and business perspective.
- 3. The information collected through this RFI is intended to support the implementation of one or more MILSATCOM Services Framework Contracts. Accordingly, the purpose of this request is to evaluate the business models and the solutions that the government and the commercial sectors can propose and sustain. This request can assess both, new solutions established and dedicated to meeting NATO requirements, as well as existing support frameworks, currently serving MILSATCOM requirements domestically within a nation, or in support of a group of Alliance member nations.
- **4.** This RFI is issued solely for informational purposes and does not constitute a Request for Proposal (RFP), Request for Quotation (RFQ), or Invitation for Bid (IFB).

# **Purpose**

- **5.** NCIA is issuing this RFI to assess and evaluate the feasibility of placing one or more framework contracts to gain access to a wide range of service profiles, allowing to meet emerging operational demands, while being able to dynamically expand the volume and the reach of any contracted resources, if and when required.
- **6.** The RFI seeks to unveil and evaluate opportunities, possible contract vehicles and service delivery models that would enable the reactive delivery of MILSATCOM services, in ways that are viable and compatible with the SATCOM portfolios and the business strategies of both government and industry providers.
- **7.** Such reactive delivery is sought under a changing environment where NCIA cannot forecast certain capacity requirements emerging and enduring beyond those already fulfilled through the current portfolio of MILSATCOM resources available to NATO<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Memorandum of Understanding (MoU) may be used instead of a framework contract, when the provider is a nation or a group of nations.

<sup>&</sup>lt;sup>2</sup> This will include Training and Exercises, with capacity allocated for a limited period of time, augmenting and avoiding overlaps with any permanently-allocated core capacity.



- Responses to this RFI will assist NCIA in planning and shaping the strategy for any future solicitation seeking to establish said contract vehicles and service delivery models.
- **9.** NCIA requests the broadest possible dissemination by Nations of this RFI to their qualified and interested industrial base.

# **Background**

- 10. NCIA requests the assistance of the Nations and their industry to identify the solutions and business models that government agencies and the national commercial sector can propose and sustain, in order to enable access to MILSATCOM resources in response to changing operational requirements. Accordingly, access to such resources shall be possible, when needed, within a range of services, described and costed through a services catalogue. These services are sought under three profiles (described under section 3 of Annex B):
  - a. Allocate and Commit (AAC) service profile
  - Managed Access Capacity (MAC) service profile
  - c. Anchor and Transport Services (ATS) service profile
- **11.** NCIA requests inputs and recommendations from Nations and commercial providers able to provide those services, using resources compliant with NATO's Service Assurance Levels (SAL)<sup>3</sup> in the Ka and X military bands, as well as UHF.
- 12. This RFI aims to help identify the preferred service delivery models, any limitations or conditions that may need to be met before Nations or commercial suppliers can produce service catalogues and submit bids for the formal procurement of services in the scope of this request.
- **13.** This RFI aims to apply due diligence by "testing the market" for options and opportunities, which may include:
  - **a.** Adopting an existing solution already in-service, existing under a national or multinational service delivery framework (involving government agencies and industrial providers)
  - **b.** Acquiring an existing solution from industry, independent of any national or multinational service delivery framework
  - c. Creating a solution exclusive and tailored to NATO needs
- 14. This RFI is intended to engage both Nations and their industry base in a collaborative fashion to explore procurement strategies to ensure that NATO can receive MILSATCOM resources when and where required, in response to operational requirements exceeding the current permanent allocations of MILSATCOM capacity.
- **15.** The services profiles sought after under this project are provided in <a href="Annex B">Annex B</a>. Respondents are invited to carefully review the summary of requirements in <a href="Annex B">Annex B</a> to determine interest.

<sup>&</sup>lt;sup>3</sup> NSS6G MOU document available from respective Nations



# **Submission Instructions**

- **16.** NATO Delegations or potential suppliers are invited to respond in accordance with the instructions below:
  - a. Submit responses via the email address in Paragraph 22 no later than 12:00 hours Central European Time (CET) on 07 October 2025.
  - b. Responses should be submitted in PDF or Word format and must include:
    - i. Responses to Annex A and comments on Annex B
    - ii. Cover page
    - iii. Organisation brochures or product literature (technical data sheets, non-binding catalogue price lists, descriptions of existing installations, etc.), if required
    - iv. Attachments such as past performance references, if required
  - c. Use the following subject line for submission
    - i. "Response to RFI [MS-424274-SATCOM] [Delegation to NATO / Company Name]"
  - **d.** All responses should address the items listed in Annex A Requested Information. Responses shall include a description of the capability available and its functionalities (not above NATO UNCLASSIFIED). This shall include any restrictions (e.g. export controls) for direct procurement of the capability by NCIA. Non-binding product pricing information is also requested as called out in Annex A.
  - **e.** Respondents are also encouraged to review <u>and comment</u> on the draft requirements in <u>Annex B</u> Statement of Requirements.
  - f. Responses may be issued to NCIA directly from Nations or from their Industry.

# **Industry Engagement (Optional)**

- **17.** NCIA intends setting up bilateral technical meetings with Nations or their industry following the receipt of responses, with the purpose of clarifying or further augmenting those responses where required.
- **18.** Respondents are requested to await further instructions after submission of their responses regarding any potential future bidding process, and are requested to contact only the NCIA POC in Paragraph 22 with any further requests for information or clarification.

### **Disclaimer**

- 19. This RFI is for planning and informational purposes only and shall not be construed as a solicitation or obligation on the part of the NCIA. The NCIA does not intend to award a contract based on responses to this RFI. Respondents are solely responsible for all costs incurred in responding to this RFI. The NCIA will consider and analyse all information received from this RFI and may use these findings to develop a future solicitation. The NCIA will consider all responses as confidential commercial information and will protect it as such.
- **20.** NCIA reserves the right, at any time, to cancel this informal market survey, partially or in its entirety. No legal liability on the part of NCIA for payment of any sort shall arise



and in no event will a cause of action lie with any prospective participant for the recovery of any costs incurred in connection with the preparation of documentation or participation in response hereto. All effort initiated or undertaken by prospective informal market survey participants shall be done considering and accepting this fact.

# **Use of Information Provided through Responses**

# 21. Confidentiality of Responses

The NCIA may incorporate industry comments and responses, in part or in whole, into a future release of a solicitation. Should respondents include proprietary data in their responses that they do not wish to be disclosed to the public for any purpose, or used by NCIA (except for internal evaluation purposes), they must:

### a. Mark the title page with the following legend:

This document includes data that shall not be disclosed outside NATO and shall not be duplicated, used, or disclosed – in whole or in part – for any purpose other than for NCIA internal evaluation purposes, unless otherwise expressly authorised by [insert company name]. This restriction does not limit the NCIA's right to use information contained in this data without restriction if it is obtained from another source. The data subject to this restriction are contained in sheets [insert numbers or other identification of sheets]

### b. Mark each sheet of data it wishes to restrict with the following legend:

Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this document.

### RFI Point of Contact

- 22. Ms Viktorija Navikaitė, Senior Contracting Officer
  - a. MS-424274-P4SATCOM@ncia.nato.int



# **Annex A – Requested Information**

1. Respondents are encouraged to provide the following information in their response:

### a. Organisation Information

- i. Name of national authority / Legal Business Name
- ii. Address
- iii. Website
- iv. National designated Point of Contact / Primary Point of Contact of the company
- v. Email address

### b. Technical Capability

i. Summary of relevant capabilities and past performance

#### c. Feedback and Recommendations

- i. Comments on the draft Statement of Requirements
- ii. Responses to the RFI Questions under Para. 2 below
- iii. Innovations or alternatives
- iv. Rough Order Magnitude (ROM), including any assumptions upon which they are based

### d. Questions or Concerns

- i. Risks, concerns, or barriers
- ii. Suggestions for risk mitigation or enhancing competition
- 2. Respondents are requested to provide answers to the following RFI Questions:

### a. Background

i. Can you share examples of other large-scale partnerships or collaborations you have undertaken, whether with clients, government agencies, or organizations? What key insights or lessons did you gain from managing those high-volume scenarios?



### b. Perception

- i. Does the proposed scope of this project appeal to your organization? If not, what adjustments would make it a better fit?
- ii. How do you evaluate the profitability of contracts like this one?
- **iii.** What kind of partnerships or subcontracts might you need to execute this project successfully?
- **iv.** Are there any elements of this contractual framework that can be better aligned with your business strengths?
- **v.** What minimum duration of the contract or minimum commitment would make this project attractive to your organization?

# c. Feasibility and Risk

- **i.** Are there elements of the project scope or requirements that might create barriers to participation?
- **ii.** Do you see any areas where the proposed requirements could be streamlined or optimized for better efficiency?
- **iii.** Do you foresee any risks that could impact your business case for this project?
- **iv.** What kind of support or conditions would you need from us to tackle those challenges and reduce risks in general?
- **v.** What measures do you have in place to future-proof the infrastructure so that early investments remain relevant as demand grows?

# d. Pricing and Revenue Model

- i. What factors would make this project financially attractive to your organization?
- ii. Can you explain how you would build the cost model (and details of Capex/Opex or investment/O&M if applicable)?
- iii. Please provide a Rough Order of Magnitude (ROM) cost for the yearly use of the service based on the quantity and period of commitment you are able to offer. Please include any assumptions that this ROM is based upon, including management fees for operating and supporting the capability, if and where applicable. Please fill in the table below with your price model.
- iv. Complete the tables in line with the requirements in Annex B.



		Activated Service Cost (ASC) (MHz concern the ACC profile; Mbps concern the MAC profile)		e; Mbps concern e)
Service Profile  (refer to Section 3 of Annex B for the definitions of the ACC and MAC profiles)	Base Service Costs (BSC) (if applicable)	Range 1: <100 Mbps or <80 MHz	Range 2: 100 Mbps> and <600 Mbps or 80 MHz> and <480 MHz	Range 3: 600 Mbps> and <2000 Mbps or 480 MHz> and <1600 MHz
Allocate and Commit (ACC profile)  • Short Term (up to 6M)  • Mid Term (up to 18M)  • Long Term (18M+)				
Managed Access Capacity (MAC Profile) • Short Term (up to 6M) • Mid Term (up to 18M) • Long Term (18M+)				
Anchor and Transport Services (ATS profile) • Short Term (up to 6M) • Mid Term (up to 18M) • Long Term (18M+)				

Table 1 Service/Price Model

Available UHF Channels	Coverage	Cost per Channel

Table 2 UHF Service/Price Model

# e. Service Catalogue

i. What is your experience working with a service catalogue to deliver MILSATCOM services in an Allocate & Commit fashion? (comparable to what is requested in this RFI)?



- ii. What is your experience working with a service catalogue to deliver MILSATCOM services in a Managed Access Capacity (MAC) fashion (comparable to what is requested in this RFI)?
- iii. Respondents must provide details regarding the Satellites and their transponders including Orbital position, Orbital Inclination, Rx/Tx Antenna gain, Rx/Tx coverage areas, EIRP, G/T, Channel BW, Channel Frequencies.
- **iv.** Can you provide examples of structure and items in such a service catalogue?
- **v.** What flexibility do you usually build in the modelling of the services (e.g. BW, classification, QoS profiles)?
- **vi.** Any user impacting activities need to be discussed and approved via NATO-owned change management process. How could you support us for any change management activity?
- vii. Please provide a Service catalogue detailing what services you can offer in compliance to the profiles described in "Extended Core SATCOM" Service catalogue definitions.
- viii. Are you able to provide all of the services (described above in Table 1 and Table 2) required by this RFI? If not:
  - A. What services are you able to provide?
  - B. In which regions can you provide the services?
  - ix. How will you provide remote management, control and technical assistance for the service? (SLA, KPI's, Monitoring and control systems to: monitor service consumption, allocation and access of resources etc.).
  - **x.** Where relevant, detail compliance with US Federal Information Processing Standard (FIPS) specifically in TRANSEC.
  - xi. Are you able to provide security cleared personnel Inside Military Locations and/or to deployable environments at European and Global scenarios?

### f. Concluding questions

- i. NCIA aims to build a long-term, scalable, and cost-effective communications requirements. From your perspective, how can we best structure our collaboration to ensure continued success and adaptability as our needs evolve?
- **ii.** Please share any additional thoughts, concerns, or recommendations regarding our requirements, potential challenges, or alternative approaches we may not have considered.



# **Annex B – Draft Statement of Requirements**

### 1. Background

NATO recognizes that the MILSATCOM industry in the Private Sector has developed and is operating robust end-to-end service networks based on SATCOM technologies that are providing resilient Layer 2 and 3 connectivity access, across a variety of government markets and military domains, spanning the deployed enterprise, mobile commercial air and maritime, and government users.

These sovereign SATCOM "access services" and all their underpinning technologies provide NATO with the opportunity to leverage the performance, cost and resilience benefits that are currently being attained through multi-platform SATCOM networks, including those able to support operations in contested environments.

In line with this window of opportunity, NATO is seeking to augment its current capabilities with affordable MILSATCOM Services featuring assured access, high resilience and guaranteed operational performance, at distances up to 15,000 km from Brussels, delivered by providers operating within and across multiple NATO Allied Nations.

### 2. Scope

NCIA is seeking information from Nations' MILSATCOM providers on the practicality and sustainability of one or more framework contracts for the provision of either raw MILSATCOM capacity (in the form of power and bandwidth, in MHz), or managed MILSATCOM capacity (specified as information rates between two or more end-points, in Mbps), in response to continuously evolving operational requirements.

The service provided shall not be contented, oversubscribed, or delivered as best effort, i.e. the space segment capacity shall be fully dedicated to the required service, i.e. a service composed of a 1 MHz shall be provided by the correspondent 1 MHz at the satellite transponder(s), and a 1 Mbps shall be 1 Mbps of Committed Information Rate (CIR) for a given set of Class of Service (CoS) attributes, as per the Metro Ethernet Forum definition (MEF 10.2).

The responses to this RFI shall be the basis for the definition and implementation of NATO's Extended Core, complementing the extant and enduring Core MILSATCOM capability<sup>4</sup>, using a service catalogue based on the two Service models presented below.

Services under the Extended Core will cater for high-assurance and high-throughput applications for which existing Core Services are either not practical to implement, or not able to provide sufficient bandwidth, or the required coverage. In particular, some of the services sought under this project will support the connectivity of terminals deployed above the Arctic Circle, and may require link termination and transport services from ground facilities featuring antennas and RF systems compatible with the space segment of interest. Accordingly, and in response to this RFI, prospective providers should include, as part of their answers, their views on the future integration of national and commercial anchoring capabilities with the NATO Communications Infrastructure, using Protected Core Networking (PCN) standards<sup>5</sup>.

<sup>&</sup>lt;sup>4</sup> This concerns the capability delivered through projects 2016/0CM03102 for SHF (Protected SATCOM, at X and Ka-band) and 2016/0CM03103 for UHF SATCOM.

<sup>&</sup>lt;sup>5</sup> Refer to the ATS profile under section 3 of Annex B.



#### 3. Service Profiles

The prospective Extended Core SATCOM services catalogue considers three possible service profiles, with multiple entries under each profile:

- **a.** Provision of raw capacity, as MHz and associated (equivalent) power on bent-pipe transponders, dedicated to the service (i.e. permanently allocated and committed to the service). This is the Allocate and Commit Capacity (ACC) profile;
- **b.** Provision of one or more bi-directional links, defined with their committed information rates (in Mbps). This is the Managed Access Capacity (MAC) profile;
- c. Provision of anchoring and terrestrial transport services, coupled and delivered together with any of the above (ACC or MAC). Anchoring may include baseband elements like modems and routers, or only the RF and IF elements. This is the Anchor and Transport Services (ATS) profile, and can be coupled and delivered together with the ACC or the MAC service profiles;

The above service profiles are intended for services in the X-band and in the military Kaband. The ACC and the MAC service profiles are also applicable to UHF SATCOM.

A detailed definition of each service profile, including the description of the UHF variant of the service, is provided in the following paragraphs.

### **ACC Service Profile**

The ACC service profile concerns the provision of transponded capacity (MHz) only, with service demarcations at each side of the transponder, identified as D1 and D2 in Figure 1. For any satellite capacity that will be provided to NATO under this profile, the assigned Effective Isotropic Radiated Power (EIRP) and the bandwidth on the transponder will be managed by NATO, and will be used by NATO-owned and operated ground segment hardware, at all times.

In the ACC service profile, the term "transponder" shall be interpreted as one of the below:

- **a.** The traditional and basic notion of a bent-pipe or transparent relay, involving only RF amplification and frequency translation;
- b. The more modern and advanced notion of a digital transparent processor (DTP), converting analogue signals to digital, enabling the flexible channelization, routing, switching of links. In such case, the ACC service profile will adopt the notion of a 'virtual transponder', characterized by a continuous amount of bandwidth, and an amount of power committed to that bandwidth;

Under the ACC service profile, NCIA handles all the process related to users accessing the satellite resources, though Satellite Access Requests (SAR) and Satellite Access Authorisation (SAA). These SAR and SAA carry operational significance and pertain to NCIA's internal management realm, and will not be shared with the Service Provider.

<u>SLA Deliverables at service demarcation points</u>: Service Availability between the demarcation points shall be higher than 99.8%.



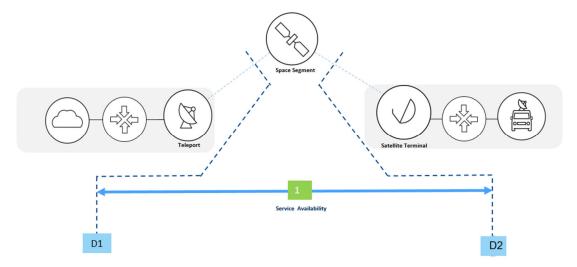


Figure 1 Service model "Allocate and Commit (ACC Profile)"

For UHF SATCOM, the ACC profile concerns the provision of access to dedicated UHF narrowband (5 kHz) or wideband channels (25 kHz), where NATO can then create all-informed or point-to-point voice or data nets (one net per narrowband channel, and up to three nets per wideband channel). The service demarcation points are also at the edges of the UHF transponders, with minimum service availabilities higher than 99.8%.

### MAC Service Profile

The MAC service profile consists of provision of managed MHz and power, delivered as Mbps, with the same service demarcations introduced under the ACC profile, identified as D1 and D2 in Figure 2. The Service Provider provides and manages space segment based on a target SLA established with Purchaser.

The MAC service profile, similarly to the ACC service profile, will use NATO ground segment hardware. The Service Provider will be responsible to conduct capacity planning in order to fulfil each service, based on specific connectivity requirements delivered by the Purchaser. The Service Provider will also need to comply with management requirements such as monitoring, and support to troubleshooting activities. The Service Provide will need to manage the access to bent-pipe or digitized and channelized capacity, i.e. take responsibility for:

- **a.** The configuration of the communications payload (analogue or digital transponders, coverage beams, etc.);
- **b.** The allocation of power and bandwidth the terminals (Static/Dynamic), in order to guarantee a Committed Information Rate (CIR), which shall be available at all times, irrespective of the propagation conditions;
- **c.** The planning of satellite link budgets, in support of the above;
- **d.** The collection and processing of SAR and the generation of SAA, or equivalent mechanisms to convey the connectivity requirements and to guarantee the allocation of resources during a given time period.

Under the MAC service profile, the Service Provider provides and manages the space segment based on target SLA established with NATO. NATO provides the locations, the characteristics of the terminals concerned, and the description of the links, in the form of a



SAR (or equivalent) while the Service Provider designs and provides the SAA (or equivalent).

### SLA deliverables at service demarcation points:

- **a.** Service Availability (for CIR in Mbps) higher than 99.8%.
- **b.** Service Provider shall deliver the SAA or Line-up documentation.

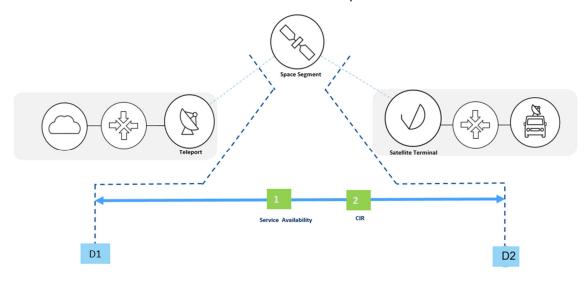


Figure 2 Managed Access Capacity (MAC) Service Profile

For UHF SATCOM, the MAC profile concerns the provision of access to permanent or ondemand UHF nets, using the Integrated Waveform (IW) time-domain multiple access scheme. The IW scheme is managed by the Service Provider, who allocates these nets to NATO and to other users sharing those channels. Permanent nets are preconfigured by the Service Provider in the IW control system, in order to be available at all times. Conversely, on-demand nets are only activated through the IW request/assignment process. The service demarcation points are also at the edges of the UHF transponders, with minimum service availabilities set higher than 99.8%, for the access control portion (i.e. the availability of the orderwire channel)<sup>6</sup>.

### **ATS Service Profile**

Under the Anchor and Transport Services (ATS) service profile, and coupled to the provision of space segment resources under any of the two service profiles above (ACC or MAC), the Service Provider can allocate RF and IF resources in one or more RF heads, in one or more ground stations (subject to availability and geographical diversity requirements), as well as (one of the below):

a. Baseband (modem) resources, in the form of one or more managed modems, to terminate the links, as illustrated in Figure 3. This form of ATS can be coupled with the MAC service profile, where the Service Provider is responsible for defining the waveform and its operating variables, and can best program them in their own modems(s);

<sup>&</sup>lt;sup>6</sup> The availability of the user access portion is contingent upon the link budget defined by the user for the voice or data net concerned, based on the performance of the terminals at the endpoints of the link.



b. Collocation (hosting) resources, to accommodate the installation and operation of a NATO-managed Hosted Baseband Anchor Capability (HBAC), to terminate the links, as illustrated in Figure 4. Those resources will consist of power, cooling and floor space in the same facility hosting the RF heads, if collocated (or in any other facility, if not collocated, and connected over digital IF). This form of ATS can be coupled with the ACC service profile, where NATO is responsible for defining the waveform and its operating variables, and can best program them in NATO's own modem(s), inside the HBAC.

### SLA deliverables at service demarcation points:

- a. Service Availability higher than 99.8%
- **b.** Committed Information Rate (CIR) in Mbps, CIR as per MEF definition.

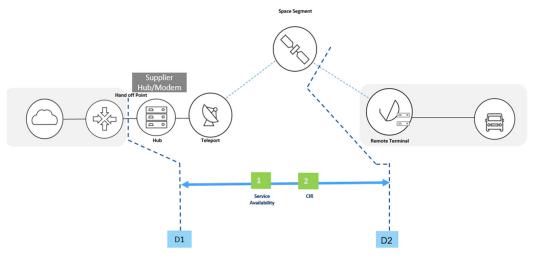


Figure 3 MAC with ATS profile (and provider-furnished RF Head and Hub/Modem)

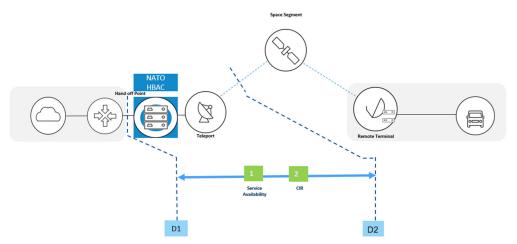


Figure 4 ACC (or MAC) with ATS profile (and provider-furnished RF Head and NATO HBAC)

The ATS service profile can also comprise terrestrial transport services, in order to deliver the services beyond the demarcation line of the ground segment facility, in both flavours of the ATS profile (i.e. beyond the provider-furnished modem or beyond the NATO-furnished



HBAC). Such transport services shall rely on a Protected Core Segment (PCS) contributed by (or through) the Service Provider (refer to the National PCS in Figure 5 below), then connected to the NATO Enterprise PCS (refer to the NCI PCS in Figure 5 below). Such transport service, and the corresponding PCN-1 interface between both PCS, shall abide by STANAG 5639 (or the Protected Core Networking specifications of FMN Spiral 5).

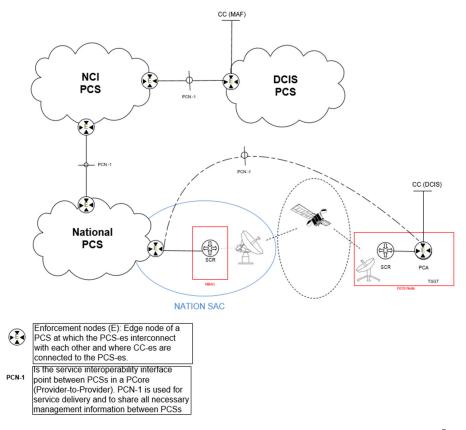


Figure 5 ATS profile augmented with Protected Core Segment (PCS)-based transport<sup>7</sup>

### 4. Service Coverage Zones

Three services coverage zones, or Extended Core Regions, are defined, as follows:

- Inner Region: the circle up to 4,000 km from Brussels
- Middle Region: the ring from 4,000 km up to 8,000 km from Brussels
- Outer region: the ring from 8,000 km up to 15,000 km from Brussels

A given service may exhibit different service delivery attributes on a per-region basis, i.e.

- 1) Different cost of the capacity unit (i.e. MHz cost for ACC, Mbps cost for MAC)
- 2) Notice Period, one region may require longer notice periods than the other regions
- 3) Protection levels, in terms of Service Level Assurance (e.g. SAL-2 may be only available in the Inner Region)

Mission Anchor Function (MAF), SATCOM Conversion Router (SCR). Coloured Cloud (CC).



### 5. Target Service Model

The questions posed in this RFI are intended to identify the most suitable business model and contractual framework to integrate current and emerging MILSATCOM technologies and services into the NATO SATCOM context, using an Extended Core Services Catalogue to augment the current set of Core Services. Any such framework is intended to leverage sovereign government- and industry-run capabilities, existing or in development, through Service Level Agreements (SLAs), pursuing guaranteed access to MILSATCOM resources, in an agile and scalable manner.

The Target Service Model is one based on a Services Catalogue for the Extended Core, conveying the resources that prospective Service Providers can make available for NATO use, on demand, with agreed lead times, and over predefined minimum commitment periods (from 6 months to multiple years). Such resources shall be made available under Service Level Agreements that guarantee dedicated, non-contended and non-pre-emptible access.

In line with the above, NATO is considering prearranged and fixed, as well as dynamic and flexible service models and agreements. Common to all is the intent to assure access, as well as the ability to adapt the service to changing operational requirements, once the service is established.

Due to the sensible nature of the space and ground assets required for the extended core SATCOM services, the procurement approach will rely on framework contracts established between NCIA and (1) one or more individual Service Providers, and/or (2) one or more Multi-Source Service Integrators (hereafter MSSI), able to pool resources from multiple Service Providers, benefiting from existing service delivery frameworks and their associated economies of scale.

Based on the above, the framework contracts will be established and managed following the below guiding principles:

- a. Multiple framework contracts can exist, with Service Providers, and/or with MSSI. Each framework contract will produce a priced Service Catalogue and define a payment framework (refer to section 6 below). When multiple contracts exist, NCIA will aggregate the service catalogues into one single user-facing Services Catalogue.
- b. Service Catalogues will remain open to incorporate new service entries, as the resources available to Service Providers and MSSI evolve or increase. Procedures for the evaluation and the pricing of new service entries will be detailed in the framework contract.
- c. Upon actual requests materializing in response of new operational requirements (supported by their corresponding funding lines), NCIA will peruse the single userfacing Services Catalogue for service entries matching the requirements, and conduct a close evaluation and selection process. That process may involve direct one-on-one consultation Service Providers or MSSI. The process will result in one or more Service Orders being placed, against one or more Service Catalogues.
- d. Service Orders with long periods of performance (i.e. exceeding 3 years) are likely to be issued for specific (fixed) Areas of Interest (AOI), or for services relying on constellations and/or satellite capabilities (e.g. steerable beams) that can dynamically shift capacity across different geographical areas.

### 6. Service Catalogue and Payment Framework

Each framework contract (or MoU) established under this project will be composed of a



Services Catalogue and a payment framework. The latter will consist of Base Service Costs +  $\sum$  {Activated Service Costs}, where:

- a. Baseline Service Costs (BSC) are the costs of subscribing to the Services Catalogue. The BSC, or subscription costs, shall provide access to a basic service, defined as permanent access to a threshold amount of capacity<sup>8</sup>. That capacity shall be always-available for purposes like training, ground segment testing, etc. The subscription cost shall also cover all the standing administrative and management expenses incurred by the Service Provider or by the MSSI to continuously monitor requests against the catalogue, ensure reaction times, SLA, conduct fault management, etc.
- b. Activated Service Costs (ASC) are the costs incurred by the selection and activation of a service from the Service Catalogue, through a Service Order. The ASI is a cost on top of the BSC, paid only during the period of performance of the service concerned, from its activation to its withdrawal. When the service profile and the attributes of such service overlap with those of one of the basic services provided under the BSC9, the latter shall be offset from the service in the Service Catalogue, both in volume (i.e. the amount of MHz or Mbps of the basic service) and in cost (i.e. the BSC).
- c.  $\sum$  {Activated Service Costs} is the sum of the ASC of all active services.

### 7. Period of Performance / Services Ordering Duration

a. Any Services Catalogue in support of the Extended Core shall serve a contract (or an MOU) with a target duration of 5 years. During that period, Service Orders against the Service Catalogue will be possible, at the prices agreed when setting the contract (or MOU). Services can however be activated with durations bringing their period of performance beyond the 5 year boundary of the contract (or MOU).

### 8. Place of Performance / Notional Coverage Area

**a.** The prospective provider can provide services prices grouped per geographical zones, using the Inner, Middle and Outer Regions defined under section 4 as a reference.

<sup>8</sup> Two basic services are considered under the BSC: one based on the ACC service profile, available within the Inner Region, and one based on the MAC service profile, available anywhere within the Inner Region and the Middle Region

<sup>&</sup>lt;sup>9</sup> i.e. when a service invokes the ACC service profile for a given amount of bandwidth (in MHz) over the Inner Region, its volume and cost shall be offset from the volume of the basic ACC service and its share of the BSC.