

**REQUEST FOR INFORMATION**

**PROJECT "IPTV-DS Overhaul"**

**NCI Agency Reference: RFI-424243-IPTV-DS**

NCI The Agency is requesting information from Nations and their qualified vendors regarding potential solutions to replace the outdated IPTV and Digital Signage (DS) system with a modern, state-of-the-art alternative designed to operate on the NATO Headquarters (HQ) public network.

NCI Agency Point of Contact

Senior Contracting Assistant: Mihaela Zoicas

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**To** : Distribution List (Annex A)

**Subject** : **NCI Agency Request for Information NATO HQ IPTV and DS overhaul**

1. NCI Agency requests the assistance of the Nations and their Industry to identify a commercially available solution that can meet or exceed NATO requirements for ensuring enhanced IPTV and digital signage capabilities on the NATO HQ public network.
2. A summary of the requirements is set forth in the Annex B attached hereto. Respondents are requested to reply to the required information at Annex C. Other supporting information and documentation (technical data sheets, descriptions of existing installations, etc.) are also desired.
3. The NCI Agency reference for this Request for Information is **RFI-424243-IPTV-DS** and all correspondence and submissions concerning this matter should reference this number.
4. Respondents are invited to carefully review the requirements in Annex B.
5. Responses shall in all cases include the name of the firm, telephone number, e-mail address, designated Point of Contact, and a NATO UNCLASSIFIED description of the capability available and its functionalities. This shall include any restrictions (e.g. export controls) for direct procurement of the various capabilities by NCI Agency.
6. Non-binding pricing information is also requested as called out in Annex C.
7. Responses are due back to NCI Agency no later than **11:00 AM Brussels time on 21-March-2025**



8. Please send all responses via email to the following NCI Agency Point of Contact:

For the attention of: Mihaela Zoicas at [424243-IPTV-DS@ncia.nato.int](mailto:424243-IPTV-DS@ncia.nato.int)

9. NCI Agency reserves the right to request for a service demonstration to selected suppliers. However, the NCI Agency may seek additional clarification from respondents.
10. Respondents are requested to await further instructions after their submissions and are requested **not to contact directly any NCI Agency staff other than the POC identified above in Paragraph 8.**
11. Any response to this request shall be provided on a voluntary basis. Not responding will not prejudice or cause the exclusion of companies from any future procurement that may arise from this Request for Information.
12. Responses to this Request for Information, and any information provided within the context of this survey, including but not limited to pricing, quantities, capabilities, functionalities and requirements will be considered as information only and will not be construed as binding on NATO for any future acquisition.
13. The NCI Agency is not liable for any expenses incurred by firms in conjunction with their responses to this Request for Information and this shall not be regarded as a commitment of any kind concerning future procurement of the items described.
14. Your assistance in this Request for Information is greatly appreciated.

FOR THE CHIEF OF ACQUISITION

Mihaela Zoicas  
Senior Contracting Assistant

Enclosures:

- Annex A (Distribution List)
- Annex B (Request for Information – Scope and Requirements)
- Annex C (Request for Information – Information requested)



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**ANNEX A**

**Distribution List for Request for Information**

**RFI-424243-IPTV-DS**

All NATO Delegations (Attn: Investment Adviser)

NATO Members Embassies in Brussels (Attn: Commercial Attaché)

NCI Agency – All NATEXs

**NCI Agency – (reserved)**

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## **ANNEX B**

### **Scope and Requirements**

#### **1 Information:**

- 1.1 Purpose of the RFI: this RFI aims to gather insights from qualified vendors about solutions to replace NATO HQ outdated IPTV and DS system with a modern, state-of-the-art alternative. The proposed solution should be designed to operate on the NATO HQ public network. The current solution delivers 25 channels received over the Internet, 20 received via satellite, 3 in house generated channels and 12 DS channels.

The new solution should highlight two approaches:

- A. The first one delivers all of the listed TV channels and most of the satellite channels using the Internet – without an interface to the satellite dishes.
- B. The second approach also makes use of the satellite dishes already installed and currently in use for the 20 channels received via satellite. For the complete list of satellite channels, see the channel list under Miscellaneous.

All vendors need to comply with all regulatory requirements for providing IPTV services in Belgium, including but not limited to: a license from the Belgian Regulatory Authority (BIPT), compliance with EU broadcasters regulations, content licensing rights and GDPR conformity.

- 1.2 Scope of the RFI: Vendors are invited to share insights on the technical solutions, including the cyber security compliance for a new system with installation on the NATO HQ public network.

#### **2 Project :**

- 2.1 The scope of the “IPTV and DS Overhaul” Project is to support the award of a seven-year contract consisting of a three-year base contract plus four one-year extensions.
- 2.2 The first tranche is allocated to the project phase, which involves replacing the existing current solution with a state-of-the-art solution all to be accredited in keeping with NATO security directives. This phase also includes all maintenance activities until the end of the base contract, comprising training for all local personnel.
- 2.3 The subsequent tranches are dedicated to maintaining the new IPTV and DS solution.

#### **3 Procurement Approach:**

- 3.1 NCI evaluates a Contractor Owned – Contractor Operated (COCO) approach for the implementation and operation of the new IPTV and DS service/capability:

Under this approach, the supplier retains ownership of all equipment and provides the required services under a comprehensive yearly fee. The supplier must provide a cost estimate for the yearly fee.

The yearly fee must include:

- The installation of the new IPTV solution and the associated digital Signage capabilities
- The accreditation/certification of the service to run on NATO HQ public network
- The supply and maintenance of provisions for the service.
- Channel changes up to 3 times a year.
- Comprehensive Operation & Maintenance (O&M) including technical support and training. O&M covers on-site support with required response times (restore target: 2 working days – P3), routine maintenance, updates, and periodic security testing.

**3.2** This approach will be evaluated based on the overall cost-effectiveness, scalability, and alignment with the project's operational and strategic objectives. Vendors are encouraged to outline the benefits and risks associated with this approach and to provide a detailed cost breakdown.

#### **4 Technical Requirements:**

##### **4.1 IPTV focus:**

The objective is to acquire and deploy a market-ready IPTV solution that serves all 48 channels over the NATO HQ public network. The solution shall support high-quality IPTV services, scalable to at least 500 users, and provide additional digital signage capabilities with controlled content management.

##### **4.1.1 System requirements**

###### **1. IPTV Content Delivery:**

- Encoding and streaming of licensed TV channels into an IPTV-ready format.
- Support for multicast and unicast streaming protocols.
- Adaptive bitrate streaming for consistent quality across devices and varying network conditions.

###### **2. Integration with Satellite Dishes – only for approach B:**

- Support for receiving and decoding signals from satellite dishes.
- Compatibility with standard satellite receivers and LNBS (Low-Noise Block downconverters).
- Integration of required equipment such as multi switches or amplifiers to support simultaneous channel processing.

###### **3. Middleware Platform:**

- A centralized IPTV management system (middleware) to manage channel line-ups, user access, and service configuration.
- Integration with Electronic Program Guide (EPG) data for easy user navigation.
- Tools to manage user authentication and access rights.

###### **4. End-User Devices and Accessibility:**

- IPTV solution shall support access for:
  - A minimum of 500 users on workstations, laptops, or tablets via web or app interfaces.
  - 350 standalone televisions with compatible set-top boxes or embedded IPTV functionality.
- Applications and interfaces for mobile devices, smart TVs, and desktops.

###### **5. Digital signage Capabilities:**

- The solution shall include digital signage functionalities, allowing content creation and broadcasting.
- Controlled delegation of access rights for digital content management to at least ten (10) different content managers in a secure and managed way.

- 12 different digital signage channels are required

#### 4.1.2 Infrastructure and Environment Requirements:

##### 1. Customer-Provided Resources:

- The IPTV solution shall be connected to NHQ local public network via 1 Gbit/s optical network access, provided by the customer.
- One electrical plug shall be provided by the customer (characteristics and power to be defined during implementation).
- The system shall be installed in an office-type environment with controlled temperature.

##### 2. Contractor Responsibilities:

- The contractor shall provide a technical cabinet to host all IPTV solution components.
- Provision and Installation of UPS systems capable of automatically shutting down servers safely in the event of a power outage lasting more than five minutes.
- Ensure that the IPTV solution is housed in the technical cabinet, with adequate provisions for cooling and cable management.

#### 4.1.3 Scalability and Network Integration:

- The system shall scale to accommodate additional users, televisions, or channels as needed.
- Integration with the customer's existing LAN infrastructure, supporting VLANs and QoS for optimized IPTV traffic.

#### 4.1.4 Monitoring, Analytics, and Security (optional):

- Real-time monitoring of IPTV streams, with alerts for performance issues or disruptions.
- Basic analytics to track content usage, system health, and user engagement.
- Compliance with copyright and licensing regulations for distributed content.

#### 4.1.5 Implementation and Training:

- The contractor shall handle the setup, configuration, and testing of the entire IPTV solution including network integration and satellite dish alignment – for approach B.
- Training and documentation shall be provided to system administrators and content managers.
- The contractor shall ensure that the system is operational and meets all functional and non-functional requirements before FSA.

#### 4.1.6 Deliverables:

- Fully functional IPTV system, connected the customer's private network and to existing satellite dishes for approach B.
- Middleware platform for channel and content management.
- Digital signage capabilities with multi-user access rights.
- UPS systems for safe power management.
- Technical cabinet for hosting IPTV and digital signage components.
- User manuals, network diagrams, and training materials for IPTV system and associated digital signage system.
- Technical support and maintenance plan for IPTV and digital signage systems.

#### 4.1.7 Miscellaneous

The current IPTV solution is connected to five satellites that will be used for approach B:

1. Astra 1M (19.2E),



2. Astra (28.2),
3. Turksat (42)
4. Hot Bird (13.0E),
5. Eutelsat (16).

The new IPTV solution shall offer a minimum capacity of 60 channels.

The following 25 channels shall be available:

1. Al Jazeera
2. Animal Planet
3. ARD
4. Arte
5. BBC World
6. BBC1
7. BBC2
8. CNN
9. Discovery Channel
10. Euronews
11. Eurosport
12. France 24 HD
13. La Deux HD
14. La Trois HD
15. La Une HD
16. LCI
17. MTV
18. Nat Geo HD
19. NPO1 HD
20. NPO2 HD
21. NPO3 HD
22. Rai 1
23. Rai 2
24. Rai 3
25. TV5 Monde HD

The following 20 channels are currently received via satellite. The aim is to deliver all or most of them without a satellite connection:

1. Avrupa
2. BBC News
3. Channel 5
4. CNBC HD
5. CNN TÜRK
6. HABERTURK
7. ITV
8. ITV2
9. ITV3
10. ITV4
11. PRO TV International
12. Rai News 24 HD
13. RTP International
14. Sky News Intl



15. TGRT HABER
16. TRT HABER HD
17. TRT TURK HD
18. TRT1 HD
19. TV 8 INT
20. TVR International

The Subscription fees for all channels are to be included in the contract. The addition or the removal of a channel will be managed through a customer's change request.

#### **4.2 Digital Signage focus:**

The aim is to procure and implement a readily available, market-proven digital signage system that meets the NHQ essential communication needs without requiring extensive customization. The selected solution shall demonstrate reliability, ease of use, and alignment with modern standards for digital signage technology.

##### **4.2.1 System Requirements**

The digital signage solution shall meet the following baseline capabilities:

1. Content Management and Delivery:
  - A centralized Content Management System (CMS) to create, upload, schedule, and manage multimedia content.
  - Support for multiple file types, including images, videos, text, and live web feeds.
2. Display and Hardware Support:
  - Compatibility with standard commercial-grade digital screens (e.g., LCD/LED) of various sizes.
  - Integration with off-the-shelf media players or systems embedded in display hardware.
3. Remote Management:
  - Tools to remotely monitor, manage, and update screens across multiple locations.
  - On-premises to suit operational needs.
4. Content Scheduling:
  - Ability to schedule content for specific times, dates, and locations.
  - Support for playlist creation and automated rotation of multiple content items.
5. Multi-Zone Capabilities:
  - Enable screens to display multiple types of content simultaneously (e.g., videos, text tickers, clock).
6. Real-Time Updates:
  - Support for live updates to content in response to events or changing circumstances (e.g., alerts or news feeds).
7. User-Friendly Interface:
  - Intuitive administrative dashboard accessible via web browser.
  - Role-based access to allow secure content management by authorized personnel only.
8. Integration and Scalability:
  - Compatibility with third-party tools and APIs for future integration.
  - Easily scalable to manage additional screens and locations as needed.
9. Basic Analytics and Reporting:
  - Logging capabilities to track content usage and screen uptime.
  - Reports on system performance and engagement metrics.



#### 4.2.2 Implementation and Adoption Approach:

Adoption Strategy: Preference shall be given to established, market-ready solutions requiring minimal customization and offering flexibility for implementation within the NATO HQ existing infrastructure.

### 4.3 Security requirements / Accreditation:

#### 4.3.1 Information Classification:

4.3.1.1 The IPTV solution shall host various levels of sensitive information that need to be viewed and processed by the Contractor:

- The maximum classification and ownership level of the information that can be processed by the solution is NATO UNCLASSIFIED.
- It is of utmost importance that the integrity and availability of the information is ensured at all times.
- While integrating with the Purchaser's CIS or CIS provided by 3rd party contractors, the Contractor might have to process NATO SECRET information.

#### 4.3.2 Security Accreditation Requirements:

4.3.2.1 The Provider shall be aware that the proposed Service may be subject to applicable Security Accreditation. If the solution is hosted outside of NATO environments and only integrates with classified systems through existing security gateways then no accreditation is required. If the solution is installed inside of NATO environments, then the Provider's proposed solution must adhere to the Security Accreditation (SA) requirements.

4.3.2.2 In case of Security Accreditation is required, the NATO CIS Security directives and guidelines will have to be followed:

4.3.2.3 The Provider shall develop the related documentation set that contains and not limited to Security Accreditation Documentation Set (ADS), Security Accreditation Plan (SAP), CIS Description (CISD), Security Risk Assessments (SRA), Security Test and Verification Plan (STVP), Security Operating Procedures (SecOPs). Purchaser will provide templates and guidance for the creation of such documents;

4.3.2.4 The Contractor shall support security audits executed by the Customer, including but not limited to: Security Testing and Verification, type 3 Security Audits (i.e. validation tests), type 4 Security Audits (i.e. pen-testing);

4.3.2.5 Type 3 and Type 4 Security Audits are conducted by the NATO Cyber Security Center (NCSC);

4.3.2.6 The Contractor shall take action to follow, carry out the necessary work, and to implement the advice, instructions and changes required to remediate findings resulting from security testing and security audit(s) or from the advice, instructions and changes required by the Security Accreditation Authority (SAA);

4.3.2.7 The Contractor provided Solution design, shall include implementation of the Security Mechanisms and provide full traceability of high level security measures requirements down to the implementation level.



**ANNEX C**

**Information requested**

**Company name:**

**Contact name & details (phone number and email address):**

Please **DO NOT** enter any company marketing or sales material as part of your answers within this Request for Information. But please submit such material as enclosures with the appropriate references within your replies.

Please **DO** try and answer the relevant information requested as comprehensively as possible. All points within this document should be answered in conjunction with the summary of requirements in Annex B.

Cost details required in the questions refer to Rough Order of Magnitude (ROM) Procurement & Life Cycle cost, including all assumptions the estimate is based.

**1. Technical and Implementation Details:**

- Q 1.1 What is your proposal for an IPTV and DS state of the art solution?
- Q 1.2 What is the indicative timeline for implementation of the new solution?
- Q 1.3 What are your Security Accreditation strategies for the solution to be authorised to run on NATO Headquarters public network?
- Q 1.4 What is your Transition plan from the old to the new service?

**2. Operations and Maintenance:**

- Q 2.1 What are your Service level agreements (SLAs) for maintenance and incident resolution?
- Q 2.2 What are your Routine testing, updates, and reporting protocols?

**3. Risks and Mitigations:**

- Q 3.1 What are the potential anticipated risks (e.g., technical, or security accreditation) and your proposed mitigation strategies?

**4. Cost and Pricing Information:**

Vendors are required to provide a ROM (including a ROM breakdown):

- Q 4.1 What is the minimum contract duration that will make the COCO solution a suitable approach for your company?
- Q 4.2 Comprehensive ROM for the yearly fee that encompasses:



- Ownership, supply, and maintenance of the IPTV system and the DS capabilities.
- Security accreditation of new IPTV and digital signage capabilities
- Connection of new IPTV and DS capabilities to NATO Headquarters public network.

Q 4.3 Annual ROM for Operation & Maintenance (O&M), including:

- Channels subscription fees.
- 24/7 service desk for incident and change management.
- On-site technical support with specified response times (2 working days).
- Routine maintenance, updates, and periodic security update/testing.

Q 4.4 The vendor must also include:

- A comparison of the projected costs over the system's lifecycle (10 years).
- Clear identification of any optional costs, such as additional IPTV Set-Top Boxes.
- Recommendations for optimizing cost efficiency while maintaining service quality and compliance with the stated requirements.