



NCIA/ACQ/2023/07406
10/November/2023

MARKET SURVEY

PROJECT "AI COGNITIVE AGENT"

NCI Agency Reference: MS-CO-423207-AIC

NCI Agency is seeking information from Nations and their Industry in order to assess the availability of an Artificial Intelligence Cognitive Agent.

NCI Agency Point of Contact

Senior Contracting Assistant: Esteban Diaz

E-mail: Esteban.Diaz@ncia.nato.int

To: Distribution List (Annex A)

Subject: NCI Agency Market Survey MS-CO-423207-AIC

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 an AI cognitive agent.
2. A summary of the requirements is set forth in the Annex B attached hereto. Respondents are requested to reply via the questionnaire 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 **MS-CO-423207-AIC** and all correspondence and submissions concerning this matter should reference this number.

NATO Communication and Information Agency
Boulevard Leopold III
110 Brussels
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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. Non-binding pricing information is also requested as called out in Annex C.
6. Responses are due back to NCI Agency no later than **12:00 Brussels time on Monday 15 December 2023**.
7. Clarification requests can be submitted no later than 10 calendar days prior the Market Survey closing date.
8. Please send all responses via email to the following NCI Agency Point of Contact:
For the attention of: Mr Esteban Diaz at Esteban.Diaz@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 7.
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 Market Survey.
12. Responses to this Market Survey, 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 Market Survey and this shall not be regarded as a commitment of any kind concerning future procurement of the items described.
14. Your assistance in this Market Survey request is greatly appreciated.

FOR THE CHIEF OF ACQUISITION:

Esteban Diaz
Senior Contracting Assistant

Enclosures:

Annex A (Distribution List)
Annex B (Market Survey - Requirements)
Annex C (Market Survey - Questionnaire)

ANNEX A

**Distribution List for Market Survey
MS-CO-423207-AIC**

All NATO Delegations (Attn: Investment Adviser)

NATO Members Embassies in Brussels (Attn: Commercial Attaché)

NCI Agency – All NATEXs

NCI Agency – (reserved)

ANNEX B

Requirements

1. Background

- 1.1. The NCI Agency has an intent to enhance its Level 1 (L1) support capabilities by implementing an AI cognitive agent platform within ESOC, aiming to optimize operational efficiency and provide advanced support services.

2. Purpose

- 2.1. The purpose of this project is for the NCI Agency to revolutionize its support operations by introducing an AI cognitive agent. This technology will automate routine tasks, streamline ticket management and empower L1 personnel to address complex issues efficiently ensuring a high level of service delivery.
- 2.2. The NCI Agency intent is also to familiarize its staff with emerging AI technology, enabling automation in ticket management, optimizing the usage of knowledge base and equipping personnel with advanced tools for enhanced support services.

3. Project Scope

- 3.1. The NCI Agency is exploring the potential for industry to provide commercially available tools that would allow the NCI Agency to implement an AI cognitive agent capable of automating password reset, account unlock, ticket management and suggesting relevant knowledge base articles.
- 3.2. The main objective of this task is to introduce an AI cognitive agent that can efficiently handle L1 support tasks, enabling L1 personnel to focus on complex issues and improving service quality.
- 3.3. The Agency aims to optimize support operations, improve accuracy and facilitate data driven decision making by implementing the AI cognitive agent for L1 support in ESOC.

4. Technical Requirements:

- 4.1. **Infrastructure:** The AI agent will be implemented on-premises (Mons, Belgium), not relying on external cloud-based services.
- 4.2. **Higher Level Requirements:** The initial implementation will encompass the following functionalities:
 - 4.2.1 **User Interface:** The AI software cognitive agent will interact via a user interface with people with fast and meaningful responses, to solve problems or propose solutions through interactive conversations, with understanding of natural language and context, applying logic, and inferring implications.
 - 4.2.2 **Process workflows:** The AI agent will learn from operating procedures, historical chat sessions, Frequently Asked Questions and will have the capability to

- integrate new process instructions and workflows
- 4.2.3 Password Management: The AI agent will facilitate password resets and account unlocks, collecting necessary information from Level 1 (L1) personnel and providing details for validation upon completion of actions.
 - 4.2.4 Ticket Management: The AI agent will handle the creation, updating, and closure of tickets, gathering relevant information from L1 personnel, populating it within the ticketing system, and offering suggestions such as service categorization and prioritization.
 - 4.2.5 Ticket Escalation: The AI agent will provide recommendations for ticket escalation and routing to the appropriate support groups or escalation to human Agents.
 - 4.2.6 Knowledge Base Integration: Utilizing Natural Language Processing (NLP) techniques, the AI agent will identify key terms and match them with appropriate articles in the knowledge base, offering suggestions to L1 personnel.
 - 4.2.7 Notification Template Creation: The AI agent will create priority-based notification email templates to be sent to users based on incident details received from L1 personnel. These templates will be validated by L1 personnel before sending.
 - 4.2.8 Reporting and Analytics: The AI agent will have configurable reporting capabilities to track and report Key Performance Indicators (KPIs) related to ticket management and knowledge base utilization.
 - 4.2.9 Direct Context-Based Interaction: The AI agent will communicate with L1 personnel and act as backup L1 personnel.
 - 4.2.10 Smart Learning Capability: The AI agent will have the ability to learn and improve over time.
 - 4.2.11 ITSM and Service Integration: The AI agent will be compatible with BMC Remedy (version 20.2.04) and to all the required critical services and protocols.
- 4.3. Training:** Comprehensive training will be provided for 50 individuals, along with clear documentation and guides.
- 4.4. Support & Maintenance:** Professional service support and maintenance will be included.
- 4.5. On-site support:** Availability of NATO Secret cleared personnel is required during the support period (5 days per month for 1 person).
- 4.6. Penetration and Integration Testing:** Comprehensive interoperability, verification, validation and penetration testing will take place on-premises (5 days for 1 person), which requires:
- Provision of full documentation
 - Release Information - (Release Notes / Product Guides / Version Description Documents)
 - System Media Packages, including all required elements for an operational deployment:
 - Application and installation binary files
 - Installation Instructions
 - User Manual
 - Admin Manual
 - After successful testing, the full packages will be part of the Agency's DML.
- 4.7. User Testing:** Detailed User Testing will be planned and performed before the deployment of the application.

4.8. Integration requirements:

- 4.8.1 API Integration: The AI agent will be able to integrate with other systems via APIs. This will allow it to interact with a wide range of software and hardware, expanding its capabilities.
- 4.8.2 Database Connectivity: The AI agent will be able to connect to various types of databases. This will enable it to retrieve, update, and manipulate data as needed.
- 4.8.3 Security Protocols: The AI agent will support various security protocols to ensure secure data processing.
- 4.8.4 Error Handling: The AI agent will have robust error handling capabilities. It will be able to identify, log, and recover from errors during integration.
- 4.8.5 Data Mapping: The AI agent will be able to map data between different systems accurately. This is crucial for maintaining data integrity across systems.
- 4.8.6 Scalability: The AI agent will be scalable. As the organization grows and changes, the AI agent will be able to handle increased loads and complexity.
- 4.8.7 Real-time Synchronization: The AI agent will support real-time synchronization between systems. This ensures that all systems have the most up-to-date information.
- 4.8.8 Logging and Auditing: The AI agent will provide detailed logs of its activities and interactions with other systems. This is important for troubleshooting and auditing purposes.
- 4.8.9 Failover and Redundancy: The AI agent will have failover capabilities in case of system failure. Redundancy measures should also be in place to prevent data loss.
- 4.8.10 Compatibility: The AI agent will be compatible with commonly used operating systems and platforms.

4.9. Timelines: 1 year of pilot implementation.

5. Non-Technical Requirement:

- 5.1. Supplier shall comply with the directive for the Industrial Security Policy, AC35D-2003 REV5 COR1.

ANNEX C **Questionnaire**

Organisation name:

Contact name & details within organisation:

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 questions as comprehensively as possible. All questions 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.

Questions:

1. Please provide the details of your solutions where you can meet the requirements totally or partially.
2. If the case, please provide the following information regarding current and previous uses of your available solution:
 - a. Names of customers/users:
 - b. UNCLASSIFIED details on the specific program your solution supported:
 - c. Overview of any modifications to the solution necessary to support these customers and the licensing terms applicable to modifications of the product, stating also whether those will be assigned to the NCI Agency:
3. Please provide us with any additional capabilities of your solution that go above and beyond those included in ANNEX B:
4. Please indicate advantages & disadvantages of your product/solution/organization:
5. Please provide any other supporting information you may deem necessary including any assumptions relied upon:
6. Please provide a ROM pricing data for solution: