REQUEST FOR INFORMATION
RFI-ACT-SACT-19-49

This document contains a Request for Information (RFI) Call for Industry input to NATO's Open Innovation Lab Capability.

Suppliers wishing to respond to this RFI should read this document carefully and follow the guidance for responding.
1 - INTRODUCTION

1.1 Summary. Headquarters Supreme Allied Commander Transformation (HQ SACT) is issuing this Request for Information (RFI) in order to engage with industry. The intention is to establish the art-of-the-possible and state-of-the-art with respect to process, technologies and products in the area of Agile DevOps in support of newly established ACT’s Open Innovation Lab.

1.2. This request for information does not constitutes a commitment to issue a future request for proposal (RFP). The purpose of this request is to involve industry through collaboration, in an examination of Agile DevOps in support of ACT’s Open Innovation Lab with a focus on processes, technologies and commercial products. HQ SACT has not made a commitment to procure any of the items described herein, and release of this RFI shall not be construed as such a commitment, nor as authorization to incur cost for which reimbursement will be required or sought. Further, respondents are advised that HQ SACT will not pay for any information or administrative costs incurred in responding to this RFI. The costs for responding to this RFI shall be borne solely by the responding party. Not responding to this RFI does not preclude participation in any subsequent RFP if issued in the future.
2 – GENERAL BACKGROUND: ACT Framework for Collaborative Interaction (FFCI)

2.1 ACT has implemented a Framework for Collaborative Interaction (FFCI) to increase opportunities for industry and academia to contribute to ACT capability development efforts through collaborative work. Such collaboration enables HQ SACT, and NATO as a whole, to benefit from industry/academia models, advice, capabilities and experience in the course of this work. In addition to the benefits HQ SACT gains from such projects, this collaborative effort will provide industry / academia with an improved understanding of NATO’s capability requirements and the associated issues and development challenges to be addressed by HQ SACT. Potential collaborative projects are on specific topics that are of mutual interest to both parties but shall be restricted to collaborations in non-procurement areas. Several mechanisms have been already developed to support the initiation of collaborative projects between industry/academia and ACT ranging from informal information exchanges, workshops, studies or more extensive collaboration on research and experimentation.

2.2 Depending on the level and type of interaction needed for a collaborative project, a specific agreement may be needed between parties. The FFCI agreement for any specific project, if required by either party for the project to proceed, will range from “Non-disclosure Agreements” (NDA) for projects involving exchange of specific information to more extensive “Declaration of Mutual Collaboration” (DOMC) to address intellectual property and other issues.

2.3 More extensive information on the ACT FFCI initiative can be found on the ACT web site being developed to support FFCI projects at http://www.act.nato.int/ffci.

2.4 No FFCI agreement is required to respond to this RFI.

3 - DESCRIPTION OF THE PROGRAMME

3.1 Programme Vision

3.1.1 Newly established Innovation Branch at ACT is expanding ACT’s Innovation Hub operational model by introducing Open Innovation Lab (OIL) capability. The Lab will provide a space to test hypotheses and solutions turning ideas into user-centric Minimum Viable Products (MVPs) through close collaboration of end users and developers. The Lab will provide an incubator environment where ideas will come to life rapidly following the best practices of Agile DevOps from industry and the latest research from academia. The Lab operational model will be developed incrementally, and the close collaboration with all stakeholders will shape its culture, processes and toolset.

3.1.2 HQ ACT has started the process of standing-up the Open Innovation Lab and its operational infrastructure to enable Agile DevOps within the NATO Enterprise and beyond. The Lab with their incubation function will act as a state-of-the art node within a larger ecosystem network of incubators formed across NATO Nations, partner nations, the NATO Command Structure and Agencies, industry and academia. The
essential requirement for the Lab is to provide environment where MVPs could be rapidly prototyped, tested, and operationalized (including cross security domain deployments), thus facilitating the end-to-end Agile DevOps. The diagram below depicts a notional architecture of incubators’ cloud environments along with common services fabric enabling rapid portability of services across them.

3.1.2 The Open Innovation Lab will leverage the latest proven methods of work along with top technologies to enable rapid innovation. The infrastructure utilized by the lab will be hybrid in its nature, leveraging both private and public cloud environments. It will maximize the utility of the public cloud where the market has matured and standardization assures interoperability and vendor neutrality, while capitalizing on a hybrid cloud environment where emerging technologies need to be assessed/operationalized and where austere operational environments (no or limited communication networks to public clouds providers) need to be tested/supported.

3.1.3 In the foreseeable future NATO will leverage a hybrid cloud model and increase Agile DevOps operations, yet today it lacks a clear cloud strategy which leads to non-interoperable solutions. The Open Innovation Lab under its mandate will address this issue by maintaining a reference implementation of the DevOps environment including processes and toolset. This environment will meet the requirements of fast replicability and resiliency, and thus will meet the emerging requirements from the NATO Command Structure and initiatives such as Federated Mission Networking (FMN). NATO Partners will be strongly encouraged to assure compliancy with the ACT implementation of the Open Innovation Lab.

3.2 Intent/Objectives.
This Request for Information is intended to provide industry an opportunity to provide data that would allow NATO to determine potential benefits they might receive from a product or service.
3.3 Expected benefits to respondents

Industry participants will have the chance to expose NATO participants to state-of-the-art-technologies and products, and to learn more about the NATO approach toward Agile DevOps. The selected vendors may be invited to the workshop organized at ACT Innovation Hub that will further determine the shape of the Open Innovation Lab capability.

3.4 Expected input from industry/academia.
Expected input to this RFI is industry perspective on relevant current and future processes, techniques, technologies, products and services.

4 - REQUESTED INFORMATION

With this RFI ACT requests industry to share blueprints of an innovation lab capability that would address both DevOps process and aspects of underlying infrastructure. Particularly, the following points shall be addressed for each of them:

- DevOps Process and Tools:
  - Proposal of DevOps operating model (roles, activities, products)
  - Proposal of DevOps toolset (software tools and/or services)

- Infrastructure:
  - The underlying technical infrastructure shall provide standardized Hyper Converged Infrastructure (HCI) that would underpin modern DevOps operations, and would support workload portability and resilience
  - The proposed HCI shall support new computing abstractions (such as containers)
  - Common Services distribution proposal among those kept in private vs those stored in the public cloud
  - The proposed design shall include network architecture at the logical level
  - The proposed solution shall be easily scalable, and initially provide:
    - Dev Environment for 4-5 DevOps teams of 5 members each
    - Ops Environment for up to 10,000 (ten thousand) users utilizing basic business services (e.g. timesheets management application, e-mail)
  - List of common services offered by the infrastructure
  - Support for various network security levels
  - The proposed solution shall to the maximum extent possible, comply with open systems principles, and industry open standards

4.6 Answers to the RFI.
The answer to this RFI may be submitted by e-mail to the Points of Contact listed above.

4.7 Follow-on.
4.7.1 The data collected in response to this RFI will be used to inform the Open Innovation Lab project team to help design and implement ACT’s Open Innovation Lab.

4.7.2 Provision of data, or lack of, will not prejudice any respondent in the event that there is a competitive bidding process later as part of NATO Common-Funded Capability Development.

4.8 **Handling of Proprietary information.** Proprietary information, if any, should be minimized and clearly marked as such. HQ SACT will treat proprietary information with the same due care as the command treats its own proprietary information, and will exercise due caution to prevent its unauthorized disclosure. Please be advised that all submissions become HQ SACT property and will not be returned. Upon request HQ SACT will consider signing bi-lateral NDA agreement to further guarantee protection of proprietary information.

4.9 **Questions.** Questions of a technical nature about this RFI announcement shall be submitted by e-mail solely to the above-mentioned POCs. Accordingly, questions in an e-mail shall not contain proprietary and/or classified information. Answers will be posted on the HQ SACT P&C website at: www.act.nato.int/contracting-procurements.

4.10 **Response Date.** 2 August 2019

4.11 **Summary.** This is a RFI only. The purpose of this RFI is to involve industry/academia, through collaboration, in an examination of future capabilities related to the Open Innovation Lab with a focus on DevOps processes, technologies and commercial products. HQ SACT has not made a commitment to procure any of the items described herein, and release of this RFI shall not be construed as such a commitment, nor as authorization to incur cost for which reimbursement will be required or sought. It is emphasised that this is a RFI, and not a RFP of any kind.

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