

## **NEC Assessment Criteria & Methodology Study**

### **Customer**

European Defence Agency (EDA) The study defines the Network Collaboration levels that all Capabilities that support EU Crisis Managements Operations must relate to and fulfil. It supports the pooling and sharing initiative by defining the levels of Network Collaboration Areas and how to assess them.

**Aim** As one of the EDA 12 Capability Development Plan (CDP) priorities, Network Enabled Capabilities (NEC) represents the environment which allows other capabilities to fully become Network Enabled. There is no capability being developed today – and even less so tomorrow – which does not benefit of being “network-enabled” (the so called “NE” attribute). In order to achieve interoperability this attribute should be designed in a consistent and measurable way. The study addressed the “measurement” aspects related to the “NE” attribute. The study proposes a practical and useful way on how to assess the “NE” attribute. As such NEC is supposed to provide design principles, implementation guidelines, assessment criteria/methodology and assessment tools required to design, implement and assess the degree of NEC compliancy of various capabilities. This study represents a first step towards the coherence within the design of capabilities that are Network Enabled.

### **Challenge**

European Union (EU) institutions and Member States (MS) conduct military operations and civilian missions that follow the Common Security and Defence Policy (CSDP) according to European Security Strategy (ESS) (EU, 2003) by exploiting the full range of civil and military instruments. Addressing the strategic challenges and key threats (terrorism, proliferation of weapons of mass destruction, regional conflicts, failed states and organised crimes) the EU believes that none of them can be addressed by military means only. Each crisis or crisis region requires an individual, tailored and comprehensive response. The ESS sets out three strategic objectives:

1. Addressing the threats. The EU must engage in a timely manner with the ambition to act, whenever possible, before a crisis occurs or escalates
2. Building Security in our Neighbourhood. The EU puts particular emphasis on creating stability in its strategic neighbourhood with the aim of promoting an arch of well-governed states from the East Mediterranean region and Africa
3. An International Order based on Effective Multilateralism. The strategy underlines the importance of international law and the role of the UN to create “effective multilateralism” As a consequence; the ESS has set clear imperatives for European Security and Defence Policy (ESDP). The EU is determined to become more active, more capable, and more coherent, and is willing to work with partners in a NEC environment, on whom it also relies.

### **Execution**

A gradual approach was applied during the study: The definition of the Design Principles required for the “Network Enabled” attribute of individual capabilities, both civil and military. The principles were tested in other EDA projects (such as EATF, R&T). A set of implications was derived from applying the design principles to the people, information, and technology domains. Based on these implications a fully-fledged EU NEC Maturity Model (MM) was developed. The MM contains clear descriptions of various maturity areas (each with 5 levels) and provides the benefits to advance from one level to the next. The MM assists in the decision process in establishing the actions to be taken. Based on the maturity model, both a list of assessment criteria and an associated methodology to be applied to individual (civil and military) capabilities were derived. As a last step the study provides the technical specifications and a detailed cost estimate for the further development of a NEC Assessment Tool (automated software). This should be integrated with the NEC Roadmap Tracking Tool.

### **Results**

It is the intention of EDA to translate the outcomes of this study into a software automated tool, preferably closely linked with the NEC Roadmap Tracking Tool. The intended benefits of using this methodology (and subsequently the automated tool) are: It provides a practical, tangible, and useful support to the decision process on the evolution/improvement of knowledge based capabilities The assessment of every individual capability with the same methodology and tool will

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provide comparable results, facilitating the CDP (and pMS related) processes. By applying the same Design Principles, individual capabilities will become more interoperable and the degree of efficiency will increase. The EU NEC Vision is implemented in a consistent way, so that it can be understood and related to by all capability owners/planners/developers. In conclusion, the study, as part of a set of coherent initiatives developed by PT NEC, provides to the capability owners / planners / developers a comprehensive tool to assess the current state of an individual capability (from the “NE” perspective) and proposes a methodology and a set of actions on how to enhance it.