EUROPEAN DEFENCE AGENCY

Fact sheet

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Capacity Building on Energy Aspects

Background Description

Even though energy is not the core business of the defence sector, its role as a military capability multiplier is widely acknowledged. Using energy efficiently can contribute to sustaining military operations for longer periods and reducing the needs and the corresponding logistic risks of fuel supplies in hostile environments.

Within the national borders, saving energy collectively in defence context results in saving financial resources directly (through lower utility bills) and indirectly (through lower maintenance costs), assuming also the exemplary role assigned to public sector towards mitigating climate change.

Project Analysis

The Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS) has revealed that most EU armed forces have initiated professional training schemes in the energy area; however, it is the unanimous opinion of all delegates that these have to be improved in terms of context and intensity, in order to deliver more tangible results.

To bridge the already identified knowledge gap, this project proposal seeks to develop a suite of capacity building training schemes for defence personnel, in order to cover various energy-related aspects.

Aim, Objectives and Scope

The aim of the project is to shift the defence sector towards a more energy efficient *modus operandi* through the capacity building on related energy aspects, while considering the specificities and the core business of the armed forces.

In light of this, the objectives of the project are:

- Identify knowledge gaps on energy-related aspects of the defence sector;
- Transfer well-established best practices and/or generate knowledge, tailor-made for the defence sector on energy efficiency;
- Amend existing MoDs' procedures and requirements to incorporate energy efficiency as one of the operational parameters.

The suite of capacity-building training schemes for defence personnel delivered locally in the Member States (MS) national language(s), will aim to cover:

- Communication and behaviour change theoretical basis for increasing energy efficiency;
- Energy management systems;
- Measurement and verification protocols and standards regarding energy performance;
- Energy performance contracting (EPC) and lifecycle, green procurement;
- Renewable energy sources' technologies and applications;
- Energy auditing;
- Energy-efficient design of defence infrastructure;
- Energy efficient operation and maintenance of infrastructure and equipment.

Methodologies

A review at national level will be required to identify the relevant knowledge gaps, as well as the numbers and the specialties of personnel that require training.

For common topics, generic training material will be agreed among participating MS, which will serve as a core, standardised curriculum.

Ministries of Defence (MoDs) will need to cooperate at national level with entities competent and experienced on energy issues, including training (e.g. national authorities and/or educational institutes), in order to:

- Develop the course material for each topic in the national language(s), while considering the commonly agreed, generic material and also in accordance with the country specificities and the national legal frameworks;
- Deliver training including mentoring;
- Assist in the creation of a pool of MoD / armed forces trainers to sustain the knowledge acquired and pass it to personnel that will be engaged with energy matters in the future.

The duration of the project is foreseen for 4 years.

Impact – Expected Outcomes

The project will shift the armed forces to adopt a more energy efficient way of work, leading to budget savings and rational use of resources as well as to more resilience and autonomy by:

- Changing the mindsets of personnel and management, through training on setting up relevant awareness campaigns;
- Implementing energy management systems, which are proven tools for improving energy performance;
- Measuring, verifying and modelling energy performance through defence-specific parameters;
- Using external funding mechanisms, such as energy performance contracts (EPCs), to finance interventions that increase energy efficiency without (or with minimal) upfront investments from MoDs' budgets;
- Integrating innovative technologies that increase energy efficiency and autonomy while reducing emissions in the design of new infrastructure and/or in the retrofit of the existing building stocks;
- Incorporating the energy parameter in the procurement processes for both Commercial – Off – The - Shelve (COTS) equipment but also for defence material;
- Conducting energy audits to assess the existing building stocks and activities and to provide recommendations interventions;
- Operating and maintaining more efficiently infrastructure and equipment.

Moreover, since the armed forces are among the largest owners/users of building stocks and

among the most considerable energy consumers in the public sector, this transition to a more energy efficient way of working will lead to strengthening their exemplary role and further contributing to the EU energy efficiency targets.

Opportunities

The project is eligible for potential funding at European level, for instance through a grant from the Horizon 2020 work Programme 2018-2020, the Horizon Europe 2021-2027, the European Regional Development Fund (ERDF), the European Social Fund (ESF) and the Erasmus +.

Challenges

The partition of the capacity building activities at a national level minimises any risks concerning the successful delivery of the project in total.

Potential coordination risks at national level are considered minimal, since the partners will be either national competent authorities on energy or university institutions, having long experience in delivering such projects.

Considering a high turnover of personnel, the armed forces will have to assign specific teams for the delivery of the project, covering the whole spectrum of required capacity building activities, and securing their involvement into the project for the whole duration.

A lead MS or EDA will have to appoint a dedicated manager to coordinate centrally the whole project.

Way Ahead

The H2020 relevant call LC-SC3-EE-16-2018-2019-2020 for 2019 has a deadline on 3rd September 2019. MS that are interested to participate should start liaising with national partners, in order to formulate the required critical mass for drafting the proposal as soon as possible.

An iteration of the call is foreseen for next year, having a similar deadline (September 2020).

This project idea was developed during the second phase of the Consultation Forum for Sustainable Energy in the Defence and Security Sector (CF SEDSS II) and does not entail any future commitment for the EU Ministries of Defence (MoDs) or the EU institutions or agencies. However, it provides the framework for enabling the formation of multi-national collaborations at the European level to help the MoDs to address common defence energy-related considerations and to move towards a defence decarbonised future. The potential of those ideas will be further explored in the context of the forthcoming CF SEDSS Phase III (2019-2023).

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