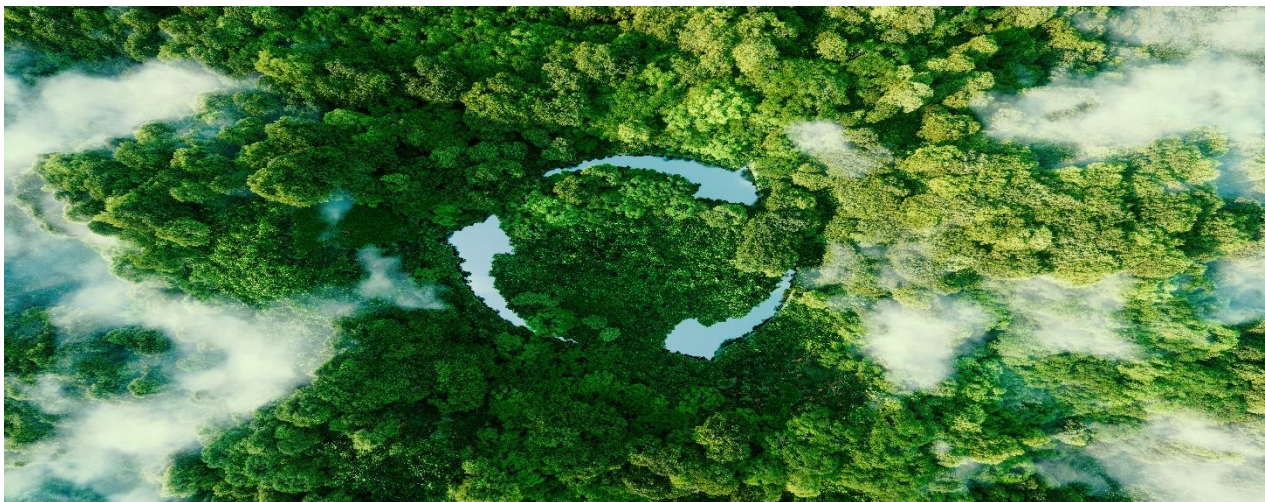


Incubation Forum for Circular Economy in European Defence (IF CEED)

Project idea

Guidelines for environmental evaluation in defence applications



Context

Circularity has the potential to limit material and energy consumption and, overall, lead to a reduction of CO₂ emissions by almost 40%. To assess the actual environmental impact of the defence sector, it is essential to perform robust and comparable evaluations.

Stakeholders in defence value chains are working towards more sustainable capabilities and, in most cases, are formally committing to reducing their environmental impact. Project ideas incubated through IF CEED also aim at improving circularity.

Despite efforts by academics and industry to determine the footprint and handprint of defence activities and/or products, there is no

commonly agreed method for assessing impacts, highlighting the benefits of circularity and avoiding undesirable side effects. It is therefore necessary to **build a consensus** on how to assess the environmental impacts.

In addition, the reliability of such assessment depends heavily on “primary data”, i.e. data directly collected/measured from the sources. Handling of such datasets requires the creation of processes and a trustworthy ecosystem to **achieve the objective without compromising sensitive information**.

The methodologies, tools and datasets selected should meet the specific needs of the sector and serve as a basis for the **eco-design** and effective management of military assets in the various domains (land, maritime and air).

Objectives

The stake for the defence sector is to build on a harmonised methodology and reliable data points to assess its environmental impact. The approach should be adapted to the respective domains and product categories.

The objective is to **establish guidelines for environmental evaluation in defence applications**, covering methodologies, tools and data sets.

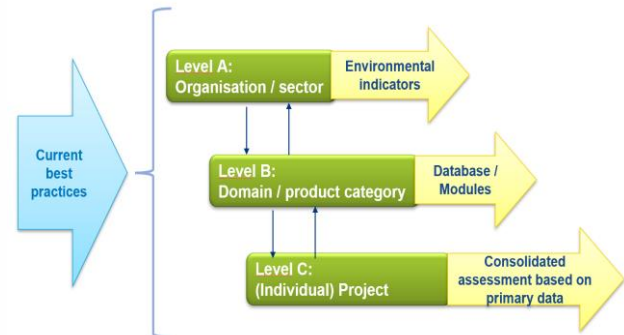
The **specific objectives** of the project idea are to:

- Formalise detailed targets (e.g., in terms of scope, functional units) and diagnose current methodologies, tools and databases in relation to these objectives.
- Conceptualise an approach based on real data for environmental evaluation in defence applications.
- Implement a feedback loop via the implementation of project ideas.
- Establish guidelines for environmental evaluation in defence applications.
- Consolidate a defence LCA database based on primary data.

Operational benefits

- Support for the identification of “hot spots” to improve resource efficiency
- Greater efficiency and support tools for operations and procurement.

Methodology



Stakeholders

- Experts engaged in IF CEED Project Circles
- Ministries of Defence, Industry, Research-and-Technology Organisations, Academia.

Timeline

The foreseen project duration is 48 months.

Expected Outcome

- Conceptual framework based on real data for environmental evaluation in defence applications
- Guidelines for environmental evaluation, validated by test implementation.

Budget & Funding

Type of project: Collaborative project/
Coordination activities

Budget: EUR 1 000 000 - 3 000 000