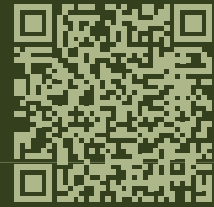


MICRAM

Sustainable circularity and CRM recovery for MW radiation protection and stealth defence applications



LinkedIn

MOTIVATIONS

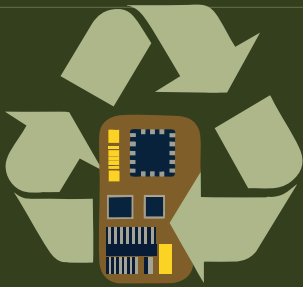
The relevance of this project lies in its contribution to both resource independence and technological advantage of the solutions proposed. By recovering CRM from e-waste, the project addresses supply risks and enhances the EU's autonomy over essential resources, crucial for defence applications. Additionally, developing advanced MW shielding materials using these CRMs directly benefits stealth technologies, which minimises detection risks for military assets such as communication systems or unmanned aerial vehicles (UAV). These shielding materials also protect personnel health and electronic systems from EMI, ensuring operational reliability and communication security in mission-critical environments. Together, these advancements strengthen defence capabilities while promoting environmental sustainability.

OBJECTIVES

- To enable the circular use of CRMs from end-of-life (EOL) electronic products
- To develop military tactical clothing and Stealth/Low observable systems for electronic devices
- To test and validate the prototypes
- To assess the environmental impact of the processes
- To establish dissemination and exploitation plans for the results of the project

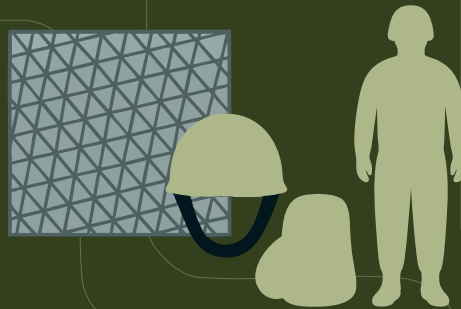
E-WASTE

CRM Recovery (Ni)



ADVANCED MATERIALS

MW Shielding & Stealth Textiles



SAFE AND SUSTAINABLE

BY DESIGN (SSbD)



AITEX - Project coordinator and textile innovation leader (Spain)

Università di Roma Tor Vergata - Academic partner contributing to system development and testing (Italy)

Centrum Materiałów Funkcjonalnych Łukasiewicz-IMN - Expert in material recovery and CRM processing (Poland)

FECSA - FÁBRICA ESPAÑOLA DE CONFECCIONES (FECSA) - In charge of the development and validation of prototypes, and responsible for the exploitation and dissemination strategies of the project (Spain)



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