

22-24 NOVEMBER 2023 – [Hotel NH Malaga](#) – MALAGA, SPAIN

THIRD PHASE OF THE CONSULTATION FORUM FOR SUSTAINABLE ENERGY IN THE DEFENCE AND SECURITY SECTOR (CF SEDSS III)

PROGRAMMESIXTH CF SEDSS CONFERENCE (22-23 NOVEMBER 2023) AND
SECOND ENERGY TECHNOLOGY SOLUTIONS CONFERENCE AND ONSITE EXHIBITION (23-24 NOVEMBER 2023)

The European Defence Agency (EDA) is organising the 6th CF SEDSS III Conference on 22-23 November, back-to-back with the 2nd CF SEDSS III Energy Technology Solutions (ETS) Conference and onsite exhibition on 23-24 November under the auspices of the Spanish Presidency of the Council of the European Union (EU) and hosted by the Ministry of Defence of Spain (ES MoD), with the support of ISDEFE (Engineering Systems for the Defence of Spain).

TUESDAY, 21 NOVEMBER 2023 (6TH CONFERENCE - DAY 0)

18h30 – 20h00 Conference registration
19h30 – 22h00 Buffet dinner – networking at the hotel restaurant

WEDNESDAY, 22 NOVEMBER 2023 (6TH CONFERENCE - DAY 1)

09h00 – 09h25 Conference registration

09h30 – 10h15 1. OPENING PLENARY SESSION

Introduction **Constantinos Hadjisavvas**, CF SEDSS III and Symbiosis Project Manager, European Defence Agency

Welcome addresses **Jiří Šedivý**, Chief Executive, European Defence Agency
ES MoD Undersecretary
European Commission

Keynote speeches **Brigadier General E. Ruiz Alonso**, Chief, Spanish Army General Logistics Base Program Support Office, ES Ministry of Defence

10h15 – 10h30 **Group photo**

10h30 – 11h00 Coffee break – networking

11h00 – 12h30 **2. PLENARY SESSION**

Setting the scene, Panagiotis Kikiras, Head of Unit Technology and Innovation, EDA

2.1. Presentation, DG ENER, European Commission

2.2. Implementing the EU's political framework on climate, defence and security, **Raphaela Engel**, Policy Officer, European External Action Service

2.3. Presentation

2.4. CF SEDSS state of play, **Constantinos Hadjisavvas**, CF SEDSS III and Symbiosis Project Manager, **Maja Kuzel**, CF SEDSS III Deputy Project Manager, EDA

2.5. EDA energy data collection and collaborative project formation, **Ioannis Chatzalexandris**, Project Officer Energy and Environment Systems, EDA

Discussion

Administrative points

12h30 – 14h00 Lunch break - networking

14h00 – 15h30 **3. PARALLEL SESSIONS - WORKING GROUPS (see next pages)**

15h30 – 16h00 Coffee break - networking

16h00 – 17h00 **4. PARALLEL SESSIONS - WORKING GROUPS (see next pages)**

17h00 End of the first day

17h10 – 17h30 **EU MoDs national contact points (NCPs) meeting**

19h30 – 23h30 **Networking dinner hosted by the Spanish Presidency of the Council of the EU/Spanish Ministry of Defence (Gran Hotel Miramar, Malaga) – meet at the hotel entrance at 19h15 (ES MoD will provide the transportation to the venue and back)**

THURSDAY, 23 NOVEMBER 2023 (6TH CONFERENCE AND ONSITE EXHIBITION “GREENING DEFENCE WITH INNOVATIVE ENERGY TECHNOLOGIES” - DAY 2)

09h00 – 10h30 **5. PARALLEL SESSIONS - WORKING GROUPS (see next pages)**

10h30 – 11h30 Coffee break - networking and onsite exhibition

11h30 – 13h00 **6. PARALLEL SESSIONS - WORKING GROUPS (see next pages)**

13h00 – 14h30 Lunch break - networking and onsite exhibition

14h30 – 15h30 **7. PARALLEL SESSIONS - WORKING GROUPS (see next pages)**

15h30 – 16h00 Coffee break - networking and onsite exhibition

16h00 – 17h00 **8. CLOSING PLENARY SESSION**

Moderator: Constantinos Hadjisavvas, CF SEDSS III and Symbiosis Project Manager, European Defence Agency

Working groups presentation: outcome and way ahead

WG1: **Ilias Manolis** (EL), WG2: **Jim Burke**, WG3: **Ioannis Chatzalexandris** (EDA) and TWG: **Giorgos Demetriou** (EDA)

CF SEDSS III Phase III: state of play and way ahead

CF SEDSS III project management team: Maja Kuzel and **Alessandra Lazzari** (EDA)

Next event: CF SEDSS III Dissemination Event: BE MoD

Concluding remarks

Jean-François Ripoche, Director Research, Technology & Innovation, European Defence Agency

Lieutenant General Luis Cebrian Carbonell, Director of Infrastructures Directorate, ES Ministry of Defence

17h00 End of 6th conference

17h00 – 18h00 **Onsite exhibition “Greening defence with innovative energy technologies”**

19h30 – 22h00 Buffet dinner - networking at the hotel

6th CF SEDSS III CONFERENCE, DAY 1
WEDNESDAY, 22 NOVEMBER 2023

3. PARALLEL SESSION – WORKING GROUPS (14H00 – 15H30)

WG1 Energy Efficiency and Buildings Performance	WG2 Renewable Energy Sources	WG3 Protection of Critical Energy Infrastructure	WG Transversal
<p>Team leader: Ilias Manolis (EL) Moderator: David Martin Borreguero (ES) EDA: Alessandra Lazzari (EDA) DG ENER: Massimo Maraziti</p>	<p>Team leader: Jim Burke Moderators: Dirk Wauman (BE) Maja Kuzel (EDA) DG ENER: Henrik Dam</p>	<p>Team leader: Ioannis Chatzialexandris (EDA) Moderators: Alexandru Georgescu (RO) Nektarios Nasikas (EL)</p>	<p>Team leader: Giorgos Demetriou (EDA) Deputy team leader: Moritz Haller (EDA) Moderators: - Policy & Management Observatory: Gintaras Labutis (LT), Xander Beks (NL) - Technology, Research & Innovation Hub: Robert Sipec (SI), Nicholas Kyriakides (CY) - Financing & Funding Gateway Cell: Pierre Di Toro (EDA) CINEA: Oronzo Dalouis</p>
<p>1. OPENING REMARKS Tour de Table WG1 Agenda and objectives</p> <p>1.1 CF SEDSS WG1 Phase III – Brief presentation of WG1 scope and objectives</p> <p>1.2 CF SEDSS 2nd cycle deliverables state of play (July 2022-Feb 2024) and way ahead for completion Speaker - TBC</p> <p>2. UPDATE ON PROJECT IDEAS</p> <p>2.1 Update on REFASYS project idea</p>	<p>1. OPENING REMARKS Tour de Table WG2 Agenda and objectives</p> <p>2. REVIEW OF 2ND CYCLE DELIVERABLES Jim Burke, Team Leader</p> <p>3. NEXT GENERATION ELECTRIC NAVAL VESSELS Andrea Pugina, IT MoD - Naval Armaments Directorate, and Giorgio Sulligoi, University of Trieste</p>	<p>1. OPENING REMARKS Tour de Table WG3 Agenda and objectives Ioannis Chatzialexandris (EDA), Team Leader</p> <p>1.1 CF SEDSS WG3 Phase III – Brief presentation of WG3 scope and objectives</p> <p>1.2 CF SEDSS 2nd cycle deliverables state of play (July 2022-Feb 2024) and way ahead for completion Alexandru Georgescu (RO), Moderator</p>	<p>1. OPENING REMARKS Tour de Table TWG Agenda and objectives Overview of deliverables and events (state of play and way ahead) and discussion Giorgos Demetriou (EDA), Team Leader</p> <p>2. POLICY AND MANAGEMENT</p> <p>2.1 Outcome of the TWG ad-hoc expert meeting on national strategies (Vilnius) and way ahead Gintaras Labutis (LT MoD), Moderator</p> <p>2.2 Defence and Energy in CDP and CARD Moritz Haller (EDA), Deputy Team Leader</p>

<p>2.2 Update on Mil-Behaviour project idea 2.3 Update on big-data for buildings project idea</p>		<p>2. FRENCH OBSERVATORY ON CLIMATE AND DEFENCE Julie Tass, IRIS -TBC</p> <p>3. CYBER-SECURITY DIMENSION ON CRITICAL ENERGY INFRASTRUCTURE Jens Vederso, VESTA</p>	<p>2.3 Energy transition roadmap for fixed infrastructure Xander Beks (NL MoD), Moderator Jeroen Haans, Head of team inVest</p>
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COFFEE BREAK – NETWORKING (15H30-16H00)

4. PARALLEL SESSION – WORKING GROUPS (16H00-17H00)

WG1 Energy Efficiency and Buildings Performance	WG2 Renewable Energy Sources	WG3 Protection of Critical Energy Infrastructure	WG Transversal
<p>3. UPDATE ON WG1 STUDY “BARRIERS TO SUCCESS AND SOLUTIONS TO IMPLEMENTING ENERGY EFFICIENCY MEASURES IN DEFENCE BUILDINGS AND SITES” Liam McLaughlin, EDA contractor</p> <p>4. UPDATE ON ZEROENERGYMOD (LIFE FUNDED PROJECT) Adeline Rezeau, Defence University Centre, University of Zaragoza</p> <p>Q&A session</p>	<p>4. ENERGY STORAGE</p> <p>4.1 Battery storage solutions: The potential role of vanadium redox flow batteries Søren Bødker, VisBlue</p> <p>4.2 Discussion on energy storage technologies drawing on contracted study on storage</p> <p>5. UPDATE ON CONTRACTED STUDIES</p> <p>5.1 Progress report on the contracted study on decarbonising the defence sector – challenges and opportunities Sami Ramdani, IRIS</p>	<p>4. PROTECTION OF CEI</p> <p>4.1. Protection of CEI – Multi-comprehensive approach Alexandru Georgescu (RO), Moderator</p> <p>4.2 Symbiosis – Offshore energy for defence: links with the PCEI Constantinos Hadjisavvas (EDA)</p> <p>4.3 Offshore energy infrastructure protection-MoD role-NO or DK case Speaker - TBC</p> <p>4.4 Offshore energy infrastructure protection – Pipeline security by ENTSO perspective Douglas Hill - TBC</p>	<p>3. POLICY AND MANAGEMENT (continued)</p> <p>3.2 Toolbox Xander Beks (NL MoD), Moderator</p> <p>4. FINANCE & FUNDING CELL</p> <p>4.1 Promoting financing for the defence sector across the private financial sector Javier Sandin Llorente, Operations & Grant Manager 2° Investing Initiative</p>

End of Day 1

6th CF SEDSS III CONFERENCE & ON-SITE EXHIBITION, DAY 2
THURSDAY, 23 NOVEMBER 2023

5. PARALLEL SESSION – WORKING GROUPS (09H00 – 10H30)

WG1 Energy Efficiency and Buildings Performance	WG2 Renewable Energy Sources	WG3 Protection of Critical Energy Infrastructure	WG Transversal
<p>5. UPDATE ON EUROPEAN COMMISSION'S PACKAGES, STRATEGIES, PLANS AND DIRECTIVES DG ENER - TBC</p> <p>6. GREENING OF STATE-OWNED SPANISH PORTS – OPS Speaker, ISDEFE</p> <p>7. ROUNDTABLE DISCUSSION: PROPOSAL FOR ORGANISATION, STRUCTURE AND TOPICS OF CF SEDSS PHASE IV Team Leader and Moderator</p>	<p>6. REVIEW OF DELIVERABLES</p> <p>6.1 Heating and cooling in defence installations</p> <p>6.2 Hydrogen in defence applications: advantages, disadvantages, and the way forward</p> <p>6.3 Power purchase agreements in the defence sector</p>	<p>5. CONTRACTED STUDIES UPDATE Nektarios Nasikas (EL), Moderator</p> <p>5.1 Impact of finance, markets and ownership on the operational security and effectiveness of defence-related critical energy supply and infrastructure Thierry Bros, Senior Expert</p> <p>5.2 Protection of offshore critical energy infrastructure beyond national sovereignty Roxana Andrei, Senior Expert</p> <p>5.3 Climate change – Hybrid Threats Studies: way ahead Ioannis Chatzalexandris (EDA), Team Leader, Constantinos Hadjisavvas (EDA)</p> <p>5.4 Table-Top exercise on hybrid threats impact on CEI: lessons learned Moderator and EDA, JRC - TBC</p>	<p>5. FINANCE & FUNDING CELL (continued)</p> <p>5.1 Funding instruments for dual use technologies Pantelis Tzortzakis, (Hellenic Development Bank), Vice chairman</p> <p>6. TECHNOLOGY AND INNOVATION HUB</p> <p>6.1 Discussing alternative energy storage and the impact on the resilience of military infrastructure in relation to the energy management systems Søren Bødker (VisBlue)</p> <p>6.2 Digitisation and impact of an energy management system linking the public and local grids Speaker - TBD</p>

COFFEE BREAK - NETWORKING & ONSITE EXHIBITION (10H30-11H30)

6. PARALLEL SESSION – WORKING GROUPS (11H30-13H00)

WG1 Energy Efficiency and Buildings Performance	WG2 Renewable Energy Sources	WG3 Protection of Critical Energy Infrastructure	WG Transversal
<p>8. WORKSHOP: GUIDANCE DOCUMENT REVISION Team leader and Moderator</p>	<p>6. REVIEW OF DELIVERABLES</p> <p>6.4 Role of site generation and energy storage in decarbonising defence installations</p> <p>6.5 Guidance Document Maja Kuzel (EDA)</p>	<p>6. WG3 STRATEGIC ORIENTATION Ioannis Chatzialexandris (EDA), Team Leader</p> <p>6.1 Space dimension of CEI – Space related energy dependencies EDA CapTech Space Moderator - TBC</p> <p>6.2 Nuclear energy infrastructure protection: challenges and concerns FR Gendarmerie - TBC</p> <p>6.3 Military energy needs: energy equivalent of military supplies (amount of energy for production and delivery on hand) Speaker - TBC</p>	<p>7. LOOKING BACK AT PHASE III</p> <p>7.1 Taking stock from the TWG phase III experience Giorgios Demetriou (EDA), Team Leader Moritz Haller (EDA), Deputy Team Leader</p> <p>7.2 Status of deliverables, and state of play of the guidance document Speaker - TBD</p>

LUNCH BREAK – NETWORKING & ONSITE EXHIBITION (13H00-14H30)

7. PARALLEL SESSION – WORKING GROUPS (14H30-15H30)

WG1 Energy Efficiency and Buildings Performance	WG2 Renewable Energy Sources	WG3 Protection of Critical Energy Infrastructure	WG Transversal
9. SUMMARY - CLOSING REMARKS: OUTCOMES FOR THE PLENARY SESSION	7. SUMMARY - CLOSING REMARKS: OUTCOMES FOR THE PLENARY SESSION	7. CONCLUSIONS OF PLENARY SESSION-WAY AHEAD-CLOSING REMARKS Team Leader	8. SUMMARY - CLOSING REMARKS: OUTCOMES FOR THE PLENARY SESSION 8.1 Conclusions and way head to Phase IV Giorgios Demetriou (EDA), Team Leader Moritz Haller (EDA), Deputy Team Leader
COFFEE BREAK – NETWORKING & ONSITE EXHIBITION (15H30-16H00)			

FRIDAY, 24 NOVEMBER 2023 (2ND ENERGY TECHNOLOGY SOLUTIONS CONFERENCE AND ONSITE EXHIBITION - DAY 3)

PROGRAMME

SECOND ENERGY TECHNOLOGY SOLUTIONS CONFERENCE PROGRAMME (24 NOVEMBER 2023) AND ONSITE EXHIBITION (23-24 NOVEMBER 2023)

Greening defence with innovative energy technologies

The European Defence Agency (EDA) is organising the 2nd CF SEDSS III Energy Technology Solutions (ETS) Conference on 24 November and an onsite exhibition on 23 and 24 November under the auspices of the Spanish Presidency of the Council of the European Union (EU) and hosted by the Ministry of Defence of Spain (ES MoD), with the support of ISDEFE (Engineering Systems for the Defence of Spain).

The 2nd CF SEDSS III ETS Conference aims to ensure that the defence sector will be at the forefront of innovative clean energy technologies while preparing for the transformative 2030 energy landscape. The event will allow the CF SEDSS community to engage with the industry, academia, and other research and technology organisations and expand knowledge on cutting-edge energy solutions that can be applied in the defence sector. Panel discussions will provide insights on how renewable energy sources and green hydrogen may play a crucial role in greening defence in the context of EU climate targets for 2030 and beyond. Speakers will also address the practical limitations of deploying self-sufficient clean energy solutions at military bases and the potential benefits of synthetic fuels as a back-up energy source. Also, a dedicated exhibition will provide interested companies with an opportunity to showcase innovative clean energy technologies, services and products to support defence green transition.

09h00 – 09h30

OPENING PLENARY SESSION

Introduction - **Constantinos Hadjisavvas**, CF SEDSS III Project Manager, European Defence Agency

Welcome addresses

Jean-François Ripoche, Director Research, Technology and Innovation, European Defence Agency

Lt General Luis Cebrián Carbonel, Director of Infrastructures Directorate, ES Ministry of Defence

Francisco Quereda Rubio, CEO, ISDEFE

Keynote speech

Ricardo Martí Fluxá, TEDAE (Spanish Association of Defence, Security, Aeronautics and Space Technological Companies)

09h30 – 10h15

Part I. PANEL DISCUSSION “HYDROGEN SOLUTIONS SUPPORTING THE GREEN TRANSITION IN THE DEFENCE SECTOR”



The 1st panel will focus on the current and future roles of hydrogen in helping secure greener defence, both in terms of infrastructure and transport. Experts will address key questions related to the scope, complexities and performance of existing solutions, as well as those related to the research on technologies and materials required for a more efficient hydrogen generation, storage and use in a military environment.

Setting the scene: Moderator: Robert Sipek, Head of Energy Efficiency and Green Transition Division, SI MoD

1st Speaker: Daniel del Castillo, Head of Sustainability (CSO), NAVANTIA, Vice-president of Green Defence Group at ASD-Europe: The Decarbonisation framework for the Defence sector from the Navy perspective

2nd Speaker: Abel Jimenez, Head of Sustainable Aviation at ITP Aero: Cryogenics, Fuel Cells and Hydrogen Combustion for military aircrafts

3rd Speaker: Marija Dabrisiute, Senior Advisor for Electrification and Renewable Hydrogen, WindEurope: State of play of the EU regulatory framework for renewable hydrogen

10h30 – 11h00 Coffee break - networking and onsite exhibition

11h00 – 11h30 **Part II. PANEL DISCUSSION “CHALLENGES IN CLEAN ENERGY SELF-SUFFICIENT SOLUTIONS FOR MILITARY BASES: SYNTHETIC FUELS AS A BACK-UP ENERGY SOURCE”**

The 2nd panel will discuss whether clean energy self-sufficient military bases are fully and realistically attainable in the near future through the implementation of new energy technologies and self-sufficient modular transportable solutions, or if a need is still foreseen for carbon fuels as a back-up energy source in climate and risk extreme scenarios. Also, a possible role of e-fuels substituting conventional carbon fuels will be tackled, as well as the understanding and consideration of constraints related to security, resilience, readiness and systems operational assurance that may impede the full deployment of clean energy self-sufficient solutions. The discussion will include an overview of the state of play in the research and development of energy self-sufficient solutions and synthetic fuels in the defence sector.

Setting the scene: Moderator: Tomás Alango, Director of renewable fuels and circular economy, REPSOL

1st Speaker: Gonzalo Piernavieja, Director R&D, ITC: Integration of renewable energies and hydrogen technologies for the decarbonisation of military installations

2nd Speaker: Shena Britzen, Head of Hydrogen Program, Rheinmetall AG

3rd Speaker: Name, Surname - TBC

11h30 – 14h00

Part III. ONSITE EXHIBITION “GREENING DEFENCE WITH INNOVATIVE ENERGY TECHNOLOGIES”**Maja Kuzel**, CF SEDSS III Deputy Project Manager, European Defence Agency

In this innovative exhibition, bringing together industry and the defence sector, European companies will have the opportunity to showcase their smart energy technologies that can be applied in the defence sector to increase its strategic energy autonomy.

11h30 – 14h00

*Exhibition and reception - networking***14h00****End of ETS Conference**