ATTRACT

Aerospace Battery Voltage DC-DC converter

Ishita Biswas
AIT Austrian Institute of Technology
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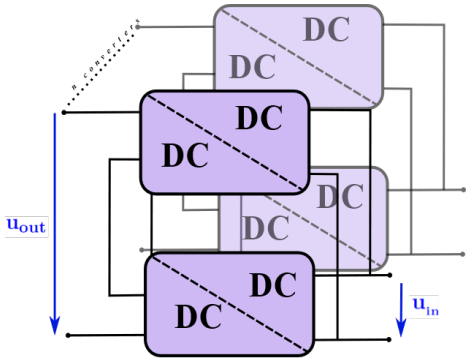
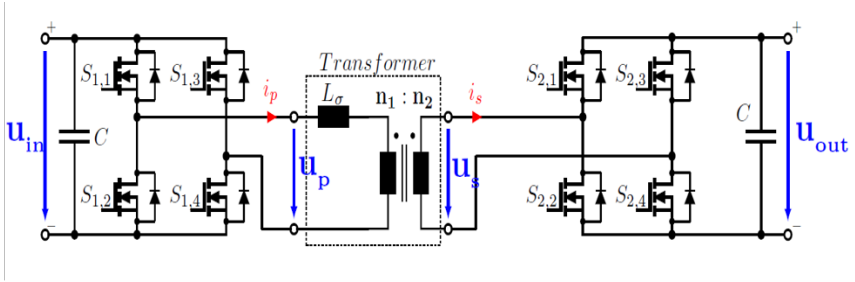
AIT AUSTRIAN INSTITUTE OF TECHNOLOGY

Montanuniversität Leoben

Short description of consortium partners

- AIT Austrian Institute of Technology
  - Consortium lead
  - Design rules and test procedures
  - System concept
- Montanuniversität Leoben
  - Converter concept
  - Simulations





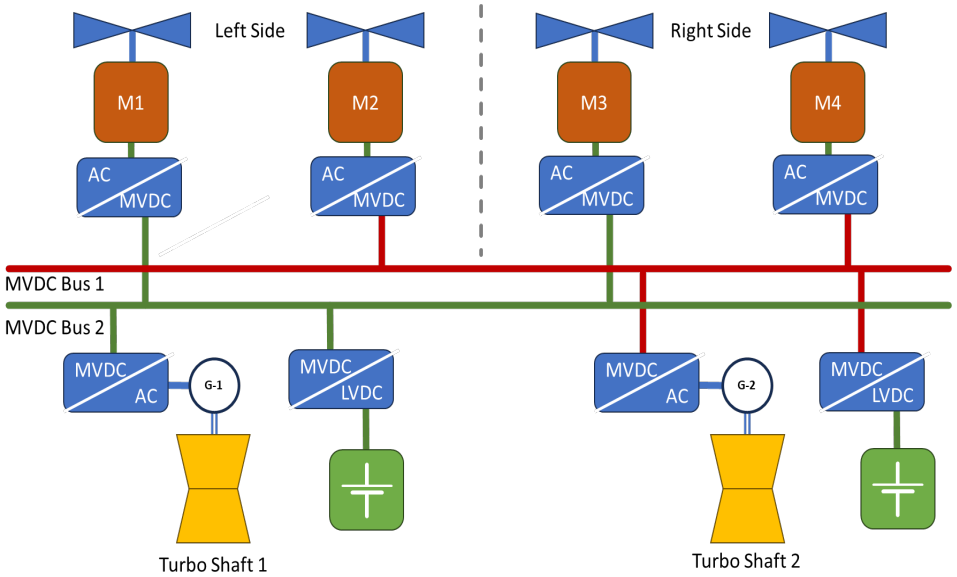
Project goals

Concept of DCDC converters suitable for:

- Voltages up to 3 kV
- Batter integration in electric aircraft

Test procedures for power electronic converters

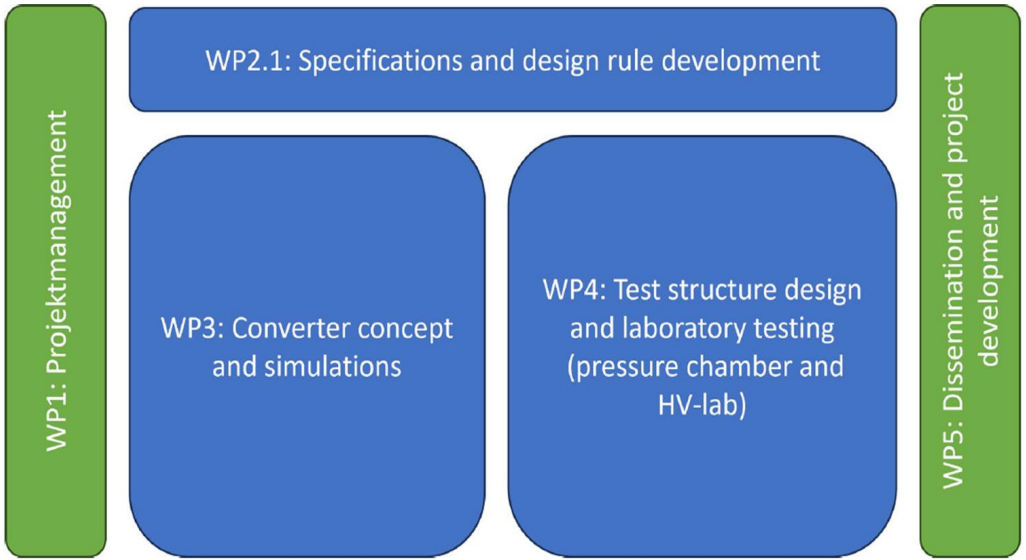
- Low pressure environment
- Partial discharge



Basic Electrical System Block Diagram

Workplan

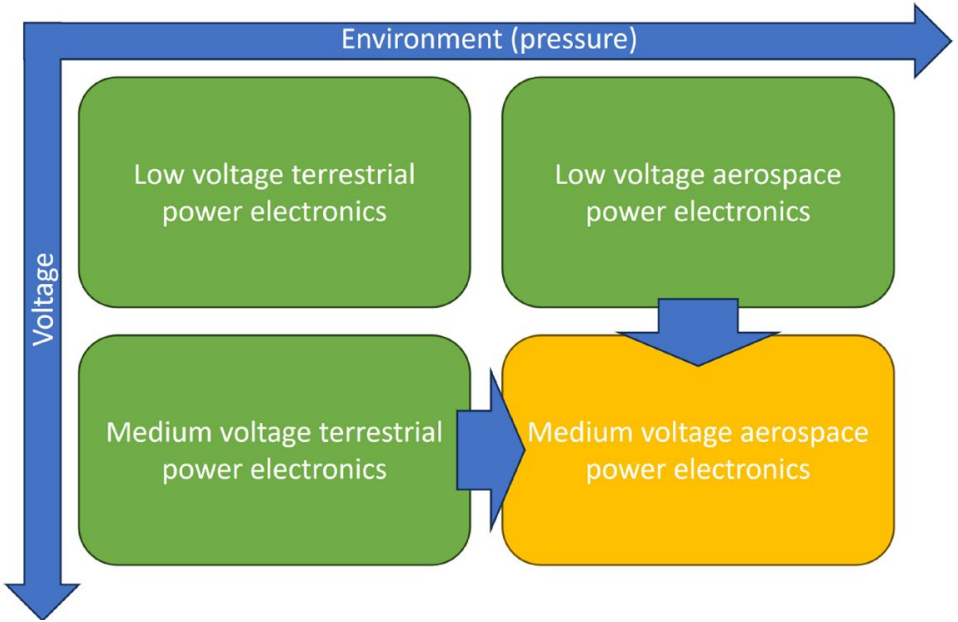
- Done:
  - Specification and base design rules available
  - First publication submitted (ECCE 2026)
- Ongoing:
  - Converter concept details and simulation
  - Test structure and laboratory testing
  - Exploitation and dissemination



Start: 1. November 2025
End: 31. October 2026

Intended exploitation

- Showcase the design rules of power electronics design for (hybrid) electric aircraft
- Concept presentation for dedicated DC-DC battery converters for MVDC
- Achieve higher TRLs in follow up project – national or EU



Contact

- Ishita Biswas (Research Engineer, AIT Austrian Institute of Technology)

Email : Ishita.Biswas@ait.ac.at, M :+4366488256095

- Stöckl Johannes (Thematic Coordinator , AIT Austrian Institute of Technology)

Email : Johannes.Stoeckl@ait.ac.at, T +43(0) 50550-6032 | M +43(0) 664 825 14 87

- Markus Makoschitz (UNIV.-PROF., Montanuniversität Leoben, Principal Scientist, AIT Austrian Institute of Technology)

Email: markus.makoschitz@ait.ac.at, T +43 50550-6317 | M +43 664 2351797

- Shashank Panikkar (Montanuniversität Leoben)

Email : shashank.panikkar@unileoben.ac.at