



FAMOUS II: European Future Highly Mobile Augmented Armoured Systems

EDF Info Day AT 2026

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Electrification in defense: Difference civil - defense



Source: AVL List GmbH

Civilian Targets

- Reduce CO₂ & vehicle emissions (Legislation)
- Reduce fuel consumption
- Image of OEMs, „Diesel Gate“
- Tax implications for customers
- City accessibility
- Vehicle Performance



Source: AVL List GmbH

Military Targets

- Reduce the weight of the powertrain.
- Minimize heat & noise signature
- Increase vehicle performance
- Reduce logistic footprint by significant fuel reduction (> 20%)
- Supply electrical devices

FAMOUS II: European Future Highly Mobile Augmented Armoured Systems

- European (EDF) defense project focused on next generation armored vehicles
- Builds on results achieved under EDIDP 2020 FAMOUS project
- Objectives
 - Maximize synergies across armored vehicle platforms
 - Increase standardization of systems and components
 - Enable interoperability between different vehicle types
 - Address highly demanding operational requirements of future battlefields
- Platform development scope
 - Development of next-generation armored platforms
 - Upgrade and modernization of existing armored vehicles
- Covered vehicle types
 - Future All-Terrain Vehicle (ATV)
 - Light Armored Vehicle (LAV)
 - Main Battle Tank (MBT)

CALL TITLE:	Fleet upgrade and close combat
TOPIC TITLE:	Future modular ground vehicles and enabling technologies, including green technologies
DURATION OF THE PROJECT:	48 months
TYPE(S) OF ACTIVITIES:	Studies; Design; Prototyping; Testing
ESTIMATED TOTAL COST:	€ 122,453,463.81
MAXIMUM EU CONTRIBUTION :	€ 94,848,156.49

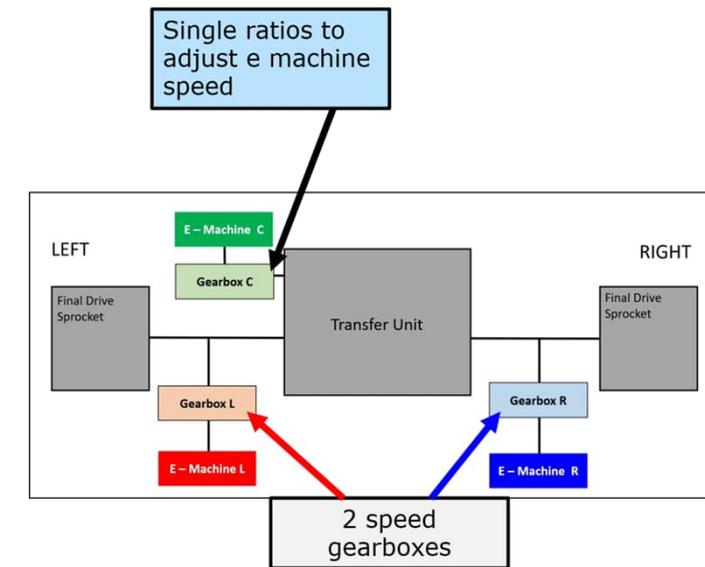
Source: FAMOUS 2 DoA.



Source: FAMOUS 2 consortium.

Electrified Cross Drive Transmission (e-CDT 1/2)

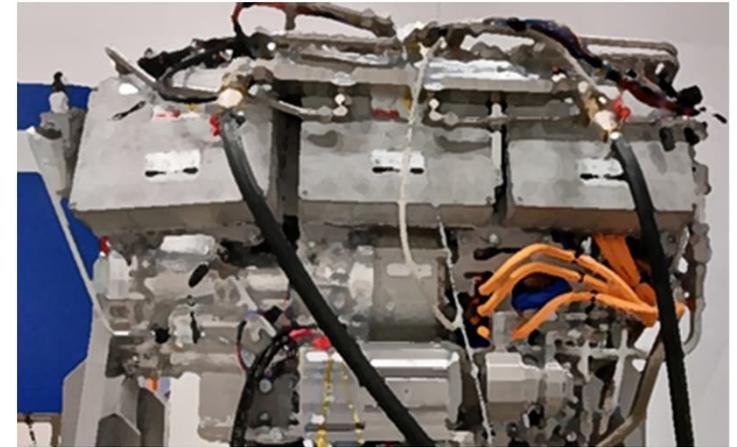
- Challenge
 - Military vehicles face a rapidly increasing demand for electrical power
 - New missions, subsystems, and modular mission equipment require power levels beyond current auxiliary power unit capabilities
 - Existing vehicle architectures cannot support power-intensive functionalities
- Performance and efficiency improvements (AVL solution)
 - Significant weight and packaging (space) reductions
 - Increased vehicle agility and mobility
 - Substantially improved overall system efficiency
 - Notable reduction in fuel consumption
 - Provision of high levels of exportable electrical power



Source: AVL List GmbH

Electrified Cross Drive Transmission (e-CDT 2/2)

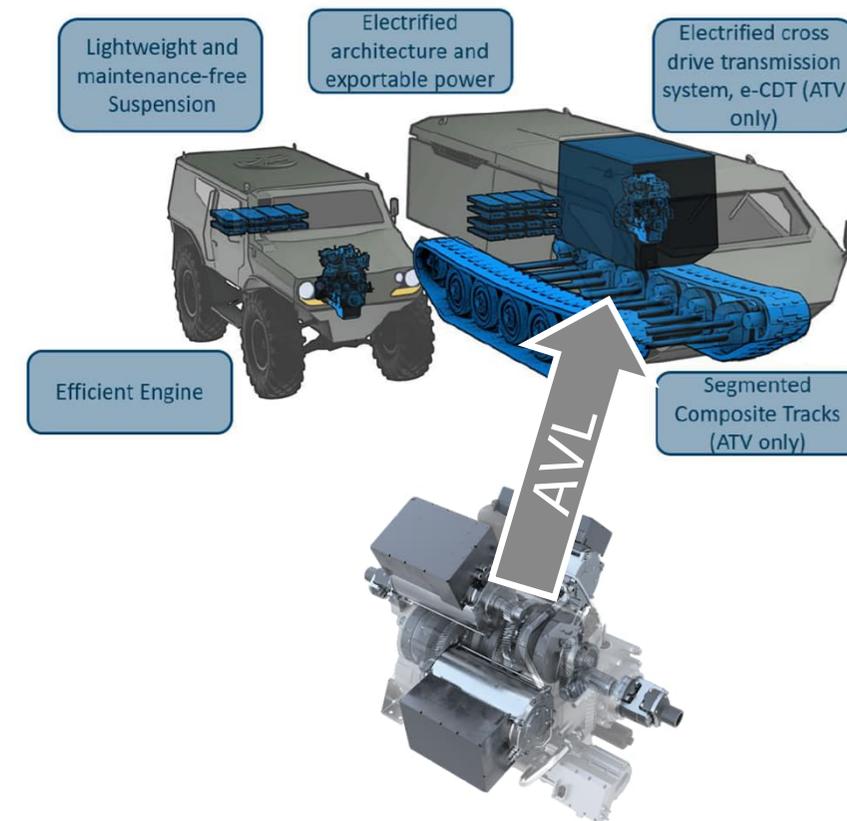
- Performance & Efficiency
 - Full regenerative braking and energy recuperation during steering
 - Significantly reduced wear of the operating brake system
 - Limp-home capability to maintain mobility under fault conditions
- Cost- and lifecycle benefits
 - Significant const advantage compared to conventional transmission
 - Reduced maintenance effort due to lower mechanical wear
- Scalability & Future Growth
 - Intrinsic growth potential for future electric motor and inverter technologies
 - Scalable architecture suitable for multiple vehicle weight classes
 - Designed to support future performance and power upgrades
 - Enables modernization of existing platforms without full drivetrain replacement (retrofitting)



Source: AVL List GmbH

FAMOUS II: AVL Role & Collaboration

- Light Armored Vehicle (LAV)
 - Support powertrain concept discussions
 - Support powertrain requirement generation
- All Terrain Vehicle (ATV)
 - Support powertrain requirement generation
 - E-CDT development
 - Systems engineering
 - 3D design & drawing generation
 - Component procurement and transmission assembly
 - Testing of transmission prototype at AVL
 - Support in vehicle integration of e-CDT
- Granted Patents
 - AT524326 B1 Architecture of e-CDT
 - AT524327 B1 Control Strategy of e-CDT

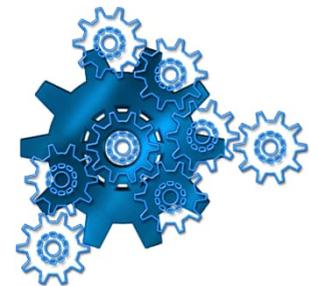


Source: FAMOUS 2 consortium.

EDF FAMOUS 3 – Austria: AVL, Zörkler

- Development and production of the TRL 8 transmission
 - FAMOUS 2 results: prototype, testbed runs, evaluation runs
 - Last mile: project extension for “winter testing”
 - Brining FAMOUS 2 results at TRL 7 to TRL 8
- Support for vehicle integration
- Accompanying vehicle tests for qualification and certification of the transmission
- Replacement of prototype suppliers by potential series suppliers (e.g., e-drive components, inverters)
- Design optimization for better accessibility of key components and for easier/improved assembly

FAMOUS²



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Project Leader:

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