



NEUMANN

Novel Energy and propUlsion systeMs for Air dominance

SELECTED PROJECTS EUROPEAN DEFENCE FUND (EDF) 2021

CALL TITLE:

Energy efficiency and energy management

TOPIC TITLE:

Alternative propulsion and energy systems for next generation air combat systems

DURATION OF THE PROJECT:

50 months

TYPE(S) OF ACTIVITIES:

Studies

ESTIMATED TOTAL COST:

€ 56,419,440.29

MAXIMUM EU CONTRIBUTION :

€ 48,919,439.88



SHORT DESCRIPTION OF THE PROJECT:

NEUMANN will study energy aircraft domains, with a focus on energy-efficient propulsion, electrical and thermal systems and management.

The project “Novel Energy and propUlsion systeMs for Air dominance” (NEUMANN) aims to address propulsion and energy systems technologies required for a highly efficient powerplant, able to deliver at the same time increased electrical power generation and increased thrust-to-weight ratio, which are necessary to cope with the mission requirements and operational needs of the next generation of fighter aircraft.



**MEMBERS OF THE CONSORTIUM AND
COUNTRY OF ESTABLISHMENT:**



 NAME OF THE ENTITY	 COUNTRY
GE AVIO SRL (Coordinator)	Italy
AEROMECHS	Italy
ARGOTEC S.R.L. – SOCIETÀ UNIPERSONALE	Italy
ARTTIC INNOVATION GMBH	Germany
ATLA SRL	Italy
AXTER AEROSPACE	Spain
BLU ELECTRONIC	Italy
C.I.R.A. CENTRO ITALIANO RICERCHE AEROSPAZIALI SCPA	Italy
CESKE VYSOKE UCENI TECHNICKE V PRAZE (CZECH TECHNICAL UNIVERSITY)	Czech Republic
CONSIGLIO NAZIONALE DELLE RICERCHE	Italy
DREAM INNOVATION	Italy
GENERAL IMPIANTI SRL	Italy
GKN AEROSPACE SWEDEN AB	Sweden
KUNGLIGA TEKNISKA HÖGSKOLAN	Sweden
LEONARDO S.P.A.	Italy

**MEMBERS OF THE CONSORTIUM AND
COUNTRY OF ESTABLISHMENT:**



 NAME OF THE ENTITY	 COUNTRY
ŁUKASIEWICZ RESEARCH NETWORK - INSTITUTE OF AVIATION	Poland
LUND UNIVERSITY	Sweden
MÄLARDALEN UNIVERSITY (MDH)	Sweden
MODELON AB	Sweden
MORFO DESIGN S.R.L.	Italy
MY PART MECCANICA S.R.L.	Italy
NATIONAL INSTITUTE FOR AEROSPACE RESEARCH "ELIE CARAFOLI"	Romania
NEUE MATERIALIEN FÜRTH GMBH	Germany
OPTIMAL STRUCTURAL SOLUTIONS LDA	Portugal
PACE AEROSPACE ENGINEERING AND INFORMATION TECHNOLOGY GMBH	Germany
PARAGON ANONYMH ETAIREIA MELETON EREVNAS KAI EMPORIOU PROIGMENHS TEXNOLOGIAS	Greece
POLITECHNIKA RZESZOWSKA IM IGNACEGO LUKASIEWICZA	Poland
POLITECNICO DI BARI	Italy
POLITECNICO DI MILANO	Italy
POLITO - (POLITECNICO DI TORINO)	Italy

**MEMBERS OF THE CONSORTIUM AND
COUNTRY OF ESTABLISHMENT:**

 NAME OF THE ENTITY	 COUNTRY
RAZVOJNI CENTER ORODJARSTVA SLOVENIJE	Slovenia
SAAB	Sweden
SUITE5	Cyprus
UNI PADOVA	Italy
UNIVERSITÀ DEGLI STUDI DI FIRENZE	Italy
UNIVERSITÀ DEGLI STUDI DI SALERNO	Italy
VON KARMAN INSTITUTE	Belgium