Case 7 - DAMAS (Italy) - test-before-invest service

Digital hub for AutoMotive and AeroSpace - <u>DAMAS</u> (Italy) is an EDIH designed to meet the needs of SMEs specialising in automotive and aerospace domains by supporting them digitalise their production chains. Coordinated by <u>Leonardo</u>, an Italian industrial key player leading the local aerospace and defense sectors, the hub is focused on two key technologies promoted by the Digital Europe Programme: Artificial Intelligence (AI) and High Power Computing (HPC) addressing further key enabling technologies such as big data analytics, virtual/ augmented and extended reality, additive manufacturing, advanced materials and nanomaterials, micro/ nanoelectronics and space technologies.

DAMAS EDIH works across a diverse range of technological areas to support SMEs and large enterprises innovate and develop their capabilities ensuring that the benefits are felt across the automotive and aerospace domains they operate in. Indicatively, these areas include digital enablers, materials and structures, optronics, electronics, mechanics, modelling and simulations, dynamic and cyber systems. In addition, the hub provides SMEs access to its 6 Leonardo Labs, some of which are built in collaboration with world-leading industrial partners and research centres in their respective areas of competence and which are located near Leonardo's main industrial sites in Italy, with the aim of facilitating technology transfer and consolidating collaboration with local institutions to maximise benefits for the regional industry. Leonardo Labs are a catalyst for local entities, allowing DAMAS hub to centralise development of enabling technologies to fully exploit the innovation opportunity. These labs are: Future Rotorcraft Technologies, Future Aircraft Technologies, Materials Technologies, Space Technologies, Future Electronics & Sensing, Quantum Technologies, Applied Artificial Intelligence, HPC\Cloud\Big Data Technologies, Intelligent Autonomous System, Future Security & Safety Technologies. In addition, DAMAS EDIH provides SMEs access to its davinci-1 supercomputer, the third most powerful in the world in the Aerospace, Defense and Security sector equipped with a battery of more than 150 supercomputing units, for a total computing power of more than 5PFlops - five million billion floating-point operations per second, i.e. a power comparable to that of 10,000 latest-generation personal computers.