



ET2SMEs Press Release

SMEs benefit from Einstein Telescope

Anyone who thinks that the Einstein Telescope (ET), which is worth billions, has nothing to do with regional SMEs is very much mistaken: In March 2021, the new euregional initiative **ET2MEs** (https://et2smes.eu) was launched under the leadership of AGIT, the Economic Development Agency of the Aachen region in Germany, and 6 euregional partners, supported by the INTERREG programme VA of the Euregio Meuse-Rhine. Its aim is to bring the Einstein Telescope, for which the extended Euregio Meuse-Rhine is competing with excellent chances in the ESFRI Call, closer to Small and Medium-sized Enterprises (SMEs) in the region in particular and to let them participate directly in terms of technology development and economic exploitation. The most important concern is to stimulate cross-border innovation-oriented cooperation between technology-oriented companies and to produce targeted innovations that are significant not only for the Einstein Telescope, but also for other demanding applications and markets.







But how can high-tech companies, start-ups or regional planning and construction industries benefit from a project that will not start operations until the 2030s? "In all phases, from planning to construction to regular operation of the facility, companies from the border region will be able to apply directly for tenders and thus for numerous contracts involving the Einstein Telescope," clarifies Ralf P. Meyer, head of the ET2SMEs project at AGIT. "However, our project initiative goes much further: We provide innovation vouchers worth 25,000 to 50,000 euros for high-quality R&D projects around ET-relevant technologies that are launched across borders by at least two Small and Medium-sized Enterprises."

But that's not all: Interested companies will also receive direct support in expanding their business network into neighbouring countries, especially in finding their suitable SME partner. They will also have the opportunity to present their know-how and special competences in a virtual 3D model of the Einstein Telescope. Of particular interest here are the Einstein Telescope operating technologies cryogenics, vacuum, precision mechanics/mechatronics, sensors, optics and optical metrology, mirrors coating, lasers and advanced control algorithms.

In addition, however, numerous other technological competences in geology, tunnel technology, geophysical imaging and remote sensing, simulation and modelling, and water technologies are also required for under-ground exploration and the construction of the facility, to name but a few.

Finally, there is the possibility for companies of participating in an Industrial Advisory Board, organized jointly by E-TEST, ETpathfinder and ET2SMEs, between Business and Research, for the large-scale facility as a dialogue partner and advisor from now one and in the coming years.







The Einstein Telescope is a unique research project with a global impact that will put Europe at the forefront of a new research discipline worldwide: The gravitational wave observatory of the latest, third generation will produce fundamentally new insights into the formation of the universe and the evolution of galaxies, stars and black holes. This "cutting edge" technology is not only associated with a leap in the quality of European research. The investment for this large-scale research facility alone amounts to at least 1.7 billion euros, 500 direct and 1,150 indirect jobs will be created and a further 2 billion euros are estimated for its operation until 2080.

Along with Sardinia (IT), the extended Euregio Meuse-Rhine is the last suitable region in Europe to apply for the location of this facility. The telescope is to be built as geologically undisturbed as possible at a depth of about 300 m below the earth's surface and will consist of a triangle of 10 km long sides. A final decision on the location is expected in 2024, and the facility is expected to be commissioned from 2032. In the Programmes Flanders-Netherlands and Euregio Meuse-Rhine, numerous preparatory initiatives and projects with a volume of approx. 45 million euros are already being implemented, including the construction and operation of an ET pilot facility in Maastricht (ETpathfinder), the underground design and location studies as well as the building of a prototype – a large suspended mirror at cryogenic temperature (10 Kelvin) (E-TEST).







Who is behind ET2SMEs?

Seven economic development and innovation agencies from the Euregio Meuse-Rhine work closely together in ET2SMEs:

The consortium is led by AGIT mbH, Economic Development Agency for the Aachen Region; from NRW, the state cluster NanoMicroMaterialsPhotonics, NMWP.NRW, is also actively involved.

From the Dutch side, the LIOF, provincial economic development agency, is involved, and from the Flemish side, the POM Limburg is comparably involved.

From Wallonia, Interface Entreprises-ULiège, the technology transfer office of the University of Liège, the aeronautics cluster SKYWIN and the SOWALFIN, partner for the walloon entrepreneurs, are together actively involved.

The associated partners and LOI supporters include: RWTH Aachen University, ZENIT GmbH, IHK Trier, SBP Bitburg-Prüm, WFG Vulkaneifel, PhotonDelta, Brainport Development, EEN, AGORIA, the competitiveness clusters MecaTech and Greenwin, SPI and WFG Ostbelgien.

https://et2smes.eu, info@et2smes.eu

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