

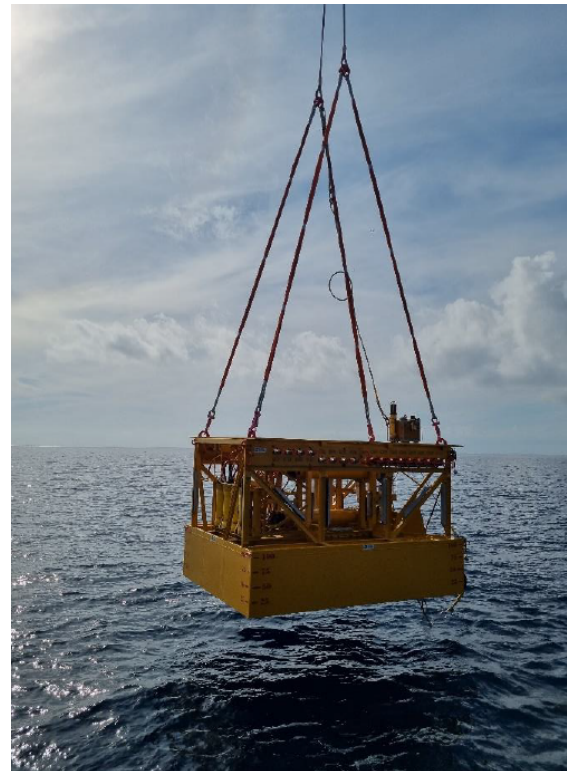
INFN and Alcatel Submarine Networks sign contract for the extension of the largest undersea high energy Neutrino telescope in the Mediterranean

Located in Southeastern Sicily, the new submarine structure will connect the existing subsea multidisciplinary laboratory.

Paris, France, July 21, 2023 – Italy's Istituto Nazionale di Fisica Nucleare (INFN) and Alcatel Submarine Networks (ASN) have signed a contract to supply and install a cable termination frame – CTF-3 – to deliver power and communications connectivity to the institute's underwater multidisciplinary laboratory. The lab, which lies 3,500m deep off the Sicilian coast, incorporates a high-energy neutrino telescope – the largest in the Mediterranean.

This contract is being financed by the Italian Ministry of University and Research under the European Recovery Plan aims at implementing a high energy neutrino telescope.

The submarine system will transmit data from seabed detectors to the shore in real time. These data will be used by researchers, universities and science laboratories to help provide a better understanding of the universe through the lens of multi-messenger astronomy.

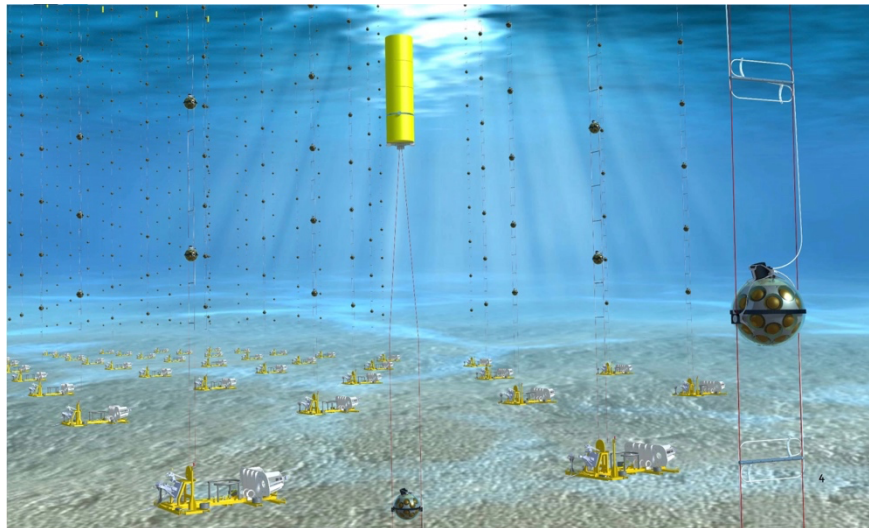


The technology ASN is providing is based on a solution initially developed for energy sector applications and features a complete power supply to the laboratory detection unit to allow for the collection of all available data. In 2022, Alcatel Submarine Networks successfully supplied and installed a similar cable termination frame in the same area.

Giacomo Cuttone, INFN – Scientific Leader of the KM3NeT4RR project said: *"This project will further offer to INFN and to the Italian research community advanced applications to implement new research models, under the framework of the MUR PNRR Km3NeT4RR project. ASN's state-of-the art technology will help us in taking a significant step to enhance astroparticle physics and other sciences such as seismology and the predictability of geophysical events."*

Alain Biston, President of Alcatel Submarine Networks, said: *"ASN has long been the world leader in providing subsea communications technology to telecoms operators. More recently, we have been putting our innovative technology at the service of organisations including scientific research bodies we're delighted to further support INFN in this challenging and important new project."*

ASN and INFN have previously cooperated in the deployment of branches of the submarine system network, used to install submarine observatories capable of monitoring acoustic and geophysics signals, bioluminescence and cosmic rays, under the framework of the IDMAR project, funded by the Sicilian region.



About INFN

INFN is the Italian public research institute dedicated to the study of fundamental physics. The INFN conducts theoretical and experimental research in the fields of subnuclear, nuclear and astro particle physics. Research in these areas requires cutting-edge technology and instruments, developed by the INFN at its own laboratories and in collaboration with industry. These activities useful applications with a significant impact on everyday life. All of the INFN's research activities are undertaken within a framework of international collaboration and competition, in close cooperation with Italian universities.

KM3NeT4RR is a project funded by Missione 4, "Istruzione e Ricerca" - Componente 2, "Dalla ricerca all'impresa" - Investimento 3.1, "Fondo per la realizzazione di un sistema integrato di infrastrutture di ricerca e innovazione", Progetto IR0000002 - KM3NeT4RR, Decreto di ammissione al finanziamento 123 del 21-06-2022

INFN press contact

Antonella Vareschin

Email: antonella.varaschin@presid.infn.it

T : +39 06 68400360

About Alcatel Submarine Networks (ASN)

Alcatel Submarine Networks, part of Nokia, leads the industry in terms of transmission capacity and installed base with more than 750,000 km of optical submarine systems deployed worldwide, enough to go almost 19 times around the world. From traditional telecom applications to content and "over the top" service provider infrastructures, as well as to offshore oil and gas applications, ASN provides all elements of turnkey global undersea transmission systems, tailored to individual customer's needs. An extensive services portfolio completes its comprehensive offering for the submarine business, including project management, installation, and commissioning, along with marine and maintenance operations performed by ASN's wholly owned fleet of cable ships.

Alcatel Submarine Networks media contact

communications@asn.com