



Quantum Secure Communication and Navigation for European Defence (QuantaQuest)

Under the Preparatory Action on Defence Research (PADR), the grant for the Research Action call on the topic 'Future Disruptive Defence Technologies – Emerging Game-changers', subtopic (3) 'Quantum Technologies for defence applications' was signed on 19 July 2021. The awarded project, called QuantaQuest, is led by THALES SA (France). The consortium encompasses a total of 9 participants from 3 countries. The project, which has a duration of 28 months, will receive an EU grant of roughly €1,5 million.

PADR Call FDDT-EMERGING-03-2019 – Information on the awarded project			
Name of the project		Quantum Secure Communication and Navigation for European Defence	
Short name		QuantaQuest	
Summary of the project			
QuantaQuest project will contribute to the applicability of quantum technologies in the military field and to the strategic autonomy of Europe. Navigation and timing will be achieved through a fully autonomous sensor based on cold atom chip and photonic integrated circuit that provide the required performance and portability. Secure communication will be improved by a new modulation scheme to implement Quantum Key Distribution. Field operation compatibility will be ensured with a free space approach. Quantum interface will be implemented as the opening gate to a quantum network of sensors. The technical work will be supported by the definition of operational scenarios to maximize its impact and benefits.			
Project duration		28 months	
Starting date		01 September 2021	
Maximum foreseen EU Contribution		€ 1.471.739,46	
List of participants			
#	Name of the entity	Country	EU Contribution requested by the entity
1	THALES SA	France	€ 319.101,34
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	France	€ 81.609,76
3	LABORATORIO EUROPEO DI SPETTROSCOPIE NON LINEARI	Italy	€ 133.245,77
4	LEONARDO - SOCIETA PER AZIONI	Italy	€ 193.076,65
5	LIONIX INTERNATIONAL BV	Netherlands	€ 311.626,80
6	QuiX BV	Netherlands	€ 141.565,35
7	TELESPAZIO SPA	Italy	€ 57.236,92
8	THALES ALENIA SPACE FRANCE SAS	France	€ 82.076,03
9	UNIVERSITA DEGLI STUDI DI PADOVA	Italy	€ 152.200,85



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