



## 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 24 months, will receive an EU grant of roughly €1,5 million.

<b>PADR Call FDDT-EMERGING-03-2019 – Information on the awarded project</b>			
<b>Name of the project</b>		Quantum Secure Communication and Navigation for European Defence	
<b>Short name</b>		QuantaQuest	
<b>Summary of the project</b>			
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.			
<b>Project duration</b>		24 months	
<b>Starting date</b>		01 September 2021	
<b>Maximum foreseen EU Contribution</b>		€ 1.496.977,00	
<b>List of participants</b>			
#	Name of the entity	Country	EU Contribution requested by the entity <sup>1</sup>
1	THALES SA	France	€ 329.998,13
2	CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE CNRS	France	€ 100.000,00
3	LABORATORIO EUROPEO DI SPETTROSCOPIE NON LINEARI	Italy	€ 150.000,00
4	LEONARDO - SOCIETA PER AZIONI	Italy	€ 200.437,50
5	LIONIX INTERNATIONAL BV	Netherlands	€ 300.062,50
6	QuiX BV	Netherlands	€ 146.247,50
7	TELESPAZIO SPA	Italy	€ 50.181,25

<sup>1</sup> The amount of EU contribution as included in the Grant Agreement. Final amounts need to be confirmed at the end of the project.



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8	THALES ALENIA SPACE FRANCE SAS	France	€ 70.000,00
9	UNIVERSITA DEGLI STUDI DI PADOVA	Italy	€ 150.050,00