

Success Story Templates

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E-mail: roncc@ici.ro

Industrial HPC Course



EURO

SUCCESS STORY IN SPACE INDUSTRIAL DOMAIN QUANTUM COMPUTING

COMPANY: INSTITUTE OF SPACE SCIENCE

The **Institute of Space Science (ISS)** from Magurele, Romania is carrying out fundamental and advanced technological research in Space Physics and related fields based on previously acquired experience, and international collaborations.

THE PROBLEM

Establishment of a laboratory for RDI activities in the field of quantum communications and development of equipment and systems for quantum communications level TRL = 1-4

THE HPC PROBLEM DOMAIN

The need for an HPC infrastructure for the development and testing of systems and equipment, which will bring benefits in terms of working time and system performance.

THE SOLUTION

Attracting funds for the development and implementation of the laboratory, through calls for research projects launched within the EUROCC project or other related projects (e.g. FF4HPC)

THE BENEFITS

- Increasing visibility in the field of HPC and quantum communications
- Development of national expertise and capabilities in the field of HPC and quantum computing

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THE PROBLEM

Development of in-house solutions for QKD (Quantum Key Distribution) capabilities of TRL level = 2-4

THE HPC PROBLEM DOMAIN

The need for computing power and fast runtime capabilities in order to implement and test optimized solutions.

THE SOLUTION

Connect HPC providers with ISS in order to use the resources to accomplish the main objectives of the applications.

Apply to projects that provide computing and testing resources

THE BENEFITS

- Encouraging national and international partnerships
- Use of products and applications both nationally and internationally
- Increasing national expertise in HPC and Quantum Computing