

Eureka

Project partners Search Form

Program (select appropriate):

- EUREKA
 EUROSTARS
 CLUSTER
 CELTIC-NEXT
 EUROGIA²⁰³⁰
 ITEA4

- SMART
 Xecs

Thematic Call (if applies):

- AI (Artificial Intelligence)
 Green Transition

Contact Person Details

Name: Josep M. Gastó

Position: Tech Trans Manager - Xarxa CYBERCAT

Phone: (+34) 659 47 63 61

Email: jmgasto@cristech.org

Organization Details:

Name: CRISES Research Group - Universitat Rovira i Virgili

Country: Spain

Website: <https://crises-deim.urv.cat/web/>

Type of Organization:
 SME
 Large Company
 University
 Research Inst.
 Administration
 Other (specify):

Number of Employees:
 < 10
 11-50
 51-100
 101-250
 > 250

Describe the activities, products, services, and expertise of your organization:

The group interest and its contribution to the socioeconomic environment is centered in the creation of technologies of industrial interest (products and services) that make compatible three objectives:

1. Cybersecurity for companies, governments and individuals in the information society
2. Privacy of the individuals who are users or passive subjects of the information society
3. Utility of the underlying informatics systems

Project Details	
Project Title	Cryptographic AcceleRation: INnovation and Access (CARINA)
Acronym	Carina
Keywords	Cybersecurity, 6G, LEZ, Smart Mobility, Blockchain
Describe your Project:	
<ul style="list-style-type: none"> Our product is a suite of ready and tested PQC accelerators logic-designs (PQC-ALD) which can be adopted in the production chain of embedded devices (TRL4). These logic-designs will be distributed under free licenses, giving our clients liberty for improvement and customization. Our services include consultancy and training services for organizations interested in adopting PQC standards. In the scope of this project, our goal is to identify a market section interested in our products and services. Then refine our business model from the interaction with potential clients. By the end of the project, we expect to gain a clear perspective and market positioning to consolidate a viable and sustainable enterprise. 	
Describe the innovative part of your project:	
<ul style="list-style-type: none"> Compared to existing solutions, CARINA differs from its competitors in two key points. We offer PQCALDs which show different performance trade-offs for embedded devices, more efficiency. Moreover we intend to take our research results further beyond to have a positive impact on society. We have consolidated our PQC “know-how” from participating in research projects like DRAC (2019-2023) and HERMES (2023-2025) Through CARINA we intend to reach a TRL6, which will put us ahead of other academic alternatives. Furthermore, our logic-designs will be released under free-use licenses, granting the users unlimited potential for adoption and improvement. This advantage is not offered by any of our professional competitors.. 	
Describe the market expectations of your project:	
<ul style="list-style-type: none"> According to <i>MarketsandMarkets</i> The global PQC market will grow from \$420 million in 2025 a \$2.84 billion in 2030, with a CAGR of 46.2% Other sources such as <i>Dimension Market Research</i> They are more optimistic, projecting up to \$1.1 billion in 2025. Data for the table: We will use the conservative estimate of \$1.0 - \$2.84 Billion for the relevant period. 	

Possible Partner Profile:

Type of Partner Needed [X] SME [X] Larger Company
 (multiple choices are allowed) [] University [] Research Institution
 [] Administration [] Other (specify):

Describe the expertise of possible partner(s) required for your project:

- We are looking for an industrial partner willing to work along with us on an applied R+D project in the TIC sector.
- The partner should be the leader of the project and should propose an innovative industrial challenge in the form of a new and innovative process or a product.
- In this Bottom-Up approach we would apply our scientific and technical expertise to solve the challenge and to find the best solution.

Describe the role of possible partner(s) in your project:

- Define the industrial problem or propose an industrial improvement that needs applied science to be solved.
- Lead the proposal process and coordinate the technical execution of the project.

CARINA: Asegurando el Futuro Contra la Amenaza Cuántica

El Problema: La Amenaza Cuántica y el Vacío del Mercado

Cosechar Ahora, Descifrar Después:
Los ordenadores cuánticos romperán el código actual, exponiendo datos sensibles recolectados hoy.

La Nueva Criptografía (PQC) es Demasiado Lenta para Dispositivos Pequeños
Las implementaciones por software en automoción o IoT introducen latencias inaceptables.

Las Soluciones Actuales son "Cajas Negras" Costosas
Los proveedores tradicionales cobran regalías y no ofrecen transparencia para auditorías de seguridad.

La Solución: El Modelo Disruptivo de CARINA

IP de Hardware de Código Abierto y Sin Regalías
Diseños lógicos de alta calidad, auditables ("White Box") y listos para integrar en chips.

Modelo "Red Hat": Regalamos la Receta, Cobramos por el Chef
Los ingresos provienen de consultoría de integración y servicios de formación experta.

Mercado Principal: Automoción (Proveedores Tier-1)
Impulsado por regulaciones urgentes (UN R155) y la necesidad de certificación de seguridad.

Posicionamiento Único de CARINA

	Modelo	Transparencia	Enfoque Embebido
CARINA	Servicios (IP Gratis)	Total (Código Abierto)	✓ Muy Alto ✓
PQShield	Licencia + Regalías	Caja Negra	Alto
Solución solo Software	Gratis (Lento)	Código Abierto	Bajo

NotebookLM

Deadline for Partner Search: 20/03/2026