



# EURO QCI SPAIN

**Securing our  
communications in Europe**

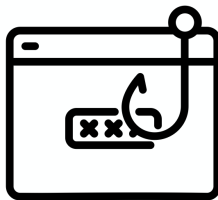




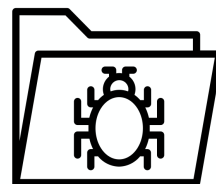
# CYBER THREATS



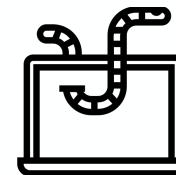
**RANSOMWARE**



**PHISHING**



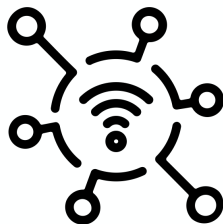
**MALWARE**



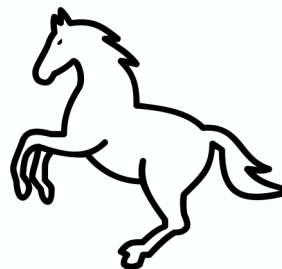
**COMPUTER WORM**



**CYBERCRIME**



**INTERNET  
OF  
THINGS**



**TROJAN  
HORSE**



**SQL  
INJECTION**





# EuroQCI

A secure quantum communication infrastructure spanning the whole EU, including its overseas territories

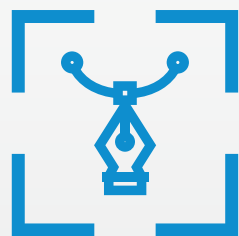


**27** EU Member States  
European Space Agency (ESA)

## Ground

## Space

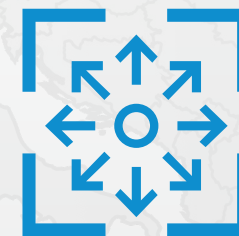
EUROQCI  
SPAIN



DESIGN

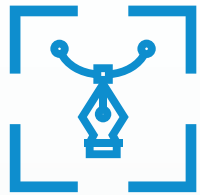


DEVELOP



DEPLOY





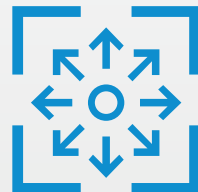
DESIGN



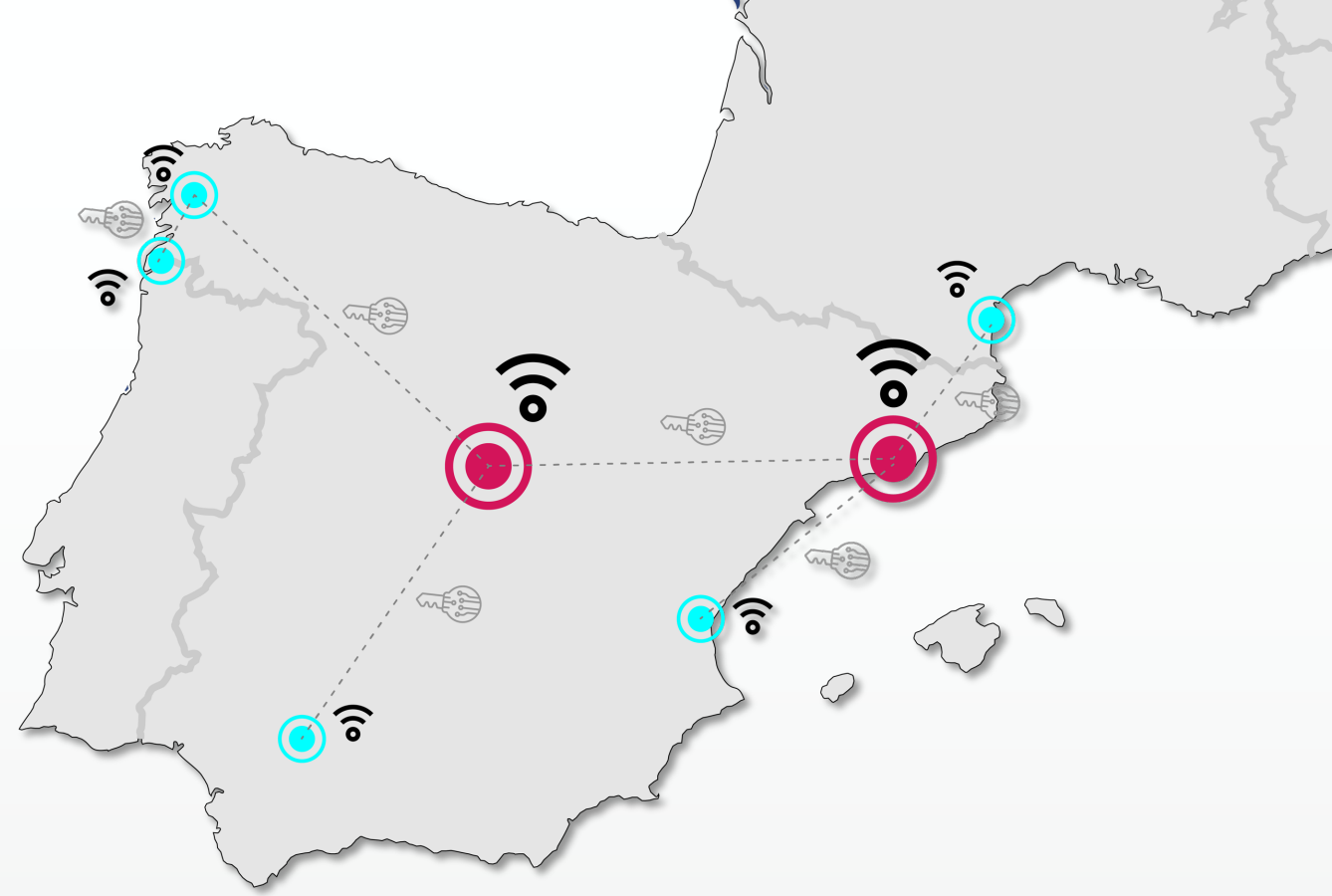
DEVELOP



INTEGRATE



DEPLOY



Bringing  
Quantum Cryptography  
to cities in Spain



# GOALS

1

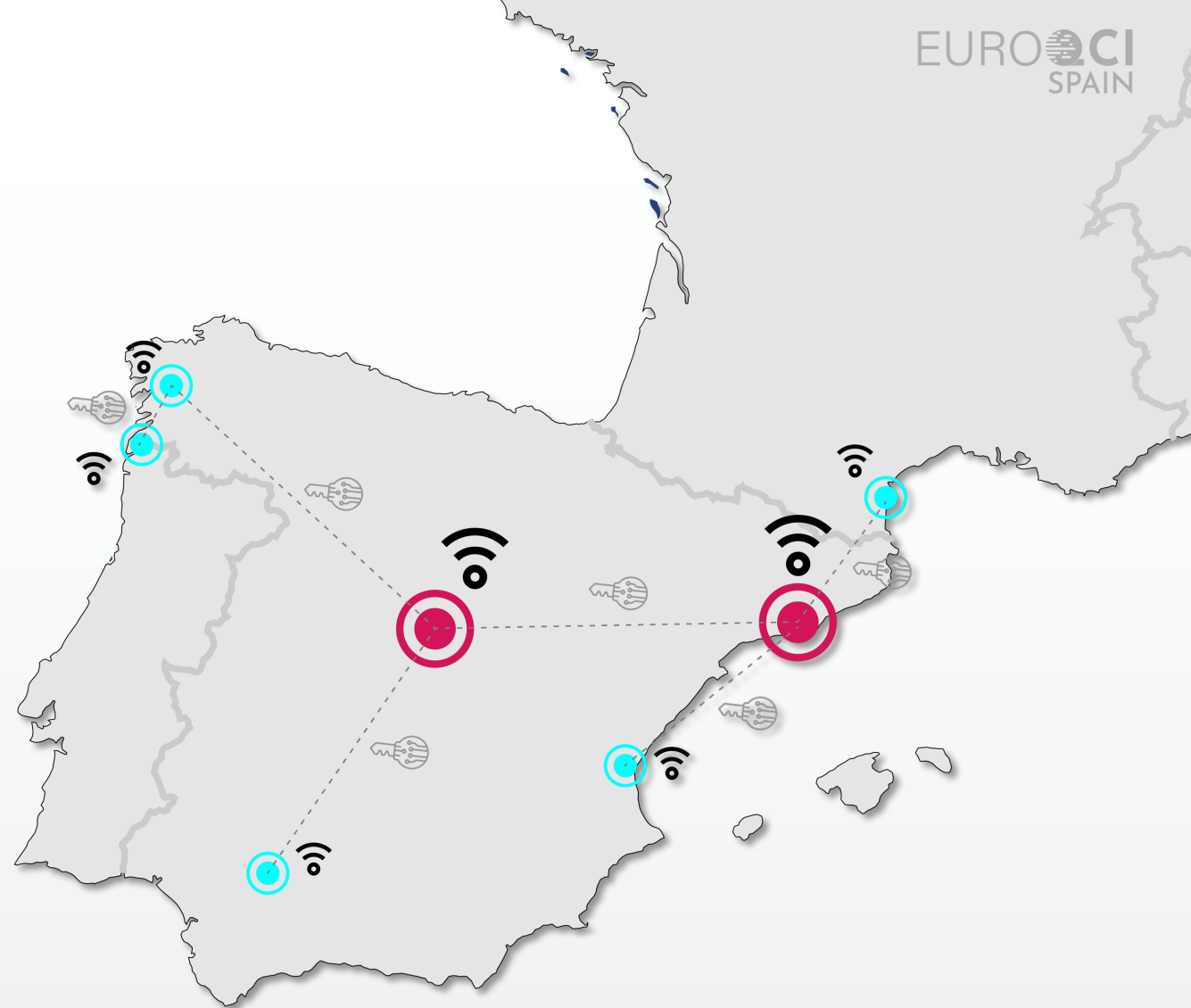
Design the preliminary National architecture of EuroQCI in Spain, starting from Madrid (MAD) and Barcelona (BCN), and then extending to more locations.

2

Deploy QKD and cryptography systems and demonstrate their functionality in the field (BCN and MAD). And design the extension to additional cities.

3

Make quantum networks available first to public authorities and demonstrate use cases, developing a national-based quantum communication ecosystem, extended to the private sector in the future.





# GOALS

4

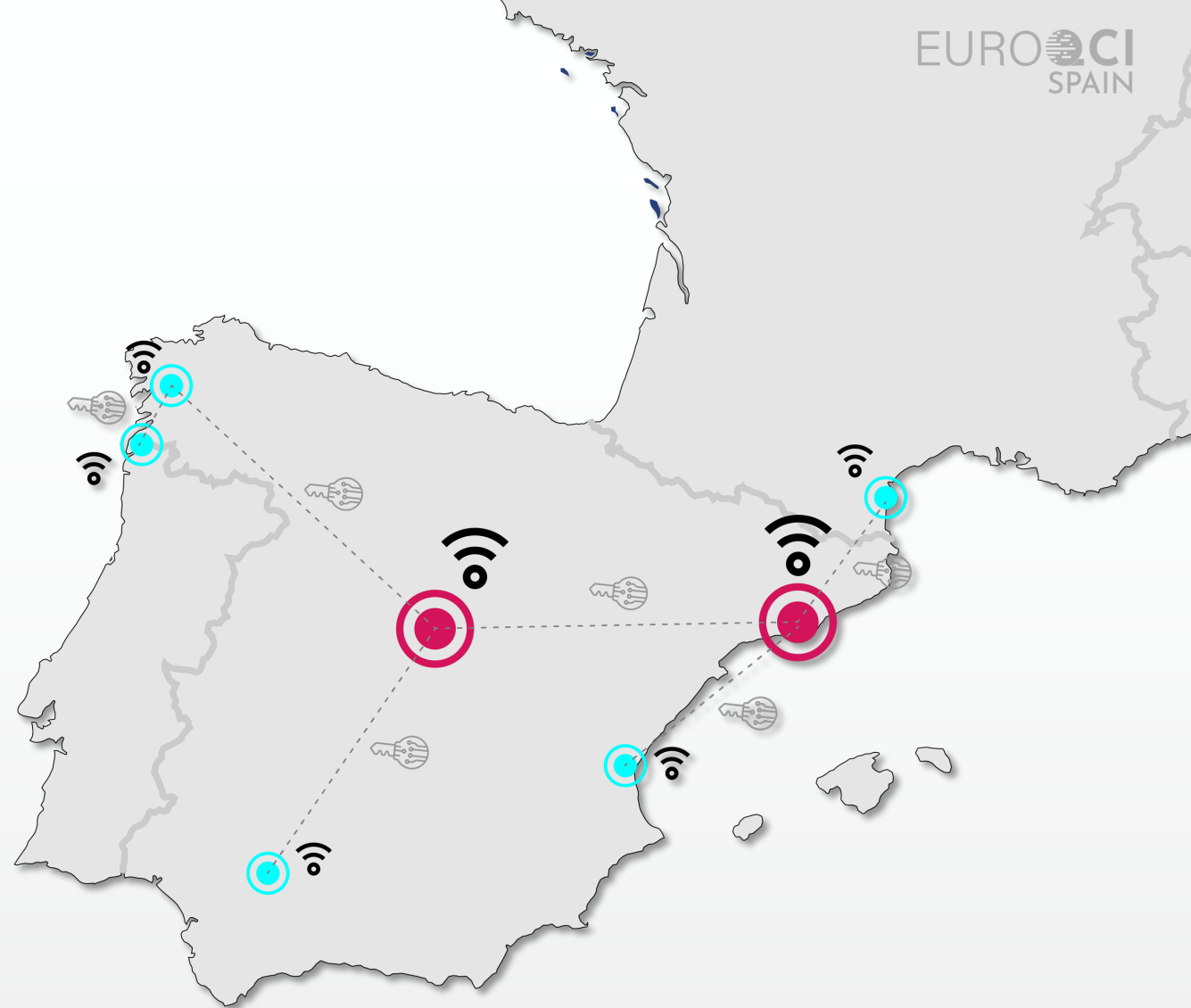
Assess feasibility of free-space and long-distance quantum communication networks (including trusted nodes and quantum repeater demonstrators) compatible with the EuroQCI architecture, intracity and intercity, the latter in preparation of large-scale deployment of QCI beyond national borders.

5

Prepare for very long-distance links by studying the interface between QCI space and terrestrial segments.

6

Cooperate and participate with other Member States in the deployment plan and strategic efforts towards designing and building the EuroQCI system architecture.





# PARTNERS

ICFO<sup>R</sup>

Telefónica



POLITÉCNICA

indra

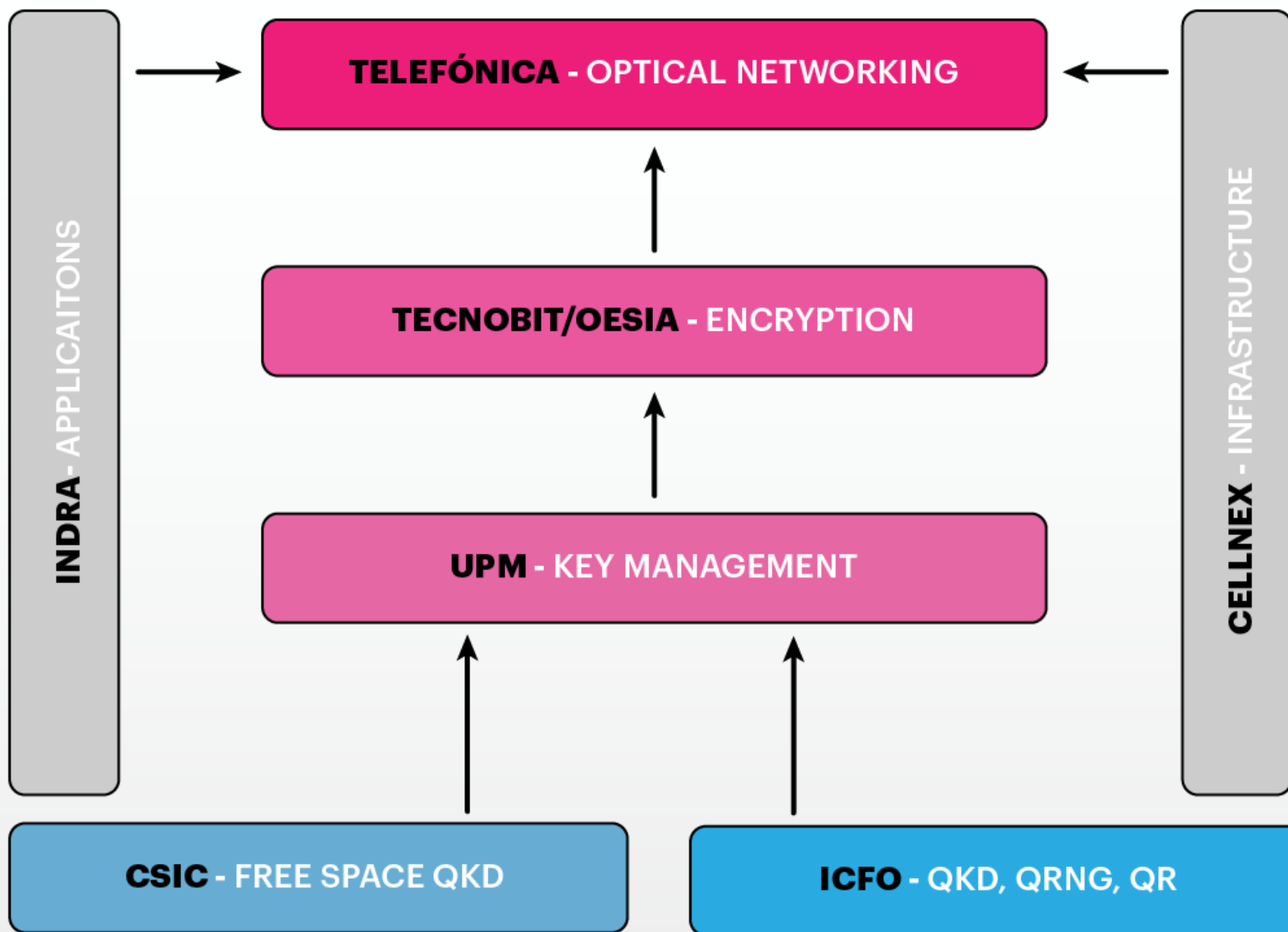


tecnobit  
grupo oesía

CSIC  
CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

cellnex









# EuroQCI Spain

is part of a  
bigger program





# Petrus- EuroQCI

A secure quantum communication infrastructure spanning the whole EU, including its overseas territories



# EuroQCI

## 21 NATIONAL DEPLOYMENTS



Austria



Bulgaria



Cyprus



Denmark



Finland



Germany



Greece



Hungary



Ireland



Italy



Luxembourg



Latvia



Malta



Netherlands



Poland



Portugal



Romania



Slovakia



Spain



Sweden

## 6 INDUSTRIAL DEVELOPMENTS

