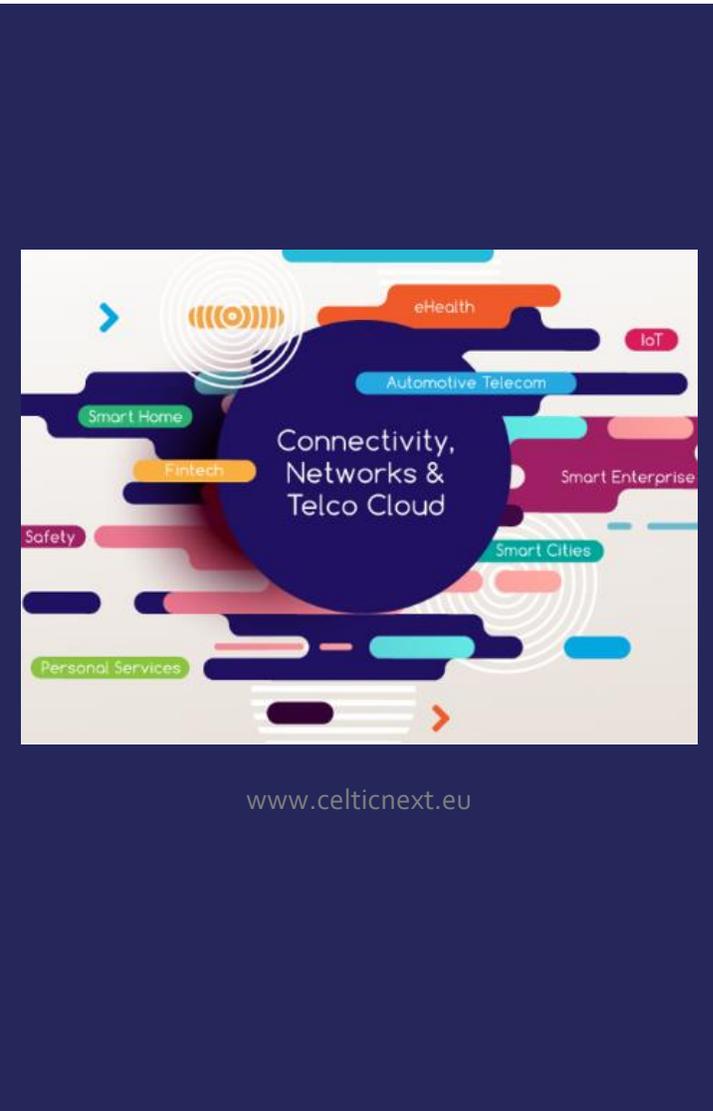




is the EUREKA ECP* Cluster
for next-generation communications
for a secured, trusted, and sustainable
digital society.

*Eureka Clusters Program, launched on 17/6/2021



Outline

- ✓ **CELTIC-NEXT Presentation**
- ✓ **CELTIC-NEXT Scope**
- ✓ **CELTIC-NEXT Benefits**
- ✓ **CELTIC-NEXT Management**
- ✓ **CELTIC-NEXT Strategic positioning**

CELTIC-NEXT is...

- The ICT Cluster under the umbrella of EUREKA
- Focusing on Next-Generation Communications for the Digital Society
- A flexible and agile community of over 1150 private and public organisations, among prominent industry players, small & medium-sized enterprises and academic/research institutions
- Organising regular calls for projects, twice a year, in Spring and Autumn; and larger Flagship Calls
- Financed through public and private funding through transnational RD&I cooperation
- Open to any organisation willing to contribute to the industry-driven European and beyond ICT research programme



What CELTIC-NEXT does...

CELTIC-NEXT manages an international Quality Label that enables international consortia to apply more successfully to National Funding schemes (mostly match-funding):

- CELTIC Bottom-up calls
- CELTIC Flagship Calls
- EUREKA ECP Joint Calls

Autumn Call 2022

Open until the 21st of October

Don't miss out our **Online Proposers Day**
7th of September 2022



CELTIC-NEXT
Σ eureka Cluster

Next-generation Communications for a secured, trusted, and sustainable digital society

Submit your proposal: www.celticnext.eu

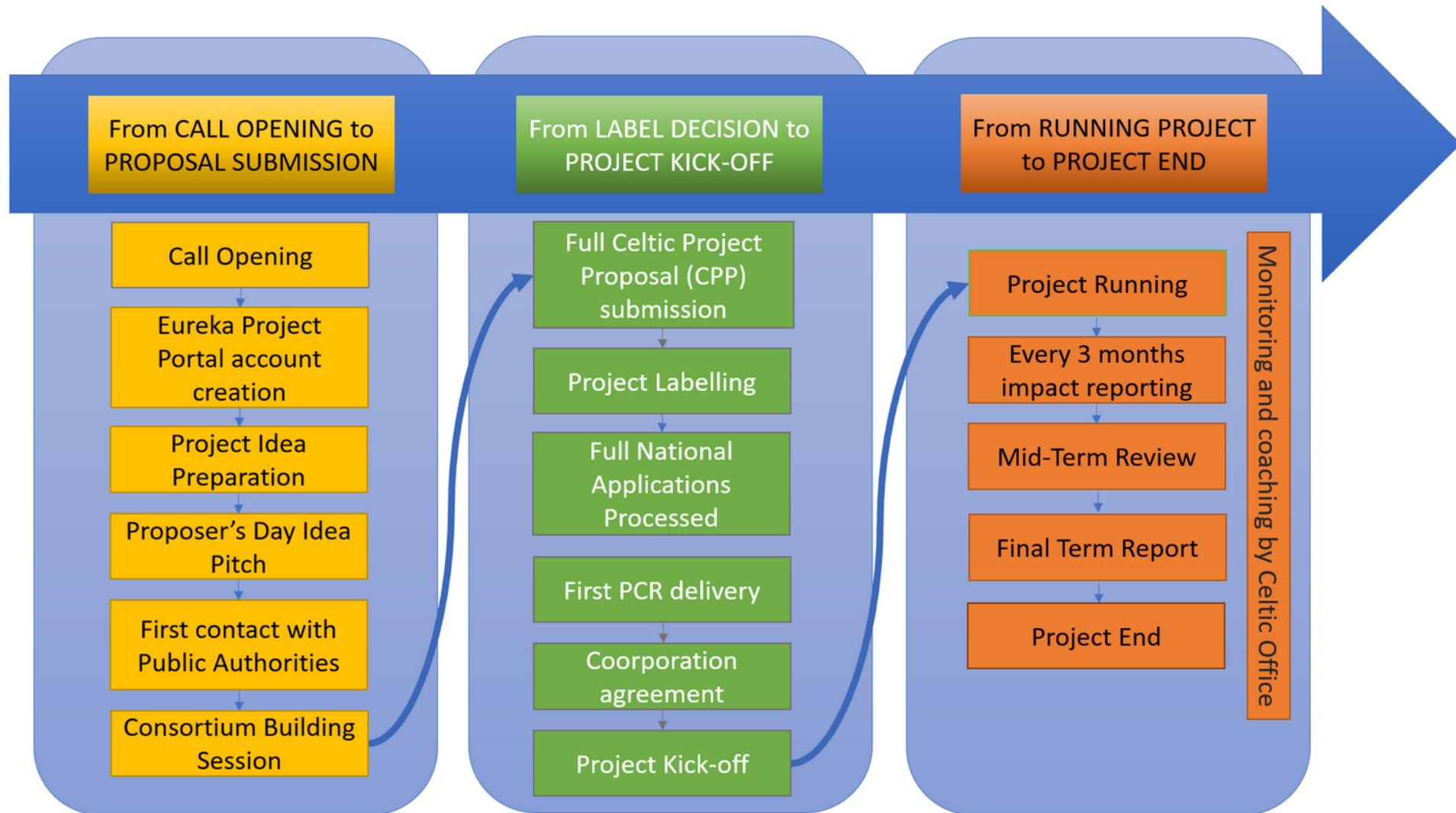
Sectors: eHealth, Beyond 5G & 6G, Connectivity, Networks & Telco Cloud, AI and more..., Personal Services, Smart Home, Smart Cities, Automotive Telecom, Public Safety, Smart Enterprise & Factory, IoT



Σ eureka Clusters
Sustainability Call 2022

Partners: CELTIC-NEXT Σ eureka Cluster, eurogia²⁰³⁰, ITEA⁴, smart advanced manufacturing, Xecs^Σ

Celtic-Next Calls and Projects Timeline



<https://www.celticnext.eu/call-information/>

CELTIC-NEXT Label decision

- Full Proposal Submission by proposers (one stage process)
- Evaluation by: Industry Experts and Public Authorities
- Label Decision: Public Authorities and CELTIC Core Group



CELTIC-NEXT scope

CELTIC-NEXT Mission, Vision and Roadmap

The mission of CELTIC-NEXT for the next 4 years is to:

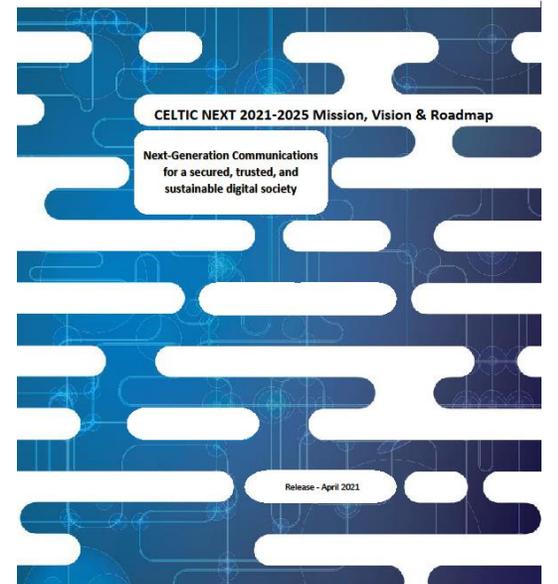
- Foster our Eureka collaborative RD&I program for the ICT community
- Accelerate the deployment and take up of advanced ICT services
- Employing the new network concepts of 5G and leading to the ownership and implementation of 6G in Eureka countries

It is crucial to consolidate the position of :

- Eureka manufacturers and service providers
- With a high degree of Eureka sovereignty

A strong ambition of CELTIC-NEXT is to:

- Assist Eureka National Authorities, Eureka Industry, and Eureka Societies
- Make them access to societal benefits, competitive advantages, commercial returns of being at the forefront of the new digital society



Celtic-Next high level targets

Societal & Environmental Excellence

- ❑ Investigate where advanced communications can reduce carbon footprints for many vertical sectors.
- ❑ Assist Eureka Nations and Industry to access the societal benefits & returns of being at the forefront of the new digital society.
- ❑ Consolidate the Eureka Nations Sovereignty in ICT technologies and services, thus, other critical infrastructures relying on ICT infrastructures, like the Energy Grid...

Economical Excellence

- ❑ Consolidate the position of Eureka ICT Manufacturers and Service Providers, within Eureka Countries and on the Global Market
- ❑ Bring all Eureka Communities to consider the issues in a holistic way considering the “end-to-end” perspective of the new communications

Technical Excellence

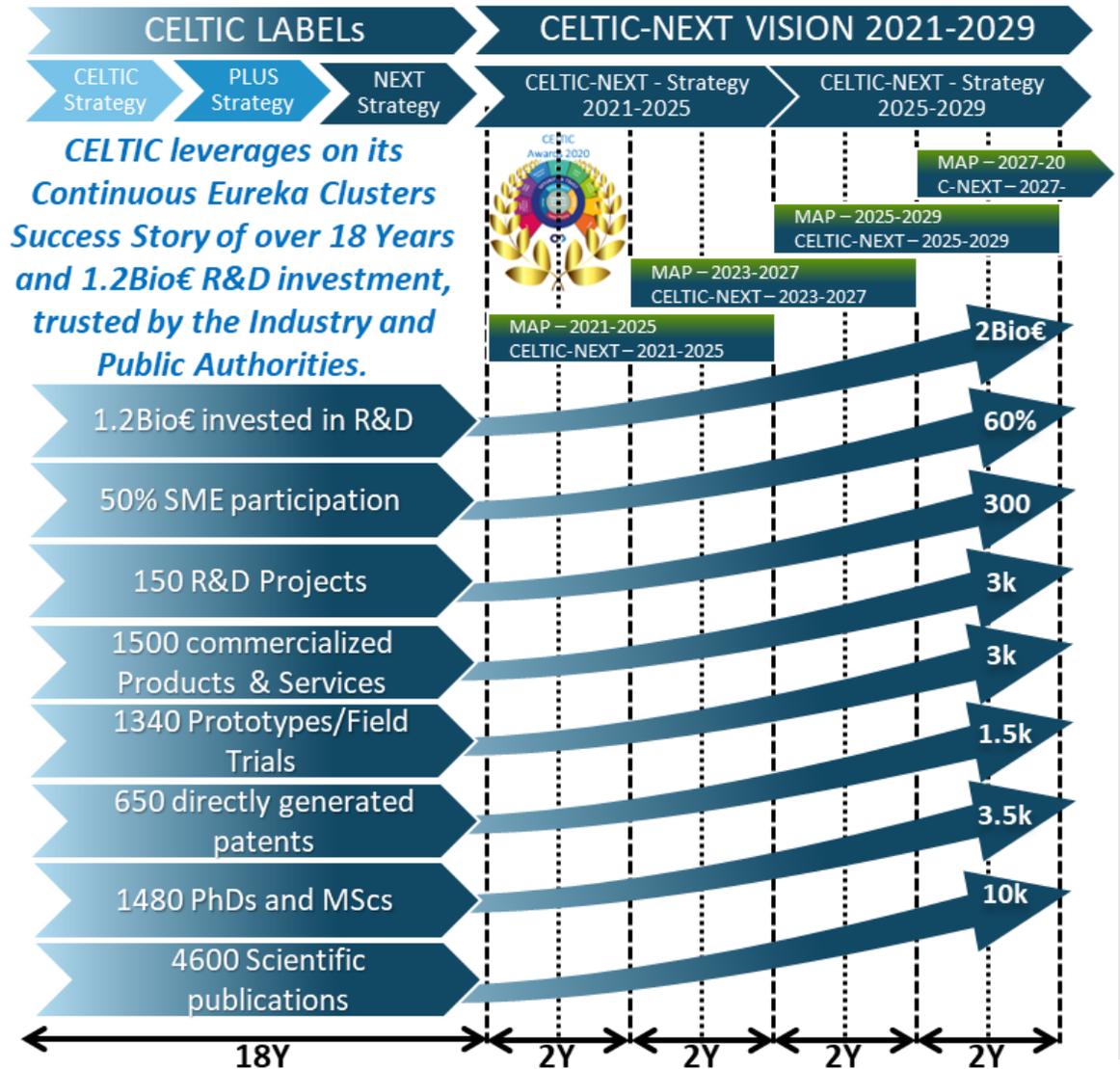
- ❑ Accelerate the deployment and take up of new advanced end-to-end ICT services, employing the new network concepts of 5G and leading to the implementation of 6G for & in Eureka countries,
- ❑ Actively facilitate the adoption of those ICT technologies by all targeted Verticals into their communities, business models and processes



CELTIC-NEXT benefits

Assets of Celtic

- **Bottom-up**
Proposers are free to define their project proposal according to their own research interests
- **Close to the market**
So far projects have led to more than 1500 new or improved products and services
- **High Success Rate**
High-quality proposals have a good chance of receiving funding.
Average success rate 60 %
- **Flexibility**
Project focus can be adjusted to new technological developments in the field



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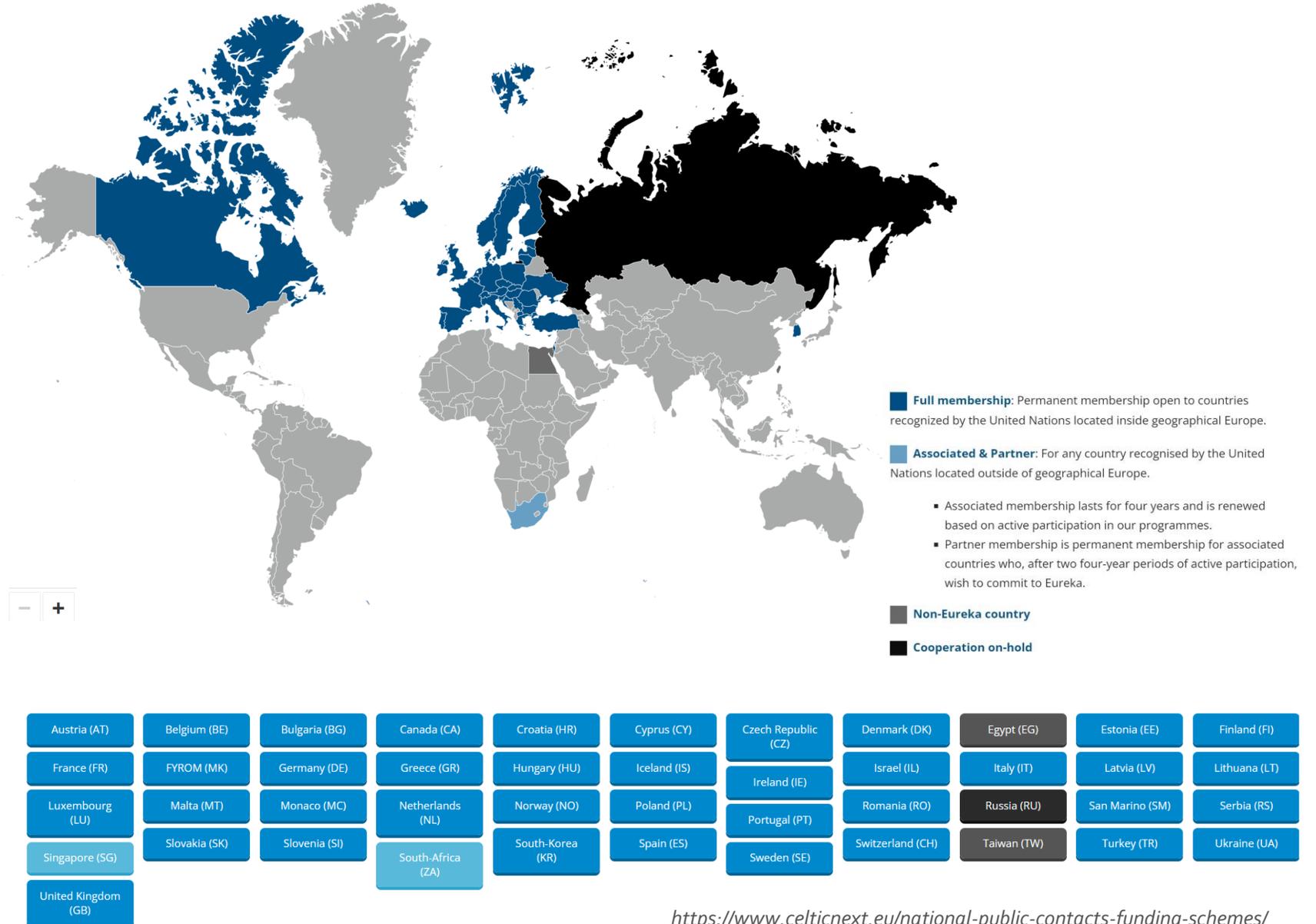
➤ **CELTIC leverages on its continuous Eureka Clusters Success Story of over 18 years and 1.2Bio€ R&D investment, trusted by the Industry and Public Authorities**



Opportunities to collaborate globally

-  Europe
-  Canada
-  South-Korea
-  South-Africa
-  Singapore

And potentially more countries in the future



Celtic-Next is the solution for consortia who want to:



- ✓ Perform collaborative joint RD&I consortia and projects within Europe and beyond
- ✓ Immerse yourself into a rich ecosystem by growing and collaborating beyond borders
- ✓ Interconnect with SMEs and large industries in 45 countries
- ✓ Foster and generate collaborative innovation by leading or being part of an industry-led project
- ✓ Stimulate disruptive and sustainable ideas
- ✓ Enrich your collaborative project via our Brokerage Tool
- ✓ Get professional coaching and mentoring before and during your project
- ✓ Get public funding support simultaneously in several countries
- ✓ Reach a high chance of getting your project funded
- ✓ Have low administrative overhead and a flexible framework
- ✓ Get high exploitation potential and business impact
- ✓ Boost your competitiveness and accelerate your growth
- ✓ Access new markets in a shortened time

Available Tools provided by CELTIC to labelled projects

CELTIC-NEXT also provides a number of additional services for registered members of CELTIC domains and, in particular, for all project domains. The offered tools are part of the tool-set provided by [Eurescom GmbH](#). **EuresTools® is a modular suite of Cloud-based project management tools.** The tools have been specifically designed to meet the needs of Horizon 2020 projects and European R&D projects in general.

Those  **EuresTools services and tools are free of charge** as included in the CELTIC fee:

- ▼ Reporter
- ▼ Conferencing
- ▼ Workspace
- ▼ Website
- ▼ Tracker
- ▼ Mailing List



Note: to access detailed information about the tools and services a domain access password is required.

<https://www.celticnext.eu/project-support-tools/>

Types of Dissemination Activities

- CELTIC website: www.celticnext.eu
- Project website is required
- Project Twitter account should follow @CelticNext and vice versa
- CELTIC-NEXT LinkedIn: [tinyurl.com/4cbb](https://www.linkedin.com/company/4cbb/)
- Interviews
- CELTIC Brochure
- CELTIC Project Leaflets
- CELTIC News
- Technical newspapers
- Conference papers
- Standardisation activities



4cbb
HFCC/G.fast

Project ID: CP1901011-4
Start Date: 1 January 2013
Closure date: 31 December 2014

Partners:
ADTRAN (Spain), Germany
DT (Spain), Telecom, SA, Denmark
Broadband Systems AB, Hungary
Ericsson AB (EAB), Sweden
ELSI AB, Sweden
The Telecommunications Research Center Vienna (FTW), Austria
Fundación Tecnalia Research & Innovation, Spain
Lund University, Sweden
Movel Telecom S.L., Spain
Orange, France
Schno Technologies, Israel
Technica HD Spain
Teliax Nordic (Telefonix) SA, Spain
TNO (ICT), Netherlands

Co-ordinator:
Prof. Olof Holgerzon
Ericsson, Sweden
E-mail: olof.holgerzon@ericsson.com
Henrik Schuber
Lund University
E-mail: henrik.schuber@lth.se

Project Website:
www.celticnext.eu/Project/CelticNext
Project: www.celticnext.eu
HFCC: www.hfcc.eu
G.fast: www.g-fast.net

Hybrid Fibre-Copper connectivity using G.fast

The project HFCC/G.fast will advance the emerging digital subscriber line (DSL) technology "G.fast" by innovations ranging from channel measurements and transceiver design to novel system architectures and use cases. This will push the standardization process as well as the broadband deployment in Europe.

Main focus

- The project is a follow-up of the awarded Celtic project "4cBB" (2009-2012) and has a budget of 3079 KEUR. The consortium consists of 14 partners from 9 European countries, including major actors from the whole telecom value chain.
- The International Telecommunication Union (ITU) is currently standardizing a novel digital subscriber line technology under the working title "G.fast". It targets the last 200 m to the customer premises at bit-rates of up to 1 Gbps. As of 2011 fibre-to-the-home (FTTH) was used by solely 1.9% of all broadband lines (EU-27 average). G.fast provides a cost-efficient broadband evolution step towards the long-term target FTTH.
- The project addresses questions related to techno-economic deployment models and use-cases for operators (such as wireless backhauling of base stations or self-installation), novel transceiver technologies (e.g. copper-fibre coupling and reverse/remote powering), measurements and models of cables and the electro-magnetic noise environment, and novel transmission models.

Approach

- Firstly, we expect to produce several technical contributions on cable measurements, modelling, simulation, and the impairments observed in operational networks. This puts performance simulations for G.fast on solid ground by adjusting the underlying assumptions and by introducing well-designed and validated cable and noise models. By doing so, we give guidance to the industry in terms of fundamental G.fast design choices.
- Secondly, we expect to produce technical contributions that are more system oriented, such as interworking issues between fibre and copper technologies, reverse/remote powering of nodes, layer 2 end-to-end architecture and management functionalities. This will help the industry in translating these requirements into technical solutions and to consolidate these in standards.

(c) TNO

CELTIC-NEXT
Next Generation Communications for a Secured, Trusted and Sustainable Digital Society

Autumn Call
Open until 22/11/2021

Connectivity, Networks & Telco Cloud, 5G & 6G

Industry 4.0, Space ICT, IoT, Smart Cities

Smart Transport, Digital Education, eHealth & eCare, Security & Trust, Critical Communications

SUBMIT YOUR PROPOSAL
www.celticnext.eu



Website: www.celticnext.eu



ABOUT CELTIC-NEXT HOW TO PARTICIPATE CALLS PROPOSALS PROJECTS NEWS & EVENTS CONTACTS

Welcome to the CELTIC-NEXT website.

Re-designed to help you manage your CELTIC proposals and projects easily, and find resources and support more efficiently.

Learn more about us, our projects, our calls, and our vision for the coming years.



Autumn Call 2022
Open until the 21st of October

Proposers Day the 7th of September 2022!

SUBMIT YOUR PROPOSAL
www.celticnext.eu

CELTIC-NEXT is the Eureka Cluster labelled for next-generation communications for a secured, trusted, and sustainable digital society. CELTIC-NEXT stimulates and orchestrates international collaborative projects in the Information and Communications Technology (ICT) domain.

CELTIC-NEXT is an industry-driven initiative involving all the major ICT industry players and many SMEs, service providers, and research institutions. The CELTIC-NEXT activities are open to all organisations that share the CELTIC-NEXT vision of an inclusive digital society and are willing to collaborate to their benefit, aligned with their national priorities, to advance the development and uptake of advanced ICT solutions.

CELTIC-NEXT IN FEW FIGURES



ABOUT CELTIC-NEXT HOW TO PARTICIPATE CALLS PROPOSALS PROJECTS NEWS & EVENTS CONTACTS

Overview of Celtic Projects

HOME / OVERVIEW OF CELTIC PROJECTS

You can search for e.g. Acronym, Year, Call...

Show

20 ▾

Search:

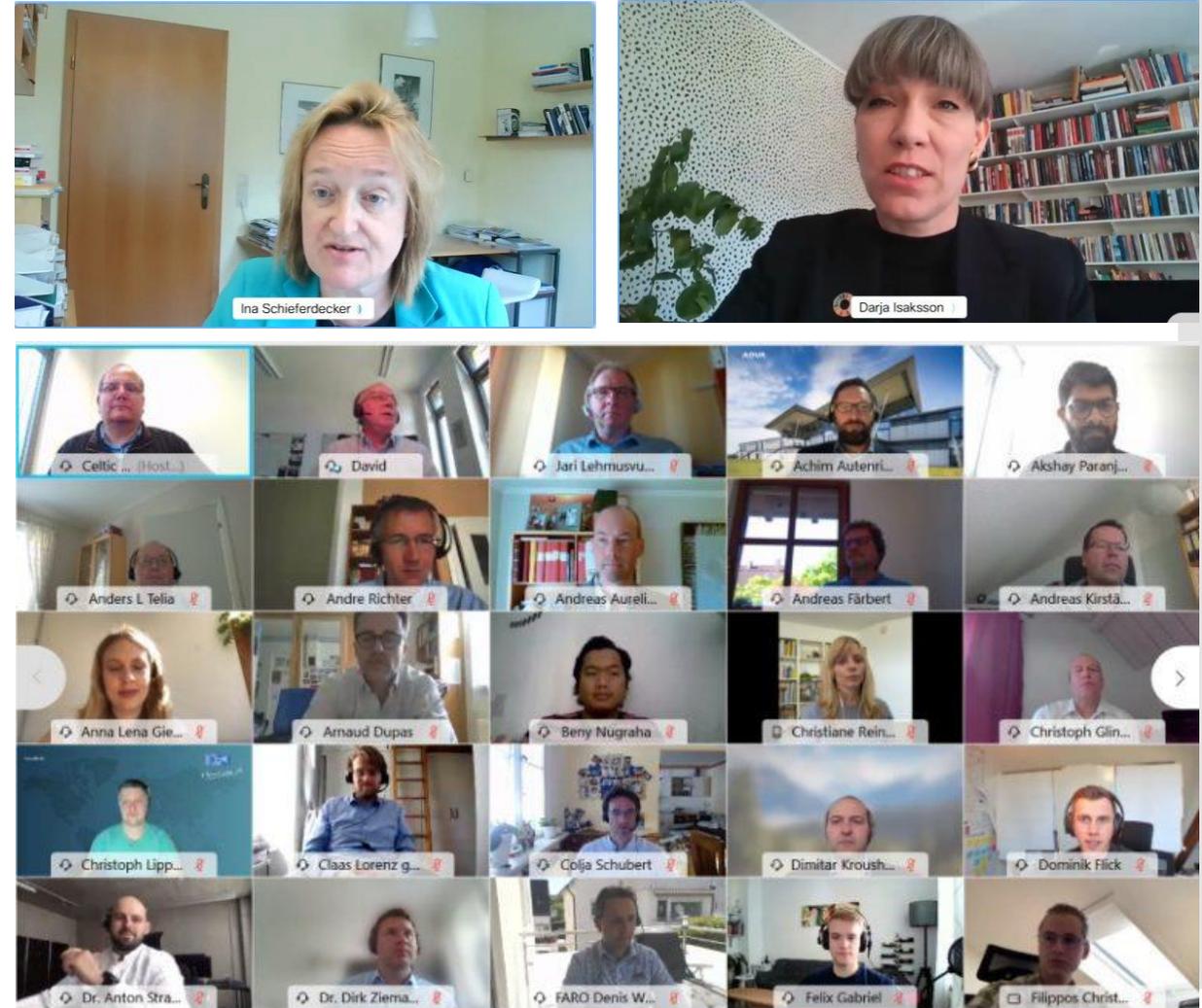
entries

ACRONYM	TITLE	STATUS	CALL	LEAFLET
CANOPY	Cognitive and Automated Network Operations for Present and Beyond	Set-up	2021	
6G-SKY	6G for Connected Sky	Running	2021	6G-SKY leaflet
AICom4Health	AI-Powered Communication for Health Crisis Management	Running	2021	
GAMIR	General Architecture for a Multilingual Information Retrieval system	Set-up	2021	
COA-CFD	Cloud-based Online Access to Computational Fluid Dynamic Simulations	Runing	2021	
F4iTECH	Federated AI Platform for Industrial Technologies	Running	2021	F4iTECH-leaflet
MASSLORA	Massive IoT over High Density LoRaWan Networks	Set-up	2021	
USWA	Ultra Scalable Wireless Access	Set-up	2021	
AIROHARSH	AI and robotics for quality and risk management processes in industrial harsh environments and pandemic areas	Set-up	2020	
ENTRY100GHz	Energy-Efficient Radio Systems at 100 GHz and beyond: Antennas, Transceivers and Waveforms	Running	2020	ENTRY100GHz leaflet

Support to organize kickoffs, reviews...

AI-Net
don
202

The screenshot shows the CELTIC-NEXT website for the AI-NET Kick-Off Event. The page features the CELTIC-NEXT logo at the top, followed by navigation links: ABOUT CELTIC-NEXT, HOW TO PARTICIPATE, PROJECT CALLS, PROJECTS, EVENTS, NEWS AND MEDIA, and CONTACTS. Below this, the event details are listed: "CELTIC AI-NET Kick-Off Event" on "June 1, 2021@9:00 am - 1:00 pm". The AI-NET logo is prominently displayed, consisting of a stylized brain with colorful lines. The main heading is "New Flagship-project AI-NET for Accelerating Digital Transformation in Europe with Intelligent Network Automation". The text describes the digital transformation context and the project's goals. A "Draft Agenda" section is visible at the bottom, starting with "09:00-09:15 CET" and "Opening by Federal Ministry of Education and Research (BMBF), Germany".



CELTIC-NEXT Newsletter

CELTIC News 1/2022

The newsletter of EUREKA Cluster CELTIC-NEXT

Please have a look at our Newsletter

<https://www.celticnext.eu/newsletter/>

and register for free subscription

<https://www.celticnext.eu/news-subscription/>

www.celticnext.eu

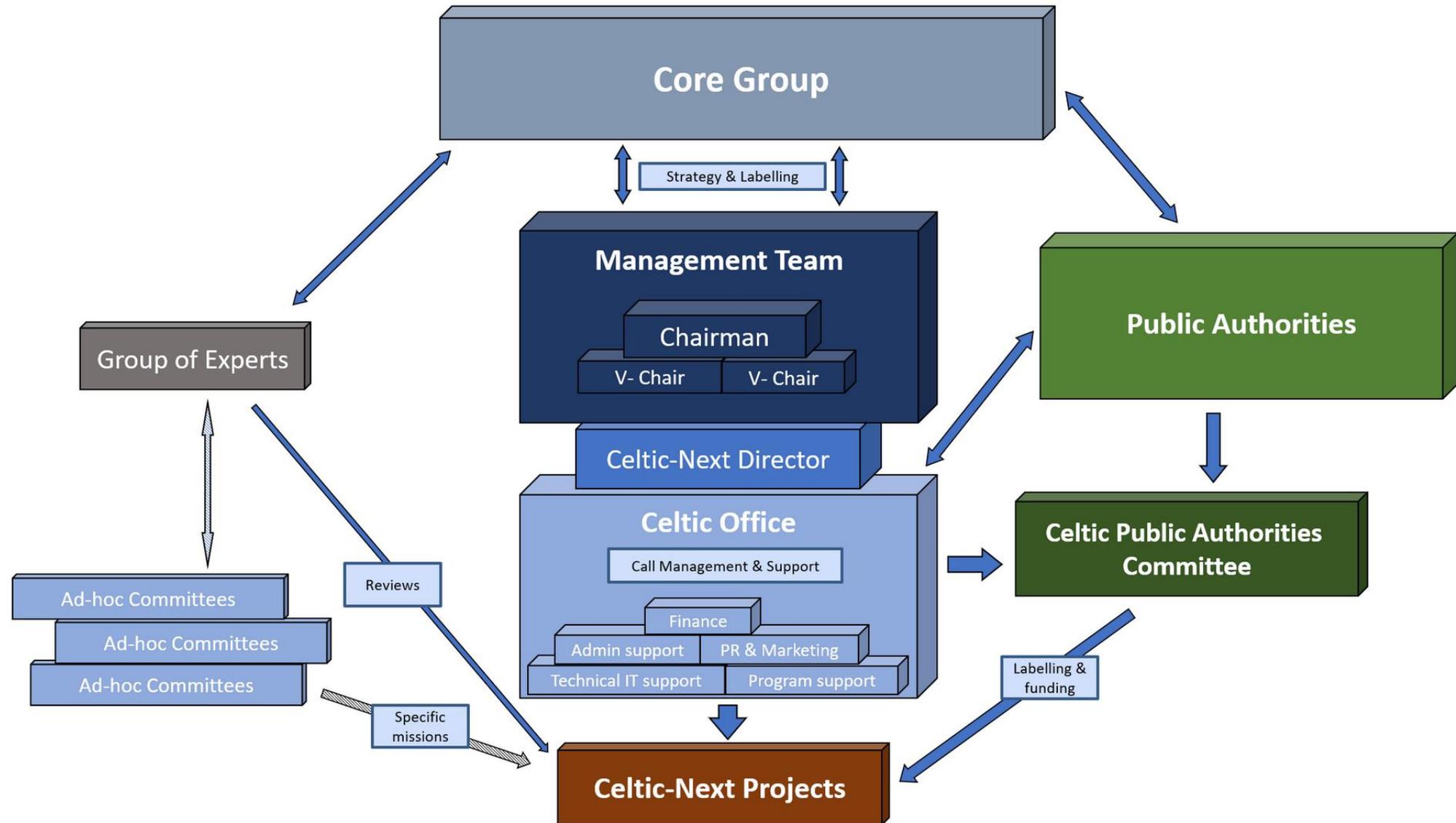
CELTIC Chair's Corner
The new improved Eureka Clusters Programme

Eureka
The Eureka CELTIC – ESA Space-ICT Programme

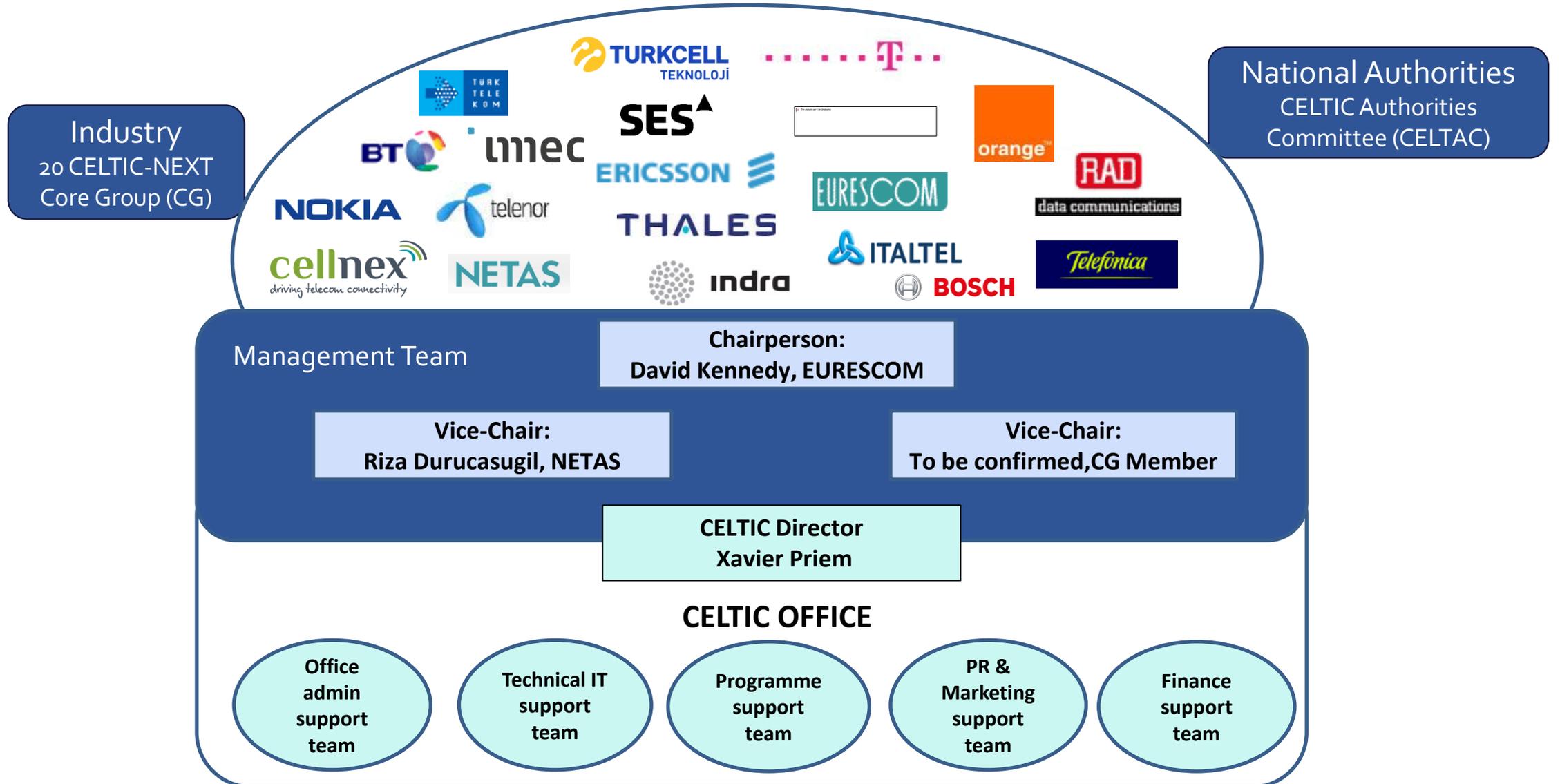
Project Highlights
Health5G – Healthcare Transforming with 5G
Wireless Tech

CELTIC-NEXT management

Organisational Structure



Core Group Organisation



Celtic Office Structure



Director

- Overall responsibility for Cluster & Office
- Interface toward Core Group and ESE
- Support for PAs

Xavier Priem



Xavier Priem
(acting)



Christiane Reinsch
(full)

Programme Co-Ordinator(s)

- Monitoring of project progress
- Support for projects
- Coordination with all PAs



Ellen Tallas



Luitgard Hauer

Operational support
Web-Administration-Projects

- Accounting and administration support
- Proposal registration
- Website management



Klaas-Pieter Vlieg

Manager IT Services

- IT Security and Support



Pooja Mohnani

Public Relations Manager

- Planning of corporate communication measures
- Relationship maintaining of Public Relations
- Representation of CELTIC-NEXT on Eureka level



Audrey Bienvenu

Business Development Trainee

- Business development
- Projects and team support

CELTIC-NEXT

strategic positioning

EUREKA-CELTIC-ESA MoI Signature Event

November 2021 – Porto



Press Release
Eureka PT Chair | Eureka Cluster – CELTIC | European Space Agency

Σeureka **CELTIC-NEXT** **esa**
Eureka Cluster

Connecting Terrestrial ICT with Space ICT

Strategic Collaboration between Eureka, CELTIC-NEXT and ESA ARTES

Porto, 22 November 2021. Eureka Cluster CELTIC-NEXT (CELTIC-NEXT) and the European Space Agency (ESA) signed a Memorandum of Intent (MoI) today, which aims to bring their respective communities closer together. This will enable the faster convergence and development of terrestrial and non-terrestrial network and service technologies in the innovative field of Space ICT.

The MoI will help to foster economic growth and jobs through coordinated R&DI activities and the commercial exploitation of integrated space and terrestrial systems enabled by 5G and 6G. The collaboration aims to leverage the complementarity of ESA and CELTIC-NEXT and build on synergies to maximise the return on investment and to support achieving the UN Sustainable Development Goals.

Eureka Chairman Miguel Bello Mora, Elodie Viau – Director of Telecommunications and Integrated Applications and Head of ECSAT at the European Space Agency (ESA), and CELTIC Office Director Xavier Priem.

Also announced to the Ministerial Event the week before.

6G-IA/SNS MoU April 2022

Memorandum of Understanding with 6G-IA signed



On 4th April 2022, Eureka Cluster CELTIC-NEXT and the 6G Smart Networks and Services Industry Association (6G-IA) signed a Memorandum of Understanding (MoU), which aims at establishing synergies and complementary activities in collaborative ICT research. The MoU will help foster economic growth and jobs through coordinated R&D&I activities and the commercial exploitation of generated results. The collaboration aims to leverage the complementarity of 6G-IA and CELTIC-NEXT and build on synergies to maximise the return on investment and to support achieving the UN Sustainable Development Goals.

ICT has become, more than ever, a pillar of sovereignty and resiliency in the rapidly changing social, political and economic environment of today and its regional battlefields. The Russian war against Ukraine as well as the measures against the COVID-19 pandemic have shown how critical it is to count on both terrestrial and non-terrestrial ICT services, as together they constitute one of the critical infrastructures of a country, especially considering the digitalisation of the society and the vertical industries.

Therefore, it is mandatory to increase and leverage to its maximum the European and allied countries' funding to reach a critical mass of R&D&I and a faster time-to-market for the European countries and their allies' ICT industry.

This Memorandum of Understanding provides the platform for leveraging on each signatory's strengths and cooperation, to support sovereignty and resiliency for Europe and allied countries.

The purpose of this MoU is to set out a simple framework where the signatories can identify the complementary nature of their respective objectives and to identify and implement shared activities that benefit both initiatives and contribute to the achievement of their goals.

The signatories aim to leverage the diversity of 6G-IA and CELTIC-NEXT as well as the fact that their projects are somewhat sequential in terms of their Technology Readiness Levels (TLRs), to maximise the return on the respective investments and increase the impact on the Sustainable Development Goals.

The signatories will focus on encouraging cross-programme discussions and workshops on potential technology pathfinders and solutions, with a view to stimulating a pipeline of new projects for both initiatives and sharing reciprocal contributions to each other's Strategic Research and Innovation Agenda (SRIA) documents.

The focus of the cooperation is to stimulate the respective communities to consider the issues in a holistic way considering the "end-to-end" perspective of the new communications services being enabled by 5G and 6G technologies, as well as developing an understanding of the economic, environmental, and societal benefits.

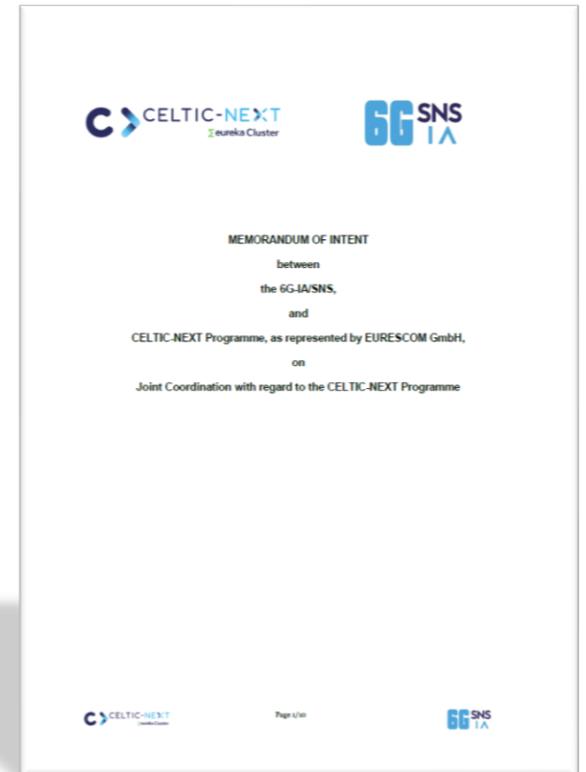
How the MoU will be implemented

To support the achievement of their common objectives, the signatories intend to:

- › Create awareness and promote opportunities for collaboration within and across the respective communities
- › Consult mutually on their SRIAs
- › Collaborate on the organisation and execution of activities with a view to reaching the common objectives identified
- › Participate in and support suitable events organized by the other signatory
- › Plan and manage joint activities in areas of common interest in line with the signatories' respective legal frameworks
- › Undertake joint communication, as appropriate
- › Leverage their relevant resources and expertise necessary to ensure the success of the common objectives
- › Regularly review the effectiveness of this collaboration, with reference to the priorities agreed

Conclusion

This MoU is the second of a series of new collaborations for CELTIC-NEXT. This fulfils the objectives set by CELTIC-NEXT's Core Group to develop CELTIC-NEXT's support to and impact for the ICT community by enriching its DNA with new verticals and communities. The 6G-IA community is also eager to collaborate more with the CELTIC ICT community. This MoU offers the perfect playground for both communities to meet and work together on strategic topics and projects.



If you have any questions
please do not hesitate!

MANY THANKS FOR YOUR ATTENTION.



CelticNextEurekaCluster



@CelticNext



CELTIC-NEXT Video
Channel

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CELTIC-NEXT - Director

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Email: <mailto:priem@celticnext.eu>

Web: <https://www.celticnext.eu/>

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