

# CELTIC News 1/2021

The newsletter of EUREKA Cluster CELTIC-NEXT



Events AI-NET Kick-Off Event

Public Authority Profile Spanish Centre for the Development of Industrial Technology – CDTI



### **Table of Contents**

### **CELTIC Chair's Corner**

### Events

### **Public Authority Profile**

### **Project Highlights**

5G-PERFECTA – 5G and next generation mobile performance compliance testing assurance .... 8

### Update from the CELTIC Office

| Relaunch of CELTIC-NEXT in revised Eureka   |    |
|---|----|
| Clusters Programme                          | 10 |
| High number of proposals in Eureka Clusters |    |
| AI Call 2021                                | 11 |

6 new projects received CELTIC-NEXT label .... 11

### IMPRINT

CELTIC Office Xavier Priem CELTIC Office Director c/o Eurescom GmbH Wieblinger Weg 19/4 69123 Heidelberg, Germany Phone: +49 6221 989 381 Email: office@celticnext.eu



### Join the Industry-Driven Research Programme for a Smart Connected World

CELTIC-NEXT Call for Project Proposals – Deadline: 22<sup>nd</sup> November 2021

Do not miss the opportunity to participate in CELTIC-NEXT, the industry-driven European ICT and telecommunications research programme under the umbrella of EUREKA. Submission deadline for the next call for project proposals is 22<sup>nd</sup> November 2021.

CELTIC-NEXT projects are collaborative private-public partnership R&D projects. All EUREKA member countries and associated countries can financially support them. More information on public funding and national contacts per country can be found on the CELTIC-NEXT Public Authorities Website. Please talk to your national contact early in the process.

### Easy proposal process

Preparing and submitting a CELTIC-NEXT project proposal is easy. Just register on the CELTIC-NEXT online proposal tool, fill in the Web forms, and upload your proposal in pdf. Access to the proposal tool and to a proposal template is available via our Call Information page (https://www.celticnext.eu/call-information).

### Benefits of participating in CELTIC-NEXT

- > You are free to define your project proposal according to your own research interests and priorities.
- > Your proposal is not bound by any call texts, as long as it is within the ICT/ telecommunications area see CELTIC-NEXT Scope and Research Areas.
- CELTIC-NEXT projects are close to the market and have a track record of exploiting their results soon after the end of the project.
- > High-quality proposals have an excellent chance of receiving funding, with an average success rate higher than 50 %.
- > The results of the evaluation will already be known in January 2022.

If you have any questions or need help, do not hesitate to contact us; we are pleased to help you.

### Contact:

CELTIC-NEXT Office office@celticnext.eu Xavier Priem priem@celticnext.eu Website: www.celticnext.eu



# The Eureka Clusters Programme – A New Era of Joint Thematic Calls



Jari Lehmusvuori Nokia, CELTIC-NEXT Vice-Chair jari.lehmusvuori@nokia.com

Many steps have been taken and many milestones reached in 2021 both in CELTIC-NEXT and jointly with the other Eureka Clusters. We are experiencing an inspiring time of both facilitating the well-known industry innovation projects, as well as planning the new Eureka Clusters Programme (ECP) jointly with the other innovation Clusters in Eureka. With the launch of the ECP in the 2nd half of 2021 a new era with both the bottom-up Calls and thematic Calls will be available as opportunities for the innovations on the next generation communications in the CELTIC-NEXT community. Therefore, it is worthwhile here to summarize the baselines as an early introduction.

The traditional CELTIC bottom-up calls in spring and autumn are not affected by the additional ECP processes. The Joint Thematic Calls under the ECP's Multi-Annual Programme (MAP) are additional commitments from both Public Authorities and Clusters to work together on common and cross-Cluster topics. The current CELTIC-NEXT projects are performing well, and as a highlight, the new CELTIC-NEXT Flagship project AI-NET is now also up and running.

### Thematic joint project calls by Eureka Clusters Programme

The planning and organization of the Eureka Clusters Programme (ECP) started in October 2020. It has continued under the lead of Eureka and with a strong contribution by the CELTIC Office. While not yet approved, the first call for projects may be introduced in late 2021 with a closing date in spring 2022. The ECP Calls follow the concept of joint calls of multiple Clusters, which enables widening the scope and competences available to a project.

Each of the Calls have a theme agreed between the industry and the funding Public Authorities of the countries. The ECP provides project opportunities to both large companies and small and medium-sized companies, and the public authorities funding according to their national policies. Each of the supporting countries assign an indicative and viable budget outlook for a thematic Call which, among the other new features, will provide improved predictability on funding. In addition, the schedule of funding decisions from idea to start is the goal. All these main features of the thematic joint calls of ECP make them a new innovations project instrument to the CELTIC-NEXT industry community, which is complementary to the single-Cluster bottom-up calls.

### Celtic-Next in the ECP

The Multi Annual Plan (MAP) sets out the commitments of the public authorities and the Eureka Clusters. They jointly determine which RDI communities can be integrated in the MAP as Eureka Clusters, what the expected funding level will be, and what potential thematic areas for collaboration are. Each RDI community wishing to join the ECP applies for a period of 4 years to operate as a EUREKA Cluster. CELTIC-NEXT as such a community has submitted the application to Eureka as of 1st July 2021. Being a part of this ECP MAP approval process it has enabled us to update our CELTIC-NEXT Roadmap together with the MAP. As a Eureka Cluster the communications industry community of CELTIC-NEXT will have the opportunity for the future thematic joint calls that set out the challenges of sustainability and autonomous mobility as examples. The themes and a description of the calls to be launched in the coming year, including the budget commitments of the participating Eureka countries are given on the Annual Operational Plan of ECP.

### Eureka Clusters AI Call 2021

As a preliminary step towards the joint calls, the Eureka Clusters AI Call 2021, to which CELTIC-NEXT substantially contributed, was organised with a submission deadline of 28 June 2021. This is an opportunity for the companies in the communications area to set up cross-innovation projects with a large network of organizations in the area of Artificial Intelligence with flexibility in the topics.

### Celtic-Next Autumn 2021 Call

CELTIC-NEXT is continuing as the communications and applications Cluster in Eureka. The Celtic Autumn Call 2021 will be launched with the submission date in November 2021. It is a bottom-up Call with flexibility in the scope for the projects. Proposals for new innovations projects are welcomed. A brokerage event is foreseen for pitching of project ideas and partnering.

### Celtic-Next Flagship project AI-NET

The new industry-led CELTIC-NEXT Flagship project AI-NET (Accelerating Digital Transformation in Europe by Intelligent NETwork Automation) started in mid-2020. It is targeting automated resilient networks for economy and society. The project brings together partners from seven European countries and three fields of technology: Communications Networks and Technologies for 5G and Beyond, Near-Use Data Centers, and Artificial Intelligence (AI). Novel solutions for network automation are expected in the forthcoming two years.

### Change in the CELTIC-NEXT Management Team

Xavier Priem has started as the new CELTIC Office Director. He has a strong track-record, both in innovation management and business development, thus providing an excellent background for industry innovations. Please join me in welcoming Xavier to the lead in the times of new challenges. He took over from Peter Herrmann, who retired in spring after having dedicated 15 years to CELTIC. As the CELTIC Office Director since 2014 he relentlessly drove the Cluster for the benefit of the European telecommunications industry innovations. Please join me in thanking Peter.

## **AI-NET Kick-Off Event**

### CELTIC Flagship Project for Intelligent Network Automation



Milon Gupta CELTIC Office office@celticnext.eu

On 1st June 2021, CELTIC flagship project Al-NET was officially launched at a high-level online event. Representatives from the public authorities of Germany, Sweden and Finland as well as representatives of the Al-NET project consortium, comprising major players from industry (large and SMEs), research organisations, and academia, presented the visions and goals of the ambitious European project to an audience of more than 150 participants.

Al-NET aims at 'Accelerating Digital Transformation in Europe with Intelligent Network Automation'. The project is addressing the



Prof. Dr.-Ing. Ina Schieferdecker, Director-General for Research for Digitalization and Innovation at the German Federal Ministry of Education and Research (BMBF)



Darja Isaksson, Director General at Vinnova, Sweden's Innovation Agency

challenge that the current centralised cloud infrastructure is not adequate for serving the requirements of the digital transformation in Europe. AI-NET is built on the premise that three technologies need to be combined to shape a new secure service and application platform: 5G, edge-centric computing, and artificial intelligence.

The main goal of the AI-NET project is to provide enablers and solutions for high-performance services deployed and operated at the network edge. AI-NET is using artificial intelligence for complementing traditional optimisation algorithms, in order to manage vastly increased network complexity.

The kick-off event was opened by Prof. Dr.-Ing. Ina Schieferdecker, Director-General for Research for Digitalization and Innovation at the German Federal Ministry of Education and Research (BMBF). She said: "AI-NET is an important step for Germany and Europe towards technological sovereignty."





Presentation by Prof. Dr. Jan Jürjens from Fraunhofer ISST

In the following presentations, the representatives of the funding agencies from Sweden and Finland – Darja Isaksson, Director General at Vinnova, Sweden's Innovation Agency, and Heikki Uusi-Honko, Head of International Networks at Business Finland shared their views on the importance of AI-NET from the perspective of their national innovation strategies. While Ms Isaksson pointed out that "AI-NET is a cornerstone in Vinnova's strategy for digital transformation", Mr Uusi-Honko highlighted the importance of AI-NET for contributing to sustainable growth in Europe. CELTIC-NEXT Vice Chair Jari Lehmusvuori, Head of Department at Nokia Bell Labs, completed the session by presenting the European innovation perspective of Eureka Cluster CELTIC-NEXT.

The next session was dedicated to presenting the AI-NET sub-projects AI-NET-ANI-ARA, led by Ericsson Research, AI-NET-PROTECT, led by ADVA, and AI-NET-ANTILLAS, led by Nokia Bell-Labs. Magnus Frodigh, Vice President & Head of Ericsson Research, Sweden, Dr. Christoph Glingener, CTO ADVA Optical Networking, Germany, and Patricia Layec, Research Department Head, Nokia Bell-Labs, France, presented the ambition of AI-NET to connect critical infrastructures and data centres through enhanced transport networks and improved networking concepts that will results in reinforced overall security.

The event concluded with a panel discussion on how Europe can accelerate the digital transformation with intelligent network automation. Panelists in the session moderated by Eurescom Director and CELTIC Chairman David Kennedy were Dr. Mohsen Amiribesheli, Research Technology Manager at Konica Minolta Global R&D; Dr. Markus Ohlenforst, Managing Director at IconPro GmbH; Dominik Flick, Project Manager for Energy Performance Management at Stellantis / Opel Automobile GmbH; Dr. Timo Lehnigk-Emden, Managing Director at Creonic GmbH; and Prof. Dr. Jan Juerjens, Director Research Projects at Fraunhofer Institute for Software and Systems Engineering.

### About AI-NET

Al-NET is a 74 million-euro public-private partnership project under CELTIC-NEXT, the EUREKA Cluster for next generation communications for a digital society. Al-NET comprises three sub-projects with 92 companies, research organisations, and universities from



Germany, Sweden, Finland, France, United Kingdom, Netherlands, and Poland. The CELTIC-NEXT flagship project is coordinated by ADVA Optical Networking SE, a European telecommunications vendor headquartered in Germany.

AI-NET is publicly co-funded by the public authorities of Germany (BMBF), Sweden (VINNOVA), Finland (Business Finland), and the United Kingdom (Innovate UK). The project will end in August 2024.

#### > Further information

- > AI-NET Kick-Off Event Page https://www. celticnext.eu/event/celtic-ai-net-kick-offevent/
- > AI-NET Project Page https://www.celticnext.eu/project-ai-net/

# Supporting the Telecommunications Area in Spain through CELTIC-NEXT

Centre for the Development of Industrial Technology (CDTI)



Juana Sánchez CELTIC-NEXT representative Centre for the Development of Industrial Technology (CDTI) juana.sanchez@cdti.es

# The Centre for the Development of Industrial Technology is the main R&D funding agency in Spain.

CDTI is a public business entity, answering to the Ministry of Science and Innovation, which fosters the technological development and innovation of Spanish companies. It is the entity that channels the funding and support applications for national and international RDI projects of Spanish companies. Therefore, CDTI contributes to improving the technological level of the Spanish companies by means of implementing the following activities:

- Financial and economic-technical assessment of R&D projects implemented by companies.
- Managing and fostering Spanish participation in international technological cooperation programmes.
- Fostering international business technology transfer and support services for technological innovation.
- Supporting the setting up and consolidating of technological companies.

CDTI employs over 350 people, three quarters of whom are engineers and graduates. Even though the bulk of the CDTI infrastructure is in Madrid, the Centre offers to Spanish companies a strategic network of CDTI SOST (Spanish Office for Science and Technology) offices in ten countries: Belgium, Brazil, Chile, China, India, Japan, Korea, Mexico, Morocco and the USA to promote the Spanish technology at international level, mobilize global financial resources and detect international market opportunities for Spanish high-tech companies with the aim of fostering the transnational technological cooperation in International Programs at bilateral or multilateral level, with special focus in the European programs, like Horizon Europe or Eureka.

### Commitment with Eureka and CELTIC-NEXT – new funding procedure implemented

Addressing its international orientation, CDTI has strong support with the Eureka programme in general and with Eureka Clusters in particular. The bottom-up orientation of Eureka is fully aligned with CDTI's philosophy. CELTIC-NEXT, focussed on the telecommunications area, has become a Eureka Cluster with high interest in Spain. The Spanish CEL-TIC community ranges from large companies to small and medium-sized companies that regularly participate in its calls to improve their competitiveness. The impact of Celtic projects encourages Spanish companies to use this way to accelerate their potential business establishment in the telecommunications area.

In order to accelerate the time to contract of CELTIC projects, CDTI has a new funding procedure that forces Spanish companies to apply for funding as soon as Celtic projects are labelled. Spanish funding application is done in two phases: First, the leader of the Spanish sub-consortium applies a 'Eureka request' after the deadline of each CELTIC-NEXT call (margin: 15 days). Second, once the projects are labelled, each company involved in la-



CDTI premises in Madrid



E3 medical test video sequence

belled projects presents the full memory (national request) with a margin of 20 days. This improved process will avoid long-term funding procedures for CELTIC projects and will shorten time-to-contract.

### Successful Spanish CELTIC project E3

The E3 project is a good example of CELTIC success based on three principles: OPEN platform that guarantees access EVERYWHERE for EVERYBODY. E3 has designed, implemented, tested and validated with final users (patients and professionals) an E2E (End-To-End) videoconference platform able to allow EVERY-BODY (low-cost high-quality video conference & e-health services reusing in-home infrastructures) access to e-health services EVERY-WHERE (both rural & urban areas, both patients and professionals) thanks to bandwidth adaptation techniques that allow simultaneous multipoint conferences with SD and HD.

These developments were tested and validated by doctors in 15 use cases over one common OPEN platform (adapted to point-to-point videoconferences and STB/HDTV functionalities), able to reuse in-home infrastructure (professional-to-patient scenarios and patient-to-patient scenarios).

E3 is a cross-domain project that uses Open Innovation to allow external partners (6 Spanish SMEs, 1 Polish SME, 1 Polish medical institution and 3 French medical institutions) to collaborate from project definition to test and validation easing go-to-market fit that has allowed to generate 12 new products and improve 14 products generating over 26.5 million euro revenue with 5.2X ROI since end 2020.

The main impact on Spanish partners has been on CALBOQUER SL (ASMEDIT) which launched Face-to-face+E3 developed solution to its 10 million customers with a 3 million euro revenue yearly increase. ASMEDIT is using STARFLOW (CLEVERNET) WAN Optimization solution to guarantee its professionals working from home connectivity, reliability and data in motion security.

Three start-ups have been created to commercialize E3 project developments, including SMART Health TV solutions in Spain which is participating in the ESA Space COV-ID19 Response Initiative as provider of telecare technology for CNR (Consiglio Nazionale delle Ricerche).



E3 project: User-friendly experience / Videoconference at Home TV

The E3 project has received 8 awards including: CELTIC-NEXT Innovation Award Winner (Heidelberg, 2020), EUREKA Excellence Award Winner (EUREKA Stakeholders Conference Amsterdam, 2019) and CELTIC-NEXT Excellence Award Winner (CELTIC-NEXT Event at EuCNC in Valencia, 2019).

### Conclusion

CELTIC-NEXT is a strategic Eureka Cluster for Spanish companies that offers an excellent framework to improve their competitiveness in the telecommunications area at international level. Spain has many successful projects that have helped companies to establish as a reference in such competitive markets. CELTIC's support is key for participants. Besides, its Core Group offers high level orientation to participants.

CDTI, aligned with CELTIC-NEXT and with Eureka Clusters in general, has optimized the funding procedure with CELTIC calls to accelerate the time-to-contract of CELTIC projects. This new procedure has already been implemented in the CELTIC-NEXT Spring Call 2021.

#### > Further information

- CDTI website https://www.cdti.es
  E3 project page -
- https://www.celticnext.eu/project-e3/

## **5G-PERFECTA**

5G and next generation mobile performance compliance testing assurance



Antonio Cuadra-Sánchez Indra Minsait acuadra@minsait.com

The 5G-PERFECTA project has developed a 5G performance compliance testing assurance solution that measures the KPIs to show the real behavior of 5G network and services.

The challenge of CELTIC-NEXT project 5G-PER-FECTA has been to develop the technology to assure the 5G service quality based on data processing, that is, to guarantee that the quality of 5G networks is aligned with the expectations of bandwidth, latency and other key performance indicators. A series of innovation activities have been settled in order to establish a reference architecture for supervising 5G networks by means of monitoring techniques that measure 5G performance indicators to evaluate the real performance of 5G networks. The consortium, led by Indra Minsait, gathers 16 partners from Industry & Telco, Research Centers, Academia and SMEs of Poland, Portugal, Spain, Sweden, and Turkey.

### Motivation

The 5G infrastructure will deliver solutions, architectures, technologies and standards for the ubiquitous 5G communication infrastructures of the next decade. The following parameters are indicative of the new network characteristics to be achieved at an operational level: 10 times to 100 times higher typical

user data rate and End-to-End latency of < 1ms. This new high-performance network needs to be effectively tested to assure that 5G technology is actually offered with high quality levels. For this purpose, we have developed a 5G performance compliance testing assurance solution that calculates KPI (Key Performance Indicators) to show the real behavior of 5G network and services. In addition, we have developed automated processes, tools and mechanisms ensuring 5G service quality, based on data processing and analytics approaches.

### Scenarios and use cases

We have defined two main project scenarios and six use cases. The 5G Network Performance scenario provides the performance monitoring information and includes the testbed and measurement scope for 5G network performance analysis. The 5G Quality Assurance scenario provides the quality of service





5G-PERFECTA scenarios and use cases

monitoring information, including the timesensitive networking mechanisms, the deployment of critical services with performance guarantees, and the QoS observability for 5G. See in figure 1 the project scenarios and use cases.

### Impact

The 5G performance compliance testing assurance solution will help the digital providers (operators, service providers, applications providers, etc.) to evaluate how next generation services are performed on the 5G networks for different purposes: measuring of 5G network performance, validating the services on 5G networks, monitoring the QoS and QoE, launching of new applications, etc. In addition, there is a very strong focus on end users in 5G PERFECTA, since they are the ones who really benefit from the correct behaviour of the 5G network. For this purpose, we have considered the end-user perspective in the analysis of the performance of services on 5G networks.

### Conclusion

The project will provide capabilities that improve efficiency in content delivery by means of user-oriented quality assurance capabilities, which will be able to impact a significant part of the 5G revenues expected for the following years. The outcomes of this project will allow network and service providers to deploy the right 5G infrastructure to run the most advanced video technology business cases before final 5G standardization is complete.

5G-PERFECTA will provide a monitoring platform that delivers real measurements of several new feasible services over the new generation networks, including beyond 4G and the 5G network, tested on a real infrastructure. These performance indicators will allow to determine the suitability of new mobile infrastructures, including 5G to support next generation applications in mobility, such as remote driving, medical care, logistics, retail, Smart Cities, Industry 4.0, etc. You can find more information on 5G-PERFECTA at https://www.celticnext.eu/ project-5g-perfecta/.

### **Public Authorities**

This project has been co-funded in Spain by the Centro para el Desarrollo Tecnológico Industrial (CDTI), in Sweden by Vinnova, in Portugal by Portugal 2020, in Poland by Narodowe Centrum Badań i Rozwoju and in Turkey by Tübitak.

# Relaunch of CELTIC-NEXT in revised Eureka Clusters Programme

Ambitious roadmap for 2021–2025



Xavier Priem Director CELTIC Office priem@celticnext.eu

CELTIC-NEXT has been relaunched with a new, ambitious roadmap as part of the revised Eureka Clusters Programme. The relaunch is very timely in a world of dramatic change that requires novel ICT solutions addressing the economic, societal, and environmental challenges the Eureka member states and the world as a whole are facing.

### The revised Eureka Clusters Programme

The CELTIC-NEXT Cluster application for the four-year period 2021-2025 was accepted, together with the Multi-Annual Plan for the Eureka Clusters, on 18th June 2021. This concluded a relaunch process that had started in June 2020. The new Eureka Clusters model is meant to encourage industry-wide collaboration and the forming of new innovation ecosystems. The revised Eureka Clusters Programme aims to align and synchronise the Clusters' processes.

Since June 2020, the Eureka Clusters had already intensified their joint and synchronised activities, most visibly through two jointly organised AI calls in 2020 and 2021, which both mobilised a substantial number of excellent project proposals.

## Updated CELTIC-NEXT roadmap for 2021 – 2025

The theme of CELTIC-NEXT for the new period is: "Next-Generation Communications for a secured, trusted, and sustainable digital society". All topics identified in the strategic roadmap of CELTIC-NEXT for the 2021–2025 period have been aligned under this theme. These topics are neither comprehensive nor prescriptive. In line with the bottom-up approach of CELTIC-NEXT, projects are free to explore



Topical areas of the CELTIC-NEXT Roadmap 2021–2025

any subject, as long as it is related to ICT and telecommunications.

A core part of the roadmap relates to the evolution of communication networks. The roadmap identifies the ongoing digitisation and automation of many aspects of our lives as fundamental drivers for transforming the communications network architecture and functionality. The shift to automation of everything is driven by current enabling technology trends like cloud-based services with dynamic, adaptive scaling, extensive virtualisation, novel software-defined automated solutions and ever-increasing wireless connectivity with a great promise of 5G, Beyond 5G, and the nascent 6G, and will require a redefinition of networking concepts and a new digital infrastructure involving radical shifts in technologies, architectures and business models to meet future digital needs

The roadmap highlights a number of important trends and requirements expected to shape the projects and results of the CELTIC-NEXT Cluster in the coming years, including: pervasiveness, almost infinite network capacity, imperceptible latency, tera-scale things, cognitive operations, and perpetual protection. Addressing the digital needs will require significant changes in network architecture and technology. Nine dimensions are identified in the roadmap towards an end-to-end convergent network architecture: 1. Massive-scale access, 2. Converged edge cloud, 3. Smart network fabric, 4. Universal adaptive core, 5. Programmable network operating system, 6. Network slicing, 7. Augmented cognition systems, 8. Digital value platforms, and 9. Dynamic data security.

Further related areas of the roadmap beyond communication networks in the narrow sense include: cybersecurity, artificial intelligence and big data, ICT solutions for sustainability, ICT-enabled health and wellness, new solutions for consumption and production, smart cities and smart territories, smart transport, smart energy, smart agriculture, smart home and smart building, digital enterprise and digital education, content, entertainment and gaming, fintech, and digital life services.

Many of the topics identified in the roadmap go across several Eureka Clusters, which is intentional, as ICT is at the core of innovation in all vertical sectors. In line with the concept of the revised Cluster Programme, CELTIC-NEXT will use these cross-Cluster topics as opportunities for creating synergies and increasing impact across the whole programme. Only in this way can CELTIC-NEXT and the other Clusters in the programme continue delivering top-level industry-driven innovations addressing the needs of economy, society and environment. In line with this cross-Cluster collaboration spirit, CELTIC-NEXT is one of three Core Technologies Clusters, together with partner Clusters ITEA (software) and Xecs (hardware). As a Pillar Cluster, CELTIC-NEXT supports the two more application-based Clusters EUROGIA2020 (low-carbon energy technologies) and SMART (manufacturing).

### **Excellence targets**

CELTIC-NEXT has defined a set of excellence targets in order to keep its activities focused on achieving substantial measurable impacts. These targets are divided into three areas:

### 1. Technical excellence targets

- 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 in Europe
- Actively facilitate the adoption of those ICT technologies by all targeted Verticals into their communities, business models and processes
- 2. Economic excellence targets
- Consolidate the position of European ICT manufacturers and service providers within Europe and on the global market
- Contribute to all Eureka Communities tackling the technological and socioeconomic challenges in a holistic way by considering the end-to-end perspective of new communications solutions

- 3. Societal and environmental excellence targets
- Investigate where advanced communications can reduce carbon footprints for many vertical sectors
- Assist European nations and industry to access the societal benefits and returns of being at the forefront of the new digital society
- Consolidate the European sovereignty in ICT technologies and services as well as other critical infrastructures relying on ICT infrastructures, like the Energy Grid

These targets are highly ambitious and require close collaboration between the private and the public sector. The revised Eureka Clusters Programme provides the structure and the ecosystem to achieve them.

### High number of proposals in Eureka Clusters Al Call 2021



The second Eureka Clusters AI Call, which was launched on 1st March, has attracted a high number of project proposals. By the deadline of 28th June, 43 proposals had been submitted. These proposals represent a total commitment of 2,518 person years by international researchers and developers from large enterprises, SMEs, research & technology organisations, and academia.

The aim of this Call is to boost the productivity and competitiveness of European industries through the adoption and use of Al systems and services. 14 Eureka countries have allocated budget to support ground-breaking Artificial Intelligence innovations. The Call has been jointly organised by the following Eureka Clusters: CELTIC-NEXT, EUROGIA, ITEA, PENTA-EURIPIDES, and SMART. For 9 of the submitted proposals, CELTIC-NEXT has been selected as the primary Cluster. For 6 additional proposals, CELTIC-NEXT has been selected as the secondary Cluster. This means that CELTIC-NEXT has been selected in more than a third of the proposals among the 5 Clusters.

The proposals are now being evaluated. Results are expected to be known by the end of September.

### > Further information

Eureka Clusters AI Call website - https://eureka-clusters-ai.eu

### 6 new projects received CELTIC-NEXT label



In the CELTIC-NEXT Spring Call 2021, 10 validated proposals submitted by 12th April 2021 got selected in the evaluation process, and out of them 6 new projects received the CELTIC-NEXT label.

The labelled projects are now eligible for funding by the project partners' national funding bodies.

The consortia of the six projects include a total number of 76 partner organisations from 12 countries, ranging from leading industry players to SMEs and academic institutions.

- The six projects include the following topics:
- > 6G for Connected Sky
- > Massive IoT over High Density LoRaWan Networks
- Ultra Scalable Wireless Access
- > AI-Powered Communication for Health Crisis Management
- > Federated AI Platform for Industrial Technologies
- Cloud-based Online Access to Computational Fluid Dynamic Simulations

As soon as the funding for the new projects is confirmed and they are ready to start, each of them will be presented on the CELTIC-NEXT website (www.celticnext.eu).





### About CELTIC-NEXT

CELTIC-NEXT is the EUREKA Cluster for next-generation communications enabling the inclusive digital society. CELTIC-NEXT stimulates and orchestrates international collaborative projects in the Information and Communications Technology (ICT) domain. The CELTIC-NEXT programme includes a wide scope of ICT topics based on new high-performance communications networks supporting data-rich applications and advanced services, both in the ICT sector and across all vertical sectors.

CELTIC-NEXT is an industry-driven initiative, involving all the major ICT industry players as well as 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 own benefit, aligned with their national priorities, to advance the development and uptake of advanced ICT solutions.



∑eureka