



The Celtic-Plus cluster for: Telecom Network Infrastructure, Services and Applications



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International Cooperation in Research and Innovation
EUREKA and Eurostars Programme
07 – 08 December, 2016 - Prague

What do you want to do?

- ✓ You want to perform collaborative R&D projects within Europe and beyond
- ✓ You want to get public funding support
- ✓ You want to have a high chance to get your project approved and funded
- ✓ You want low administrative overhead
- ✓ You want a flexible framework
- ✓ You want high exploitation potential and business impact

Our solution

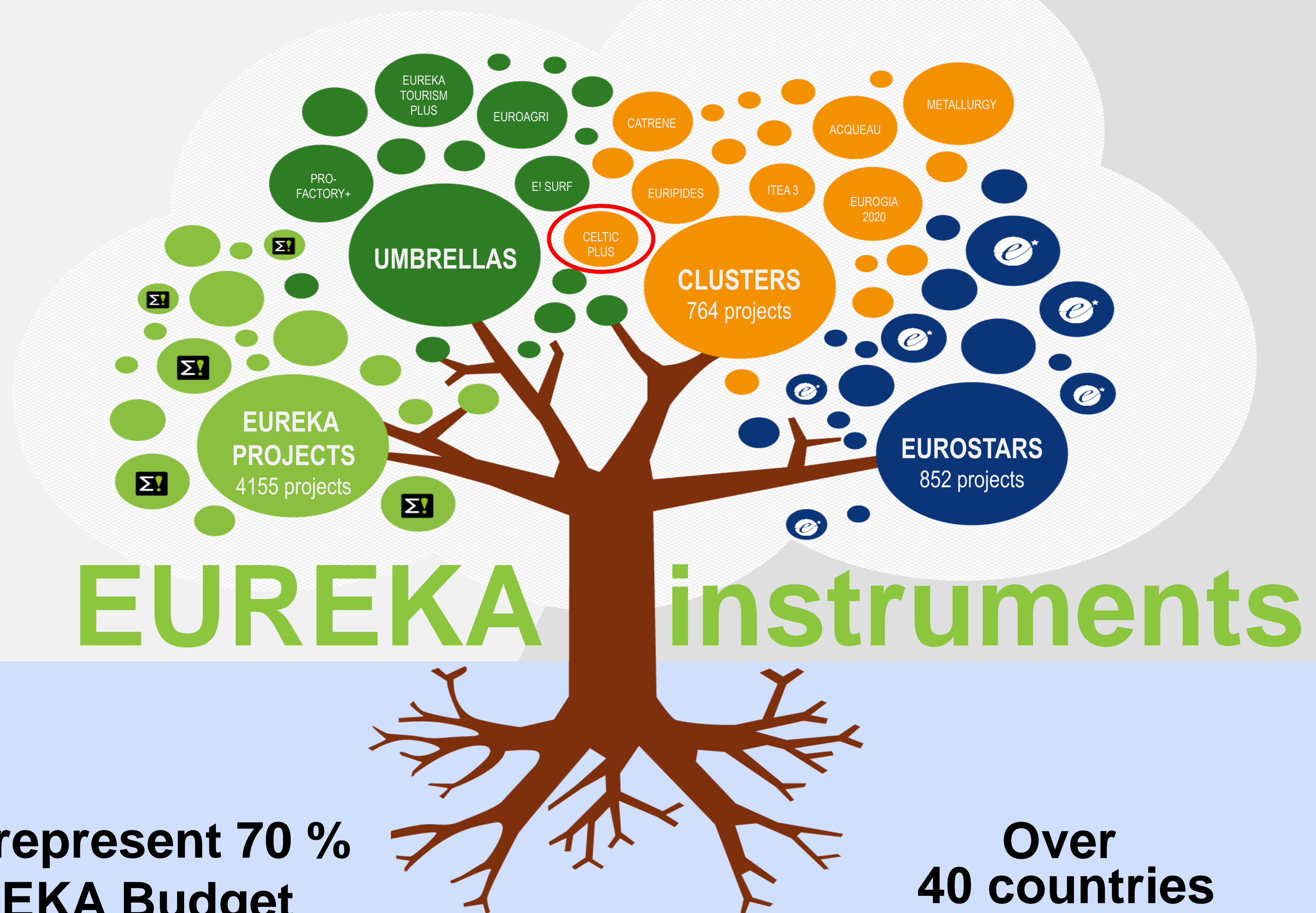


Use EUREKA and Celtic-Plus as your platform

This talk

- What is Celtic-Plus
- Label and Life cycle of Celtic Plus Project
- Some project highlights
- Coming Events and Calls





**Clusters represent 70 %
of EUREKA Budget**

**Over
40 countries**



Celtic-Plus is....



- Telecommunication and ICT Cluster under the umbrella of EUREKA
- Open to any organization ready to contribute to the industry-driven European ICT research programme
- Participation through project proposals to regular project calls
(next Call deadline: 07 April 2017)
- Collaborative Celtic-Plus projects are financed through public and private funding
- 900 private and public organisations have participated, including
 - large industry players
 - small & medium-sized enterprises
 - academic/research institutions



Celtic-Plus Organisation



National Authorities



Management Team

Chairman: Jacques Magen

**Vice-Chair:
Valerie Blavette, Orange**

**Vice-Chair:
Jari Lehmousvori, Nokia**

**Vice-Chair:
Riza Durucasugil, NETAS**

**Celtic Office Director
Peter Herrmann**

CELTIC-PLUS OFFICE

Programme
support team

Technical IT
support team

Office admin
support team

PR & Marketing
support team

Finance
support team

Celtic-Plus Benefits

- **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 800 new or improved products and services.

- **Success Rate**

High-quality proposals have an good chance of receiving funding.
Average success rate 60 %.

- **Flexibility**

Project focus can be adjusted to new technological developments in the field.

New or improved products

815

Number of directly generated patents

490

Prototypes/ field trials

880

Number of standards contributions

1030

Number of publications/ conferences

2730

Number of PhD/ Master thesis

840

Since 2011 66 finished Projects

Celtic-Plus Hot Research Items

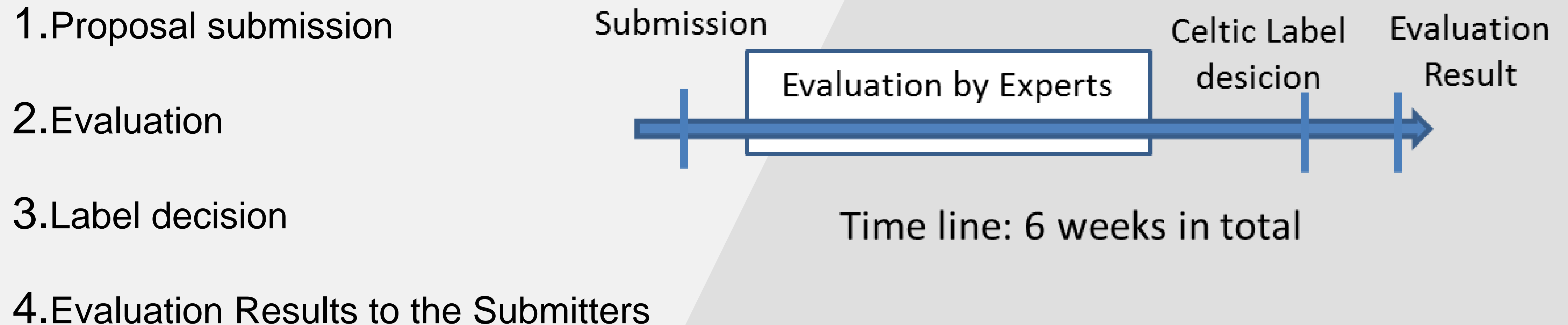


- 5G, next generation of mobile and wireless networks
- Internet of Things with billions of sensors and activators
- Energy efficiency: reduce energy consumption of ICT equipment; better manage Power Systems through communication
- Satellite and its convergence with terrestrial networks
- Network deployment, operation and management for economically sustainable networks
- Security, privacy, identity and public safety, including critical communications infrastructure
- Smart cities, smart homes, digital enterprises, requiring cross-sector approaches
- Industry 4.0, the current trend data exchange and automation in manufacturing technologies.
- E-health, solutions in response to the challenges of the aging European population
- Cloud services and Big data, including the related research challenges for data capture, storage, analysis, transfer, privacy
- Fintech: new technologies and innovation for disruptive financial technologies.

Celtic-Plus Project Timeline



4 Steps towards the Celtic-Plus Label



In Parallel: Contact your national authorities:

<https://www.celticplus.eu/public-authorities/>

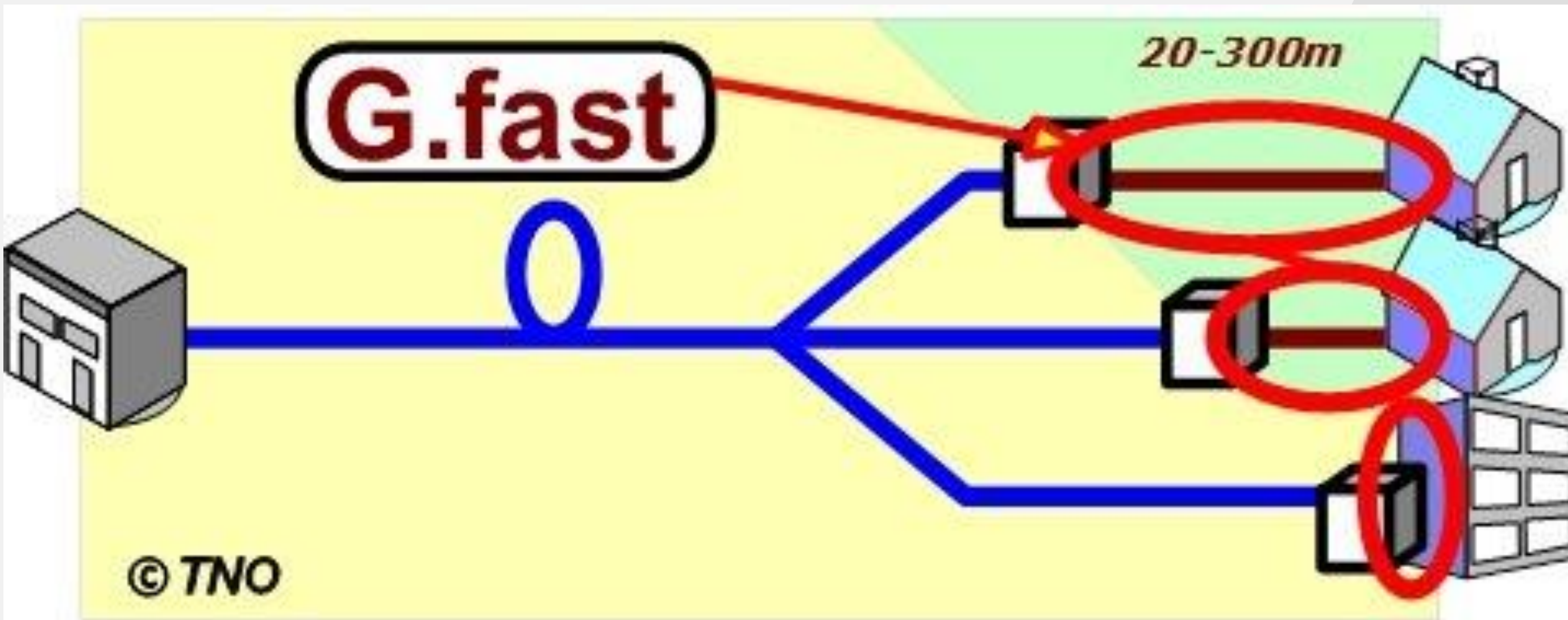
+ Funding negotiations with your national authorities after Celtic-Plus Label

Celtic-Plus Project

Highlights

Cost-effective ultra-broadband access based on G.fast standard

- The HFCC/G.fast project demonstrated throughput of nearly 1Gbps per copper pair at 100 meters, and up to 170Mbps per copper pair at 480 meters, on a 16 pair standard cable (an order of magnitude improvement compared to existing DSL technologies).
- G.fast is quickly turning into a key technology for European operators, said Trevor Linney, head of Access Network Research at BT. “During our lab evaluations, it has outperformed our expectations in terms of bitrate and reach for fixed line subscribers.



Ilan Rozen
Sckipio
Project Partner

Celtic-Plus Project Highlights



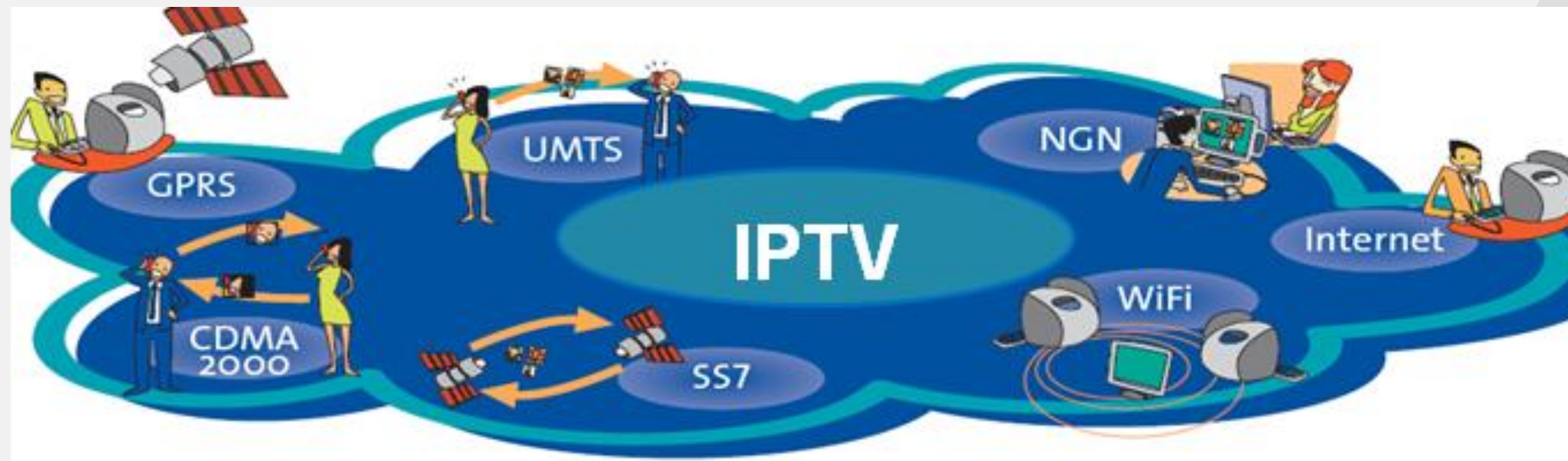
IPNQSIS: IP Network Monitoring for QoS Intelligent Support

A Customer Experience Management System was developed that monitors IP-based services (IPTV) from customer perspective to assure the optimal levels of Quality of Experience (QoE).

IPNQSIS

Customers and their Suppliers:

- 1) Main European IPTV provider: Alcatel-Lucent/Nokia, SoftTelecom, Naudit, Broadcom
- 2) Leading mobile phone operator in Turkey: Institut telecom
- 3) Biggest customer in France: Vierling Communications
- 4) Largest French ISP: IP Label
- 5) Leading operator in Finland: VTT
- 6) Others



Industrial Exploitation

26 products
• 10 new products
• 16 improved
6 standards,
6 commercial presentations

Dissemination

- 55 publications
- 17 MSc and PhD theses
- 14 exhibit

CUSTOMER EXPERIENCE MANAGEMENT SYSTEM



Celtic-Plus Project

Secure Communications for Europe

Celtic-Plus Flagship project with more than 60 project partners and a budget of 80 M€

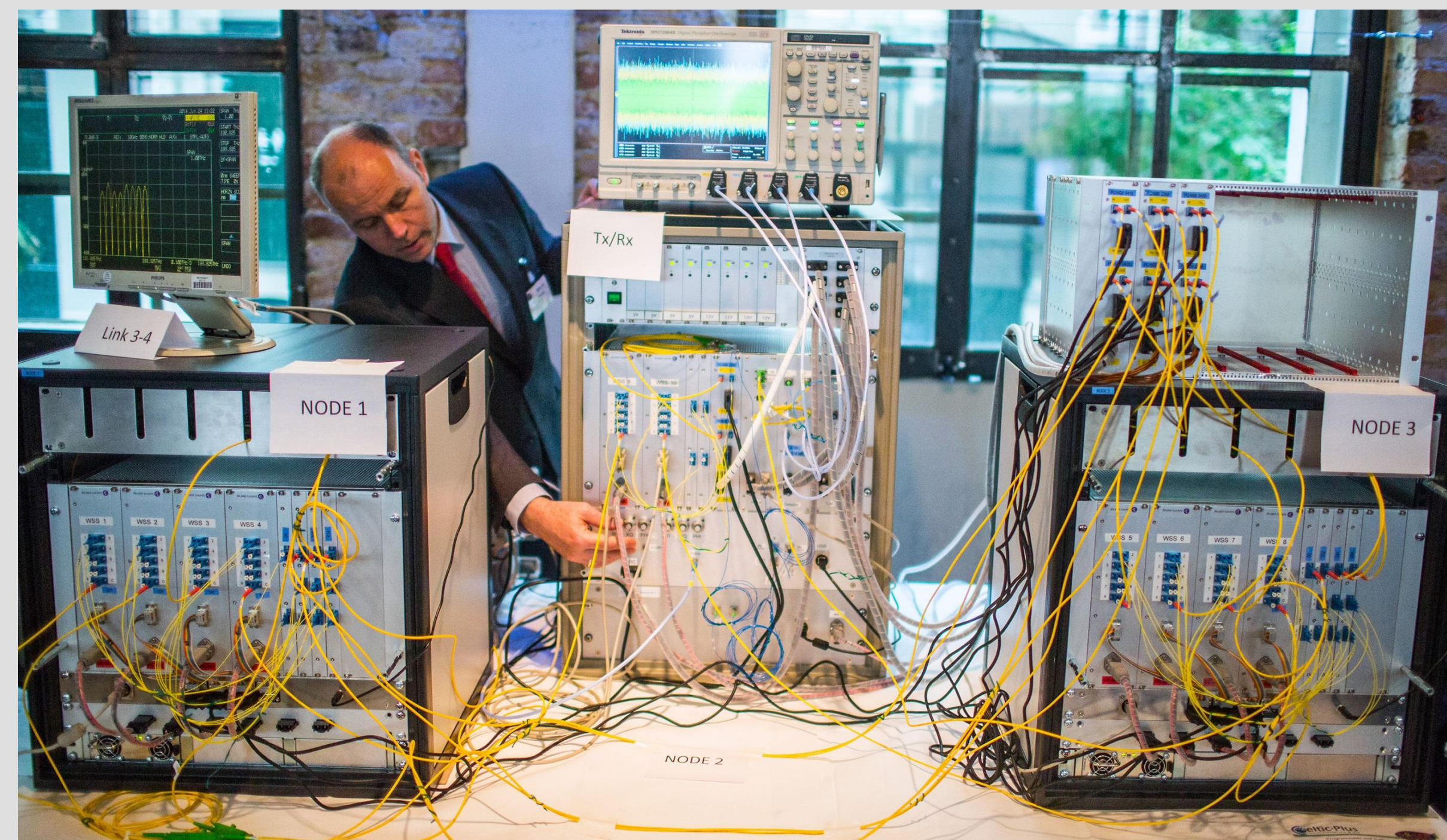
Record-breaking Transmission Field Trial of 38.4 Tbps over 762 kilometers

by von-



Cornelia Rogall-Grothe (State Secretary, BMI – German ministry of the interior) and Dr. Georg Schütte, state secretary of the German Federal Ministry for Education and Research (BMBF) - Copyright: hannibal/BMBF

Marseille-Lyon Fiber Optic Link



Copyright: hannibal/BMBF

Celtic-Plus Project

Kick Off Event of the 70 M€ Flagship Project SENDATE in Berlin



“Secure Networking for a Data centre cloud in Europe”

SENDATE will work on a solution to connect European data centres through enhanced transport networks and improved networking concepts that will result overall

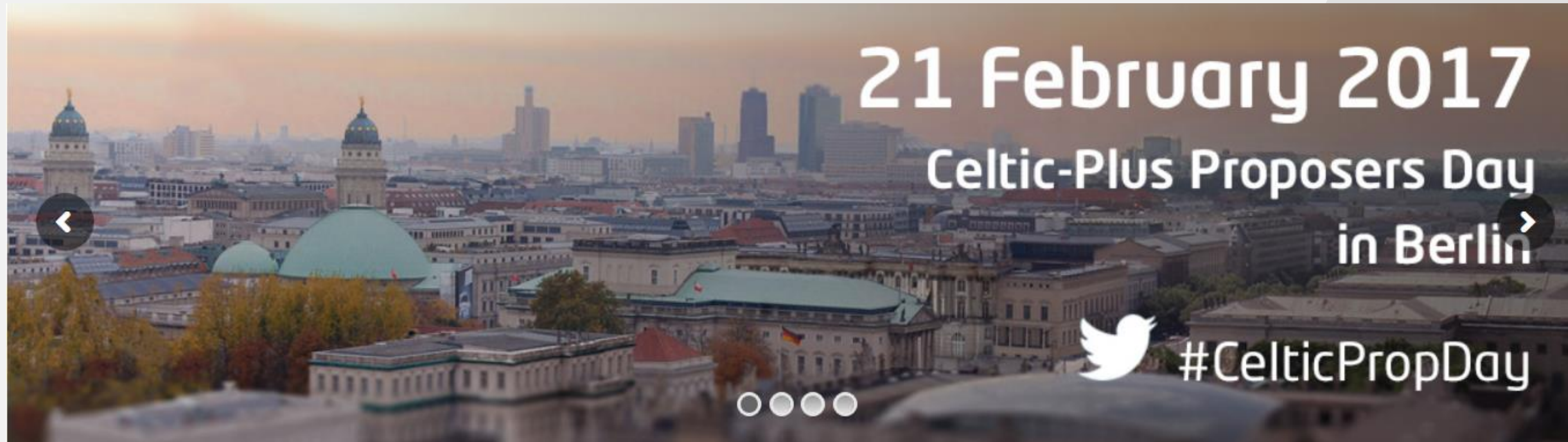


[From left to right: Dr. Ulf Lange (Head of Unit, Communication Technologies, IT-Security, BMBF), Dr. Raine Hermans (Director, International Operations, TEKES, Finland), Benjamin Gallezot (Deputy Director General, DGE, France), Jon Simonsson (Deputy Director General at Ministry of Enterprise and Innovation, VINNOVA, Sweden), Jacques Magen (Celtic-Plus Chairman). [Photo: © 2016 Steffen Gebert]]



[Photo: © 2016 Christiane Reinsch/Celtic Office]

Upcoming Celtic-Plus Events



<https://www.celticplus.eu/event/celtic-plus-proposers-day-in-berlin/>

Celtic-Plus Proposers Day at Deutsche Telekom in Berlin:

Discuss your project ideas with potential partners and find out about funding opportunities in your countries.

Celtic-Plus in Barcelona:

- Opportunity to network with proposers and experts
- Exhibition of 15 Celtic-Plus projects.
- Meet representatives from national governments
- Celtic-Plus Award



<https://www.celticplus.eu/event/celtic-plus-event-in-barcelona/>

Next Celtic-Plus Calls

**Deadline for next Call for project proposals:
07 April 2017**

Preparing and submitting a Celtic-Plus project proposal is easy:

- register on the Celtic-Plus Online proposal tool
- fill in the Webforms
- upload your proposal in pdf

A template for the proposal can be downloaded from our Call information page (“proposal forms and documents”)

Information via www.celticplus.eu

The following Celtic-Plus Call will be on **mid October 2017**.



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

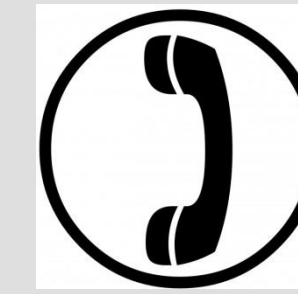
Celtic-Plus Call for Project Proposals

Deadline: 7 April 2017

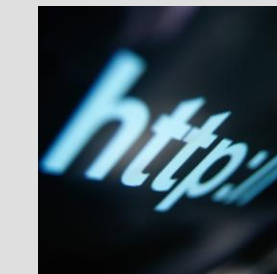


Celtic-Plus is the EUREKA Cluster
for Collaborative Research in ICT
www.celticplus.eu

Contact



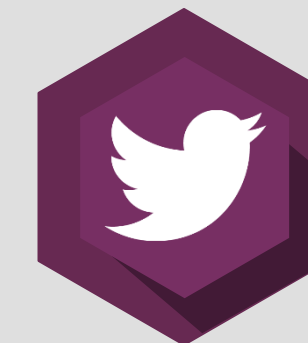
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<https://www.linkedin.com/grp/home?gid=3875389>

