



# eltic-Plus<sup>+</sup>

Smart Connected World

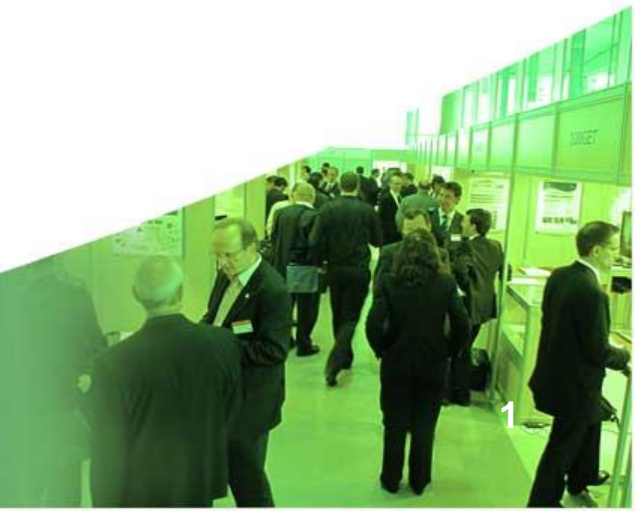


Celtic-Plus Proposers Day  
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## **SooGREEN**

### ***Service Oriented Optimization of Green Mobile Networks***

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# *SooGREEN: A new “Service Oriented” Approach for Optimization of Green Mobile Networks*



- Mobile networks are witness of the **emergence of new services** with an **exponential growth of traffic volumes**
  - **Video services** constitute a major part of the traffic and their share is expected to increase.
  - **Internet of Things (IoT)** related traffic will gain in importance with the explosion of the number of connected objects.
- This situation pushes towards an **evolution of network architectures (e.g. LTE-A features on centralized/virtual RAN)** and of **content delivery solutions (e.g. in network caching)**.
- **SooGREEN** is built around the need of **reducing the energy consumption of services** in light of the traffic evolutions and exploiting the new network architectures, while keeping in mind the **development of smart grids**.





# Proposal Introduction



- Celtic Plus project labeled the 14th November 2014
- Activity has just started :1st July 2015 up to 30th June 2018
- **SooGREEN objectives**
  - **E2E Services (OTT, P2P, Web browsing, IOT/WoT) power consumption** for network architecture, user equipment, and datacenters
  - **Services ( VoLTE, M2M, IOT) network and caching Performance Optimization, including VRAN**
  - **Service Delivery Interaction** between mobile networks and **smart-grid**: services adaptation, demand-response, renewable energy business model to evaluate investment opportunities
  - **Technical Environment optimization for base stations** (power conversion, power back-up) **and central offices** (cooling)





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# Partners



*Existing Consortium, involved countries*

Country	Industry	Telco	SME	University / Research
Finland	Nokia, Efore	Elisa		
France	Alcatel-Lucent Bell Labs France, Arelis Broadcast	Orange	Carri Systems, Lemasson Ataway	Institut Mines Telecom, University Caen Basse Normandie
Turkey			Polaran	

*We look for the following expertise, and profiles to enhance current consortium :*

- *Industry, Telco, SME, University/Research*
- *Expertise:*
  - *New kind of services: OTT, P2P, web browsing, IOT/WOT, VoLTE, M2M, D2D...*
  - *Mobile Network: Optimization of Radio Access Network and Content Delivery solutions, Energy consumption in Virtual Radio Access Network*
  - *Energy : Interaction between service delivery in mobile networks and smart-grid*



# Contact Info

For more information and for interest to participate please contact: <https://soogreen.cms.orange-labs.fr/soogreen>



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