



eltic-Plus⁺

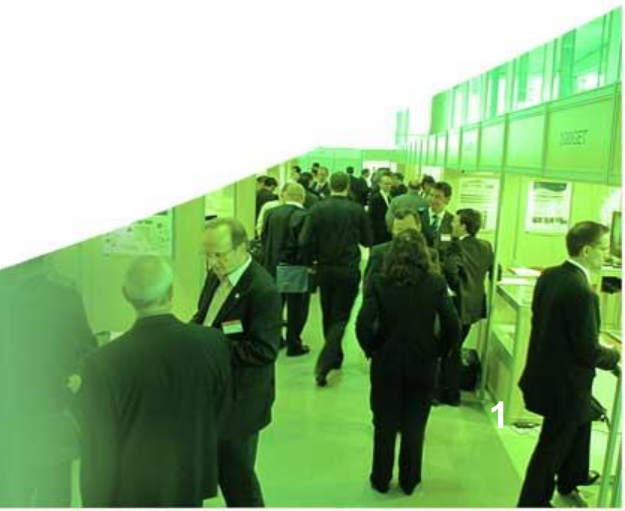
Smart Connected World



Proposers Day
7 May 2015, Oulu

Celtic-Plus Success Stories 4GBB – HFCC – GOLD

*Per Ödling
Lund University*





3 projects: 4G BB-HFCC-GOLD



What did we do?

- **The new broadband standard in the DSL-series: G.fast. Up to 1 Gbits/second**
- **We initiated the G.fast standard in 2011**
- **Standard completed 2014 (1st version)**
- **We wrote more than 400 standards papers**
- **Market value about 10.000.000.000 Euro**

- **Many partners are self-funded (i.e. they pay to be in the project)**

Previous Access Standards

	ADSL	VDSL	G.fast
Start of standard development	1992	1996	2011
First approved ITU standard	1999 (T1.413 approved in 1996)	2004	2014
Start of interop tests	~2003	~2006	2015
Start mass deployment	~2000	~2009	Expected: 2016
Years to deployment	11 years	13 Years	5 Years

To succeed – 1 – BEER

Beer (or just be nice and generous) leads to:

Trust, which leads to:

Cooperation, which creates:

Innovation and value creation





To succeed – 2 – IMPACT



- Understand that this is not an EU-project
- It is a *flexible* CELTIC-project!
- The project is never the “customer”!
 - Change the project plan constantly to adapt
- **IMPACT!**
- Maximize the projects value creation for industry and minimize their administration



To succeed – 3 – SERVITUDE



- What is the value of university research?
- (close to) NOTHING!
- So how do you create value when your research is NOT going to save the world?
 1. Be the industry's intellectual environment
 2. Facilitate cooperation
 - We chair, administrate and mediate
 3. Buy the beer and the lunches!