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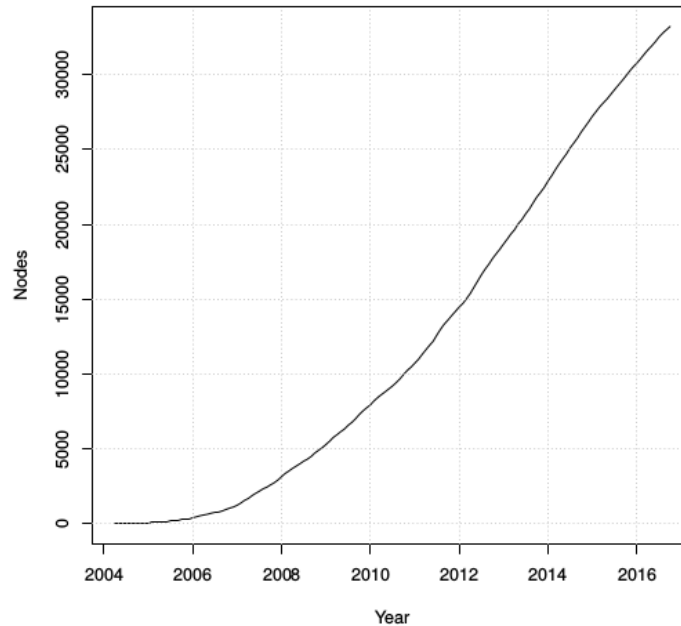

Ripe Meeting 28 / 10 / 2016

gabriel.lucas@guifi.net

CAPEX > 7M€
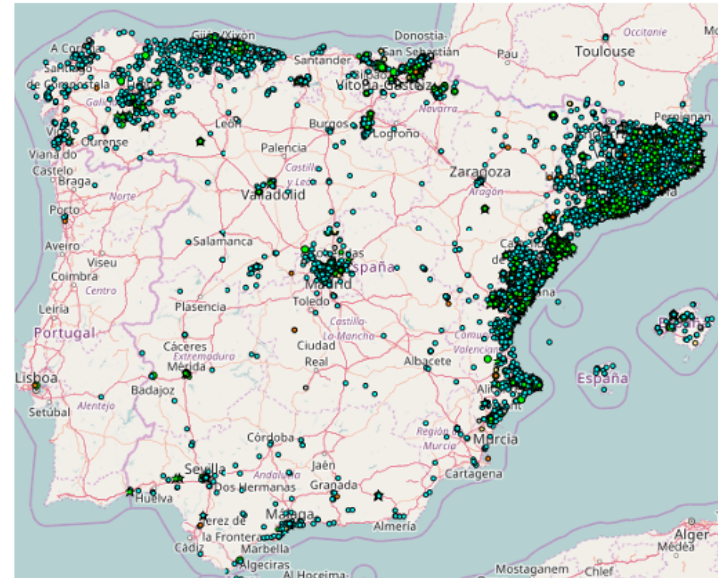
OPEX nearly 3M€ yearly turnover

32k nodes

18 Optical Fibre PoPs in Catalonia

(a) Total number of nodes over time.

(b) Nodes distribution (October 2016).

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FIBER & WIFI

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guifi·net Foundation

Non-profit, non-partisan, without conflicts of interest

https://fundacio.guifi.net

European
Broadband
Award
2015
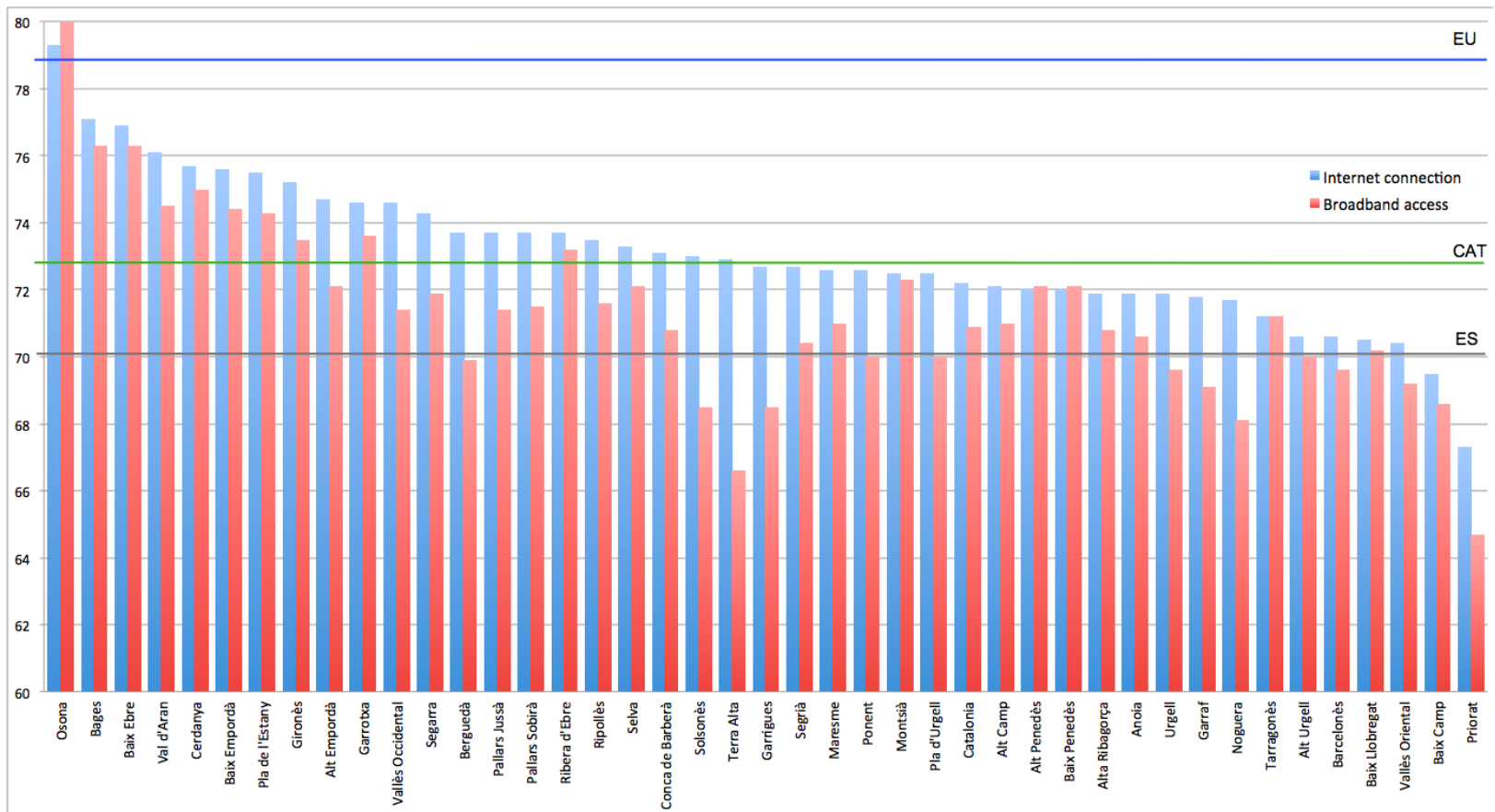
Awards:

– 2007 Catalan National Award – category on Telecommunications

– 2015 European Broadband Award – category on innovative model of financing, business and investment

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Broadband & Internet (mobile) access to the Homes, source IDESCAT 2013

- **User Access / Last Mile**
  - Goal: internet for everyone
  - Typically 90% of the total cost
  - Starting wireless
  - Later, extending to Fibre Optics: Aerial, conduits...
- **Territorial Transport**
  - Needed for Last Mile deployments' interconnection
  - Reusing existing public infrastructures: Roads, Railways, Water pipes, Power lines, etc.
  - "de facto" a large distributed neutral IX
  - Already present in many Catalan counties
- **Full Transit**
  - To the Carrier House and to the Regional IX (CATNIX)
  - 10GB/s ports
  - Redundant internet uplink (independent carriers)
  - Peering with almost all the ISPs present at the IX

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Commons Network

The main project of the *guifi·net* **Foundation** is the development of a telecommunication infrastructure based on the ideas studied by Elinor Ostrom: a commons-based telecommunication resource pool.

guifi·net is a commons-based telecommunication infrastructure of public interest, open to any telecommunications operator and to any person in equal conditions.

A network for defending the Human Right to Internet access as a basic tool for action and social inclusion, that fosters the social, solidary and collaborative economy and develops the Information Society.

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The **guifi·net** Commons Network is:

Open: the **access and knowledge** about the network is **public and available to everybody**.

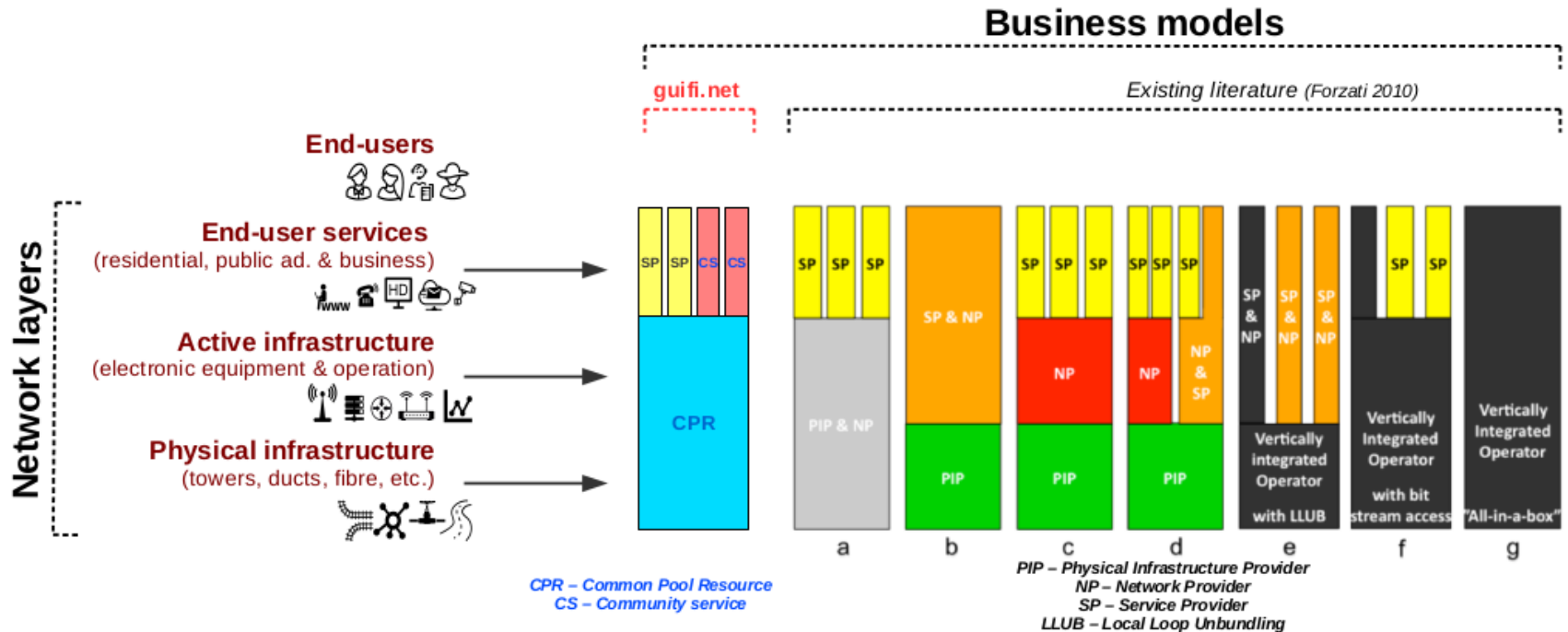**Free**: **Everyone can join.** it guarantees people achieving the right to Access the Internet.

Neutral: the network infrastructure is neutral regarding the **contents** and **services** being carried.

Commons-based: different actors participate in the network managing and operating it as a common pool resource (CPR).

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Open Acces Network model based on the commons

Governance Stack

Sustainable design

Based on collaborative economy
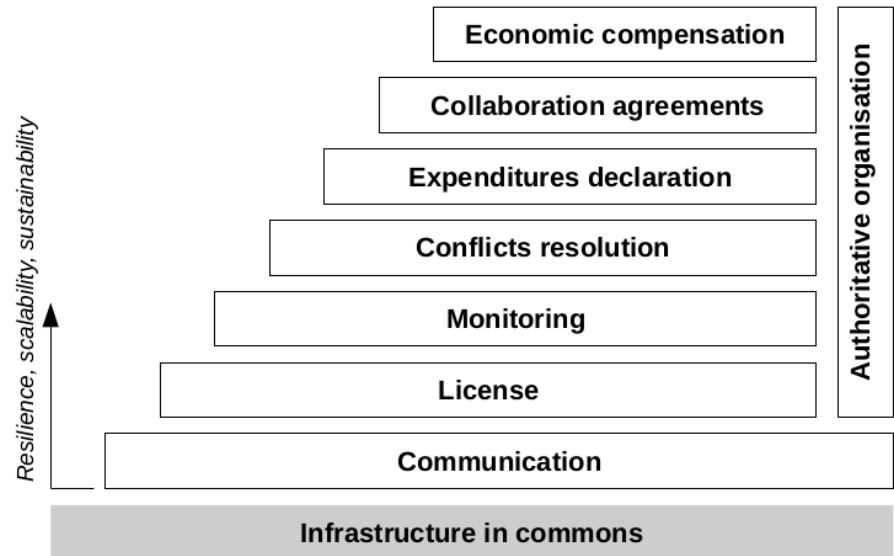
E. Ostrom (2009 Nobel Prize in Economics)

Based on free market but:

- Non-speculative

- Fair Trade

 Accountable

Implemented through:

- signed agreements

- written consensus rules (License Free, Open, Neutral Network)

Resilience, scalability, sustainability

Economic compensation	
Collaboration agreements	
Expenditures declaration	Authoritative organisation
Conflicts resolution	
Monitoring	
License	
Communication	

Infrastructure in commons
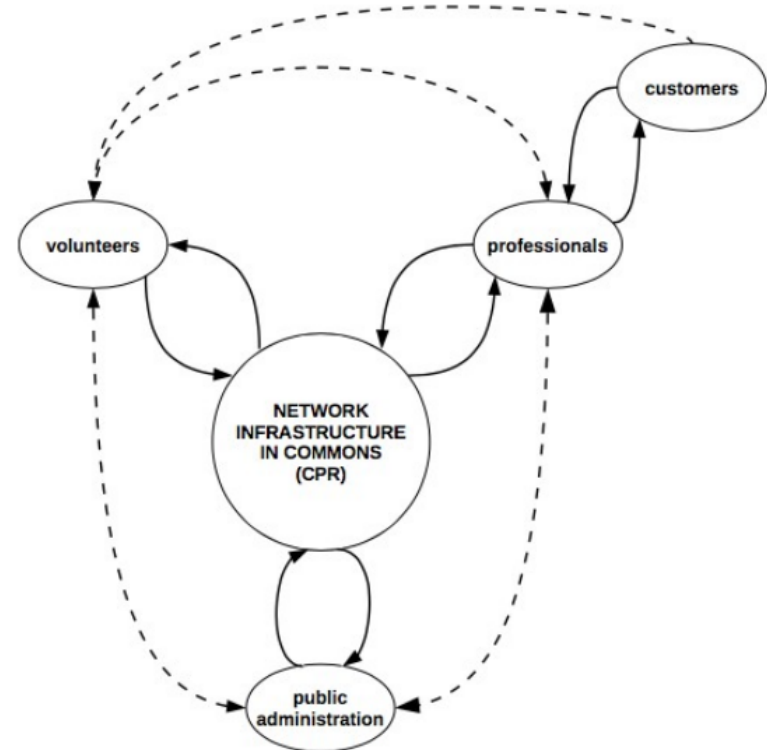
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Relationships

- **Foundation**
  - Common Pool Resource (CPR) Governance

- **Public Administrations**
  - Manage Public Domains

- **Professionals**
  - Provide services
  - Generate Income from customers

- **Volunteers**
  - Contributing to the CPR

More details ...

Video European Broadband Award 2015

The guifi.net community network

R. Baig, R. Roca, F. Freitag, and L. Navarro, "guifi.net, a crowdsourced network infrastructure held in common", in Computer Networks: The International Journal of Computer and Telecommunications Networking, vol. 90, October 2015, pp. 150-165. http://people.ac.upc.edu/leandro/pubs/crowds-guifi-en.pdf

R. Baig, L. Dalmau, R. Roca, L. Navarro, F. Freitag, and A. Sathiaseelan. "Making Community Networks economically sustainable, the guifi.net experience.", in Proceedings of the 2016 workshop on Global Access to the Internet for All (GAIA '16), August 2016. http://exo.cat/~rbaig/pubs/CNs_sustainable.pdf

Davide Vega, Roger Baig, Lloren Cerdà-Alabern, Esunly Medina, Roc Meseguer, Leandro Navarro. "A Technological overview of the gui.net community network". http://people.ac.upc.edu/leandro/docs/analysis.pdf

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BIG THANKS!

QUESTIONS ?

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