The "Rainbow of Digital Citizenship"

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Our society is shaped by information and communication technologies, a continuous reciprocal influence between what happens in the real world and what happens online. This context inevitably extends the citizenship concept which becomes digital, where rights and obligations are properly declined to meet technology opportunities or to face technology misuse. These opportunities, however, challenge the very idea of citizenship and the exercise of underlying rights. The author (with former colleagues) proposed a layered formalization called "The Rainbow of Digital Citizenship rights" [De Cindio et al., 2012] to slice all aspects of digital citizenship in conceptual levels. The framework describes an abstraction of layers spanning from basic network access up to the highest "right to active involvement in policy-making.", i.e., from low to high:

0) **The network**, the infrastructure is relativistic (two observers cannot "see" the same network state no matter what) and traces are often persistent (no privacy), these anti-features should be well known and somewhat corrected;

1) **Services** should be openly standardized, data should be ethically managed, service contracts should be transparent and fair, security and availability should be fulfilled, FOSS software should be used instead of proprietary;

2) **Access**, any citizen should be able to access a set of basic digital services (i.e., mail, storage, computation, etc.) in an equalitarian way;

3) **Education** should be a leverageable right of any (digital) citizen, thus knowledge should be accessible through open licenses and institutional/national education programs should include "digital citizenship" topics;

4) **Transparency**, data should be openly accessible, with very few exceptions, to all citizens that must be able to know factual information about government decisions (pre and post);

5) **Participation** models the right and the duty to create data and to contribute to a digital citizenship community;

6) **Consultation** defines the right to be consulted, institutions should ask digital citizens for comments about decisions that have to be taken, judgment about a topic should be backed by documents;
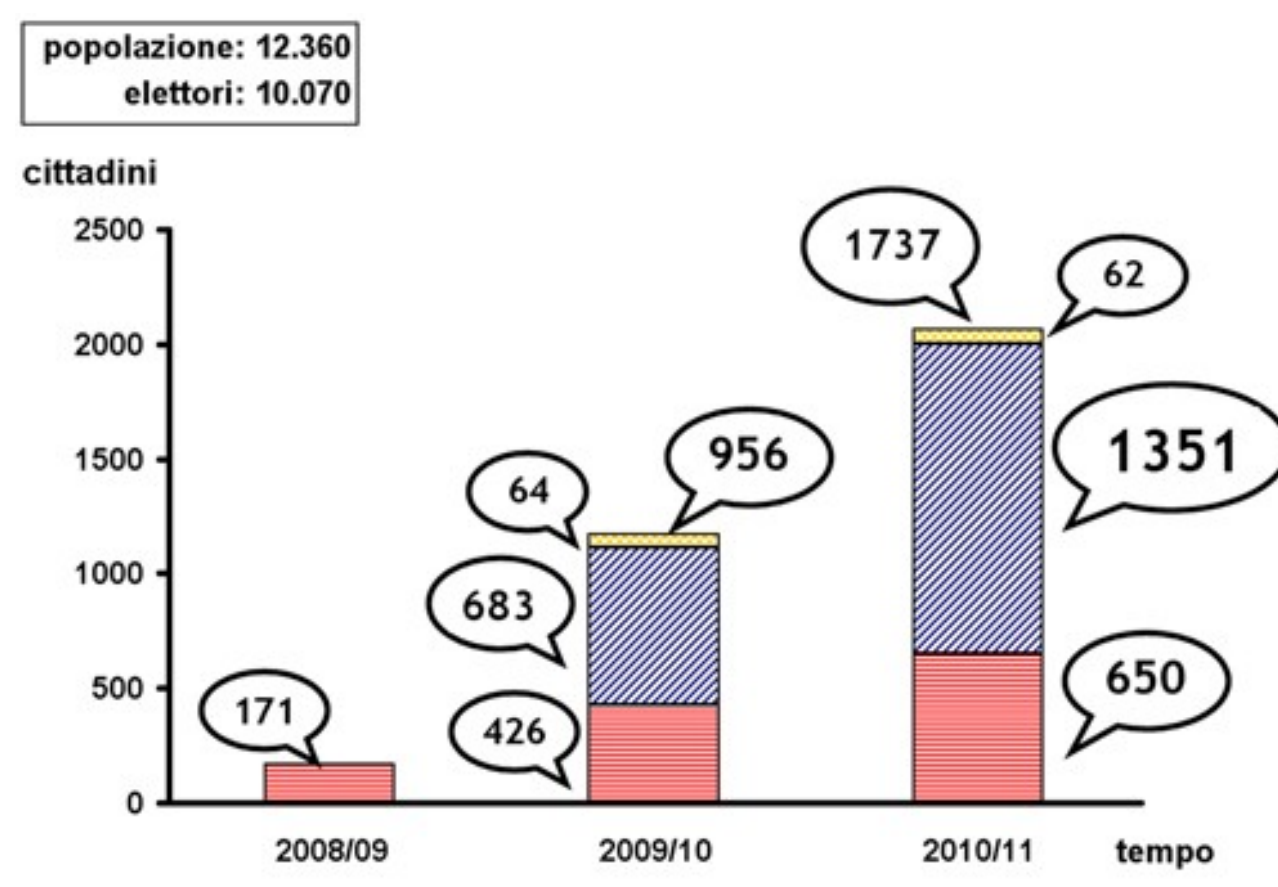
7) **Democracy** is the final and highest level of digital citizenship, it is reached when digital citizens can vote on topics and decisions instead of delegating representatives every few years.
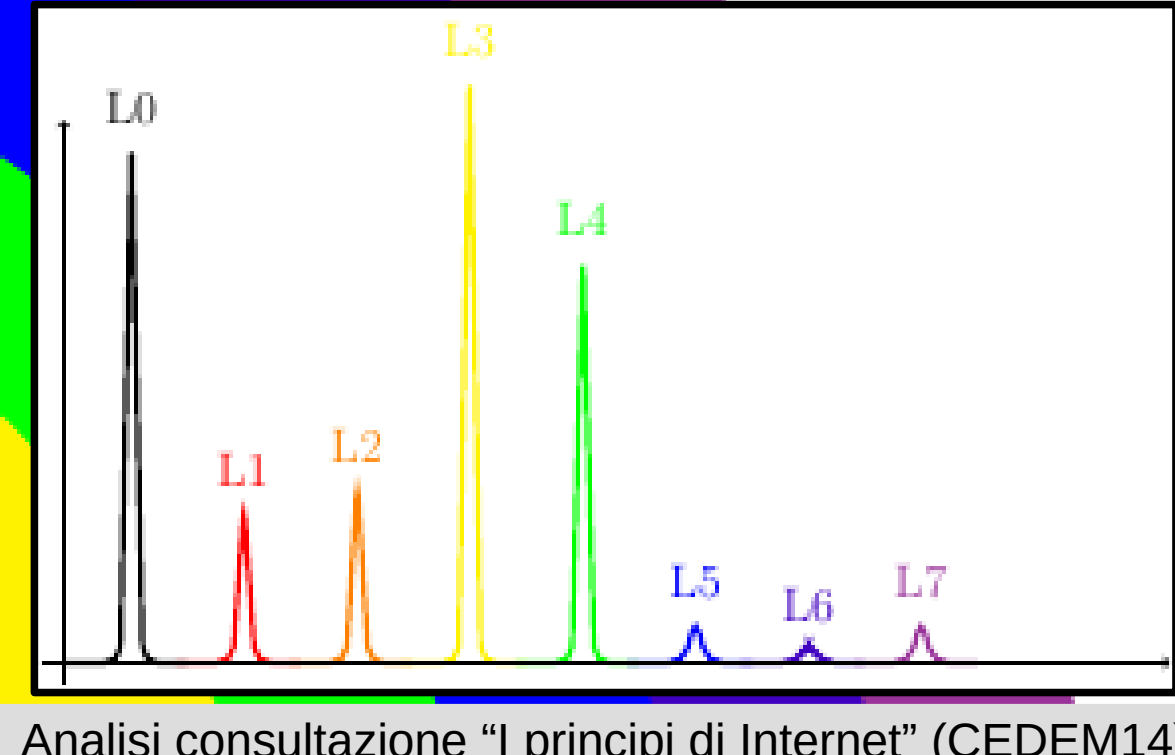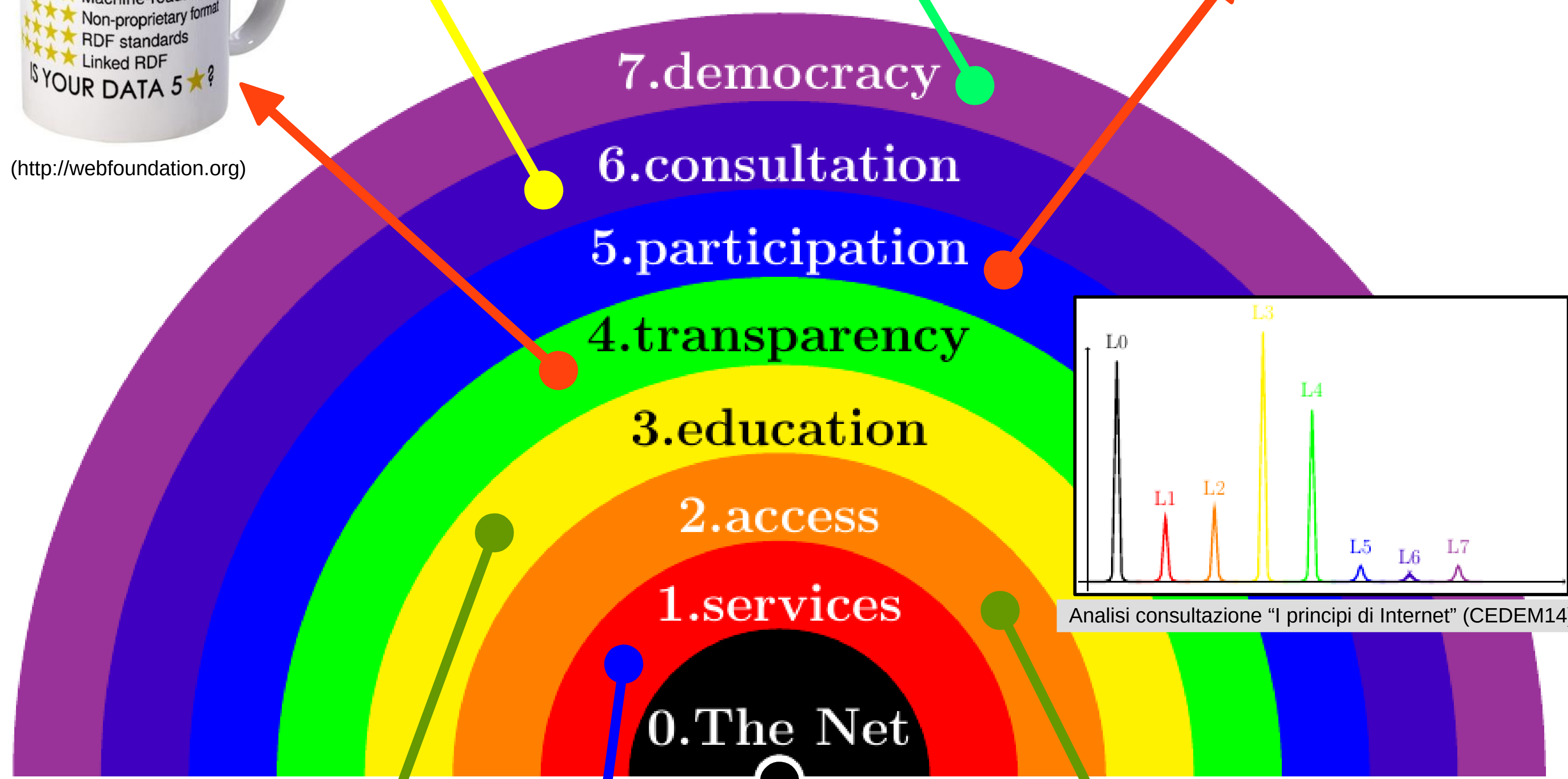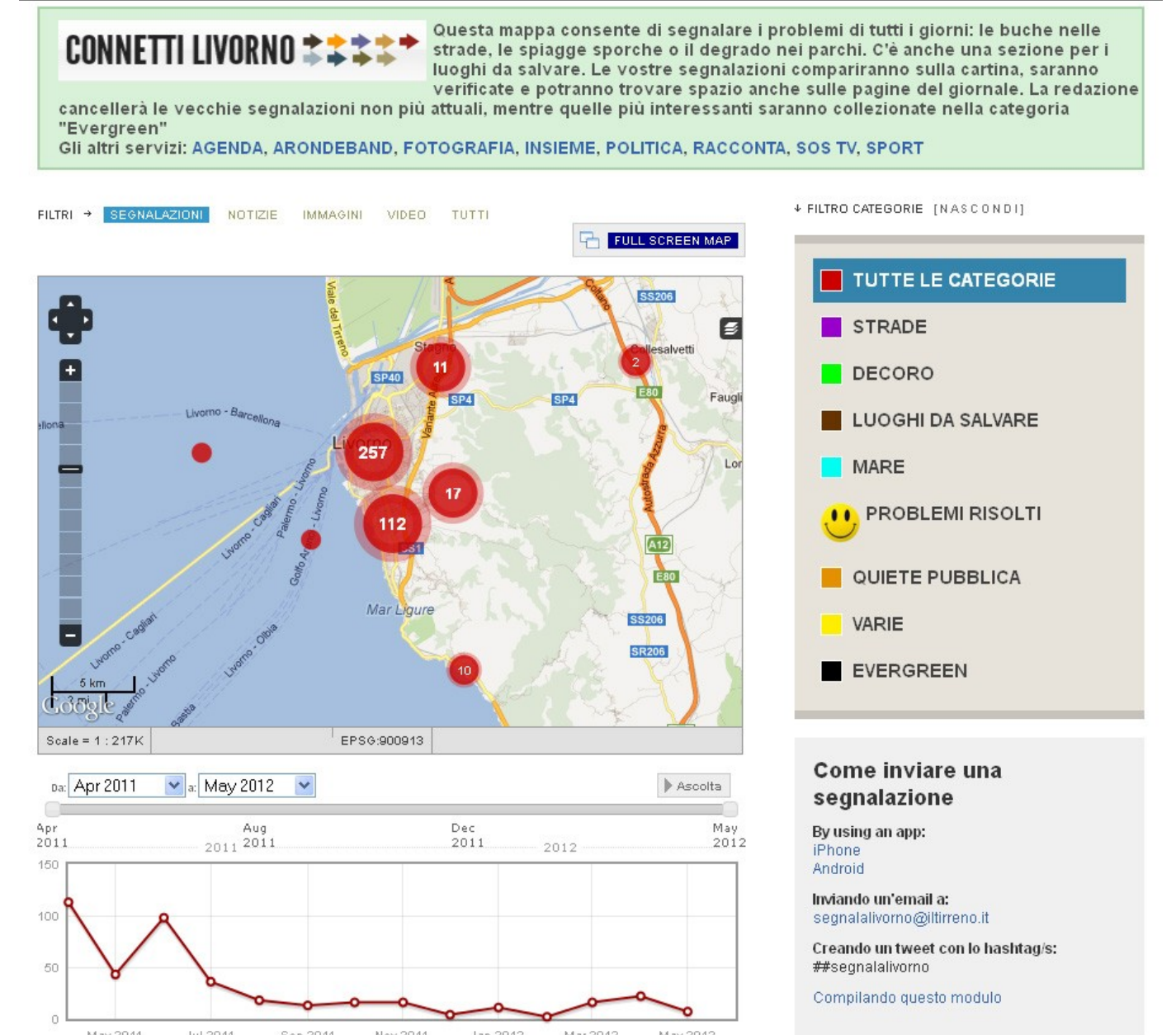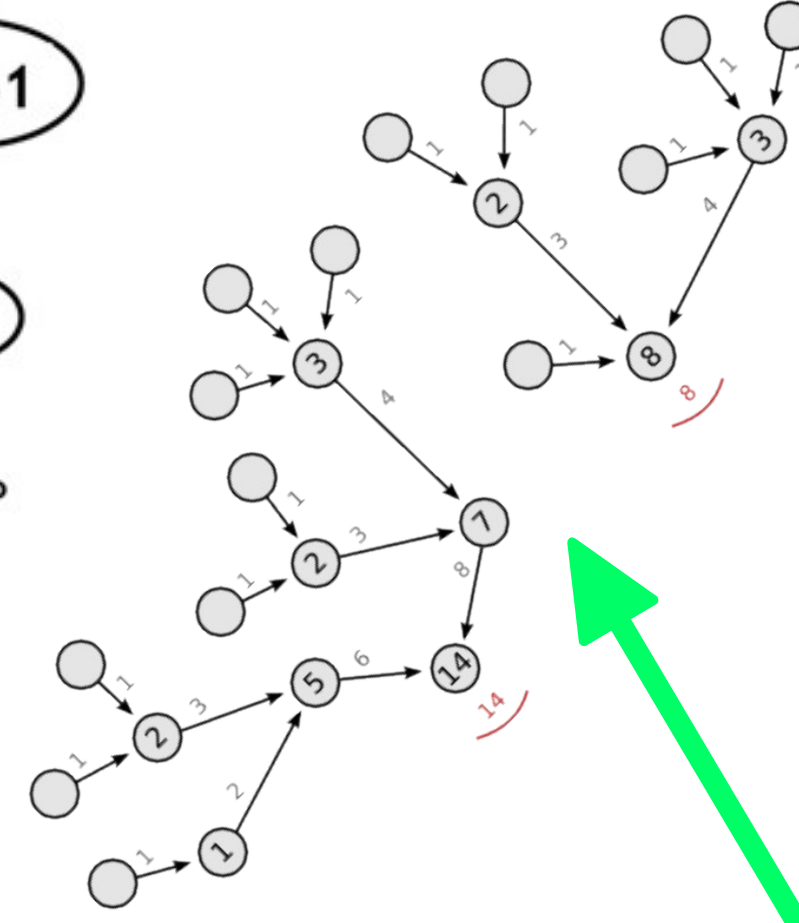
The Digital Citizenship Rainbow goals:
- the capability to analyze situations and contexts where technology is involved in some citizenship process by generating a **spectroscopy-like** diagram of the process under study;
- the availability of a simple and **fairly understandable logical model** to be used when describing a digital citizenship context/process/system in a non technical environment such as when speaking to politicians (decision makers) and citizens (stakeholders);
The framework has been in use and revision during the years, it has been used as a didactic tool throughout the many instances of the Digital Citizenship and Technocivism course at the University of Milano and it has also been tested during design and negotiation of many participatory processes in the region of Lombardy. The model performed very well in both contexts, the two main weaknesses emerged were:
- the sometimes blurred (i.e., not always easy to sketch) boundaries between 5th, 6th and 7th levels;
- the order of the lower levels, changed from access-services-education to the current services-access-education.
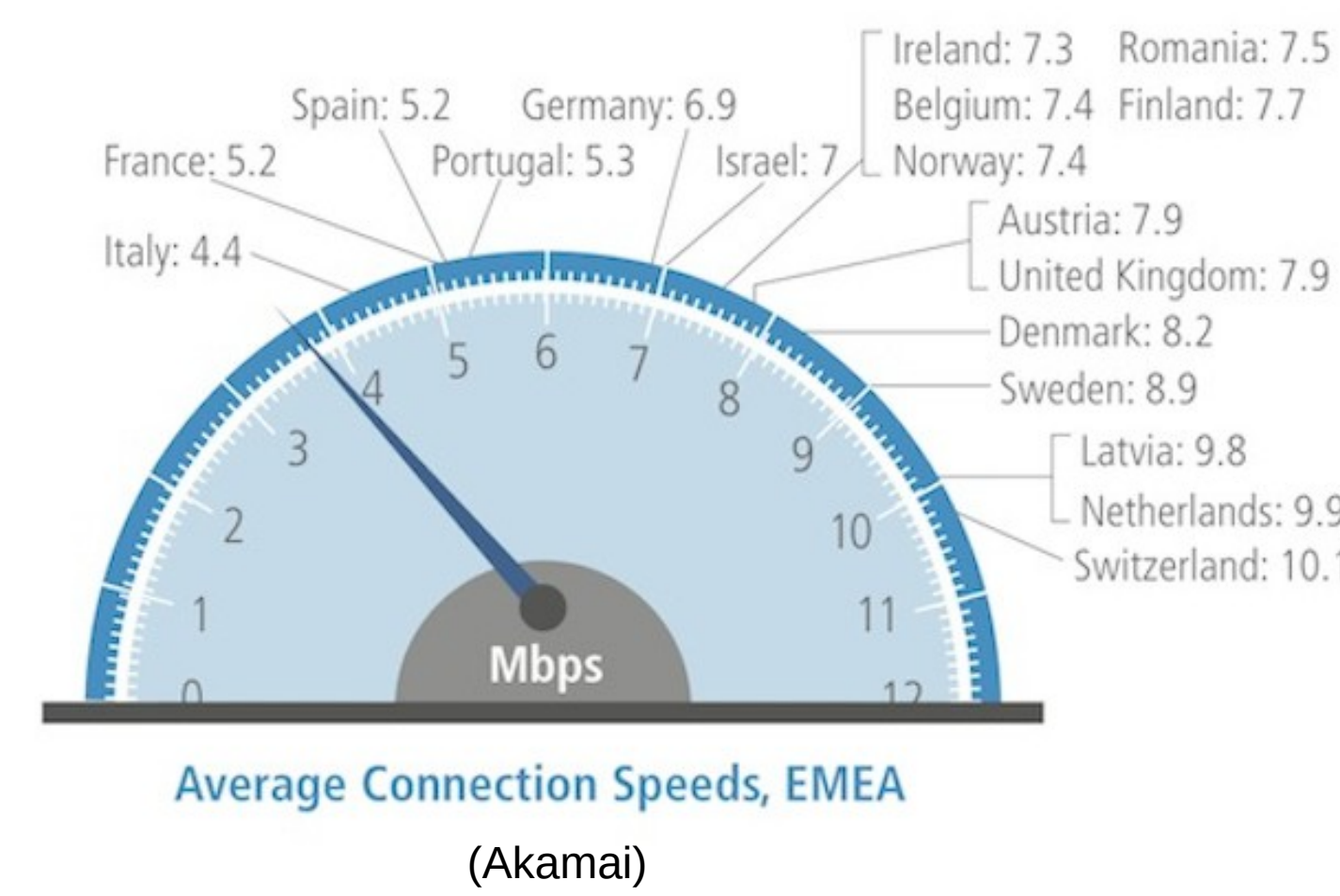

7.democracy
6.consultation
5.participation
4.transparency
3.education
2.access
1.services
0.The Net

(http://webfoundation.org)

(http://fsf.org)

READERS AGAINST DRM

Analisi consultazione "I principi di Internet" (CEDEM14)

Average Connection Speeds, EMEA
(Akamai)

Panopticon (Jeremy Bentham)