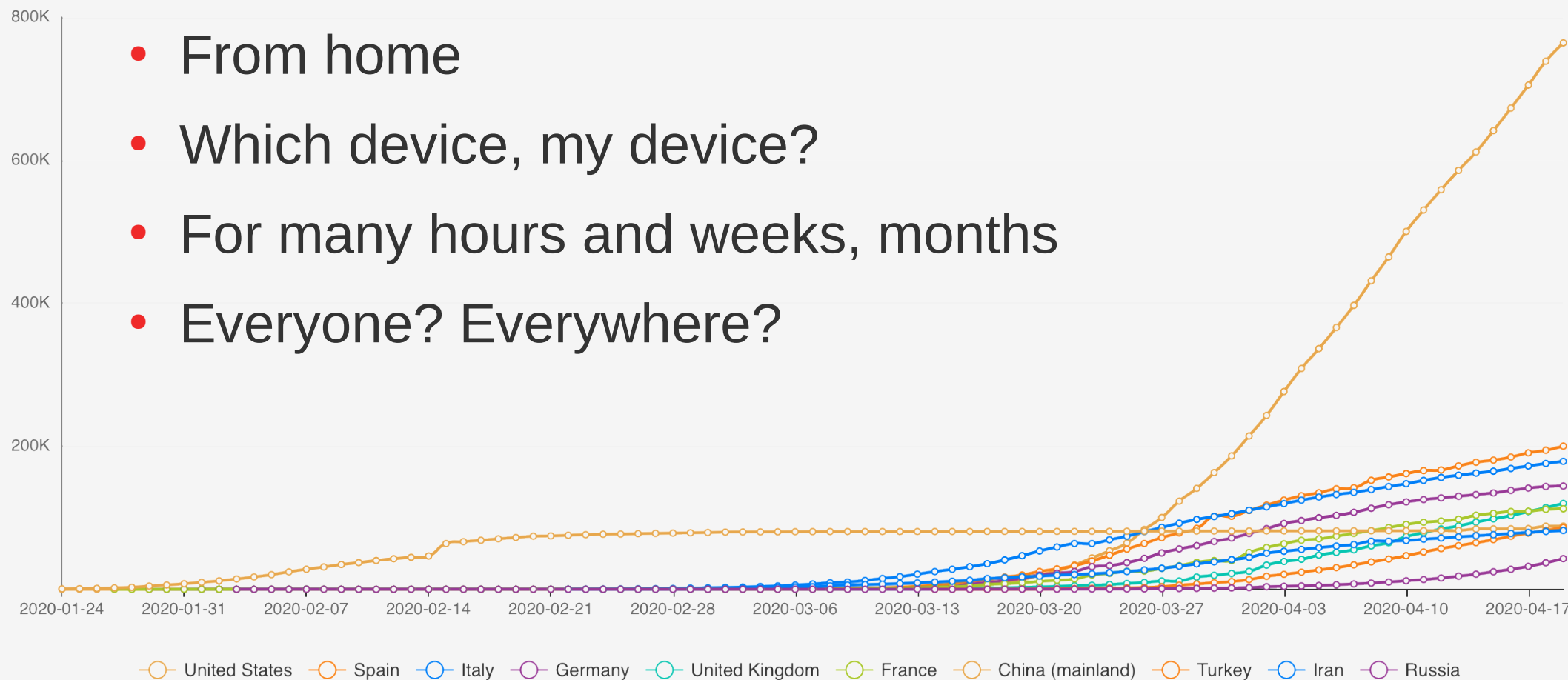# No child left offline: guifi.net, eReuse.org and the pandemic

- **Leandro Navarro**

  UPC.EDU

  leandro.navarro@upc.edu

Situation

- Suddenly: offline from tomorrow!

- All and only over the Internet

- From home

- Which device, my device?

- For many hours and weeks, months

- Everyone? Everywhere?

The challenge

- Region of Catalonia: 7.5 M people, 50K school students may need help to follow school from home

- Intensive use! a few hours a day, weeks or months
  - Connectivity: more than a simple mobile data plan
  - Devices: more than a phone, individual
  - Extra: power, space, light ...

- Span: a few hours a day, weeks or months

- Skills, support, maintenance ...

Resources

- Support networks for families
  - Local orgs/social-enterprises for socio-economic inclusion and mutual support, mothers and fathers assoc linked to schools, scouts, etc.
  - Public entities: education, social inclusion
- Connectivity
  - Neighbors sharing WiFi a few hours, spare capacity
  - Community networks: WiFi AP (Federated auth, Eduroam-like)
  - Mobile data cooperative and commercial providers

Resources

- Devices

  - Reused, better than new: Repaired/Refurbished, Circular economy (traceability until final recycling)

  - Desktops, laptops, tablets, mobiles, routers

  - Social enterprises prepare devices (social inclusion jobs), volunteers too.

- Services

  - We need videoconferencing services, storage, intranets, etc

    But capacity, scalability is limited, cost? ...

Resources

- Volunteer work (contribution, free)
  - Donate your spare time, devices for fun and impact
- Professional (socio-economic sustainability)
  - Small/large businesses. Support & services "not free"
  - Social enterprises create jobs for support professionals, social inclusion of marginalized people
- Focused solutions:
  - Ideal in specific cases: custom
- Broad solutions:
  - One for all: massive

Lessons

- GAIA!: Network + end-hosts + people
- We provide connectivity → we spread eWaste …
  - Device traceability: cradle to c, circular, no waste
  - We contribute to improve coverage:
    - Ways to map demand and supply + plan/fund deployments, device supply, funds, software …
    - The Internet as a global public good / commons
- What will remain after confinement?
- What we will learn for the future?
- What to do for the climate pandemic?