OPEN SOURCE TALENT GEOGRAPHY

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Coordinator of France 6G, Ecosystem engagement in 6G innovations to Standards

FRANCE 6G
INNOVATION TO STANDARD

Institut Mines-Télécom

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PROFESSOR AT TELECOM SUD PARIS-INSTITUT POLYTECHNIQUE DE PARIS

HEAD OF DIGITAL SOVEREIGNTY AND SOBREITY AT INSTITUT MINES TELECOM

Research Backround: 25 years in Telecom and Network architectures design and optimisation, QoS, mobility, security, Industrial IoT.

IETF, IEEE, ETSI and ITU standardisation
3GPP monitoring

Co-Chair of the french WG on Digital infrastructures' Software&Innovation Talents capacity building

Related to the national Industrial Strategic Comitee on Software and digital trust (CSF Logiciels et Numérique de Confiance)

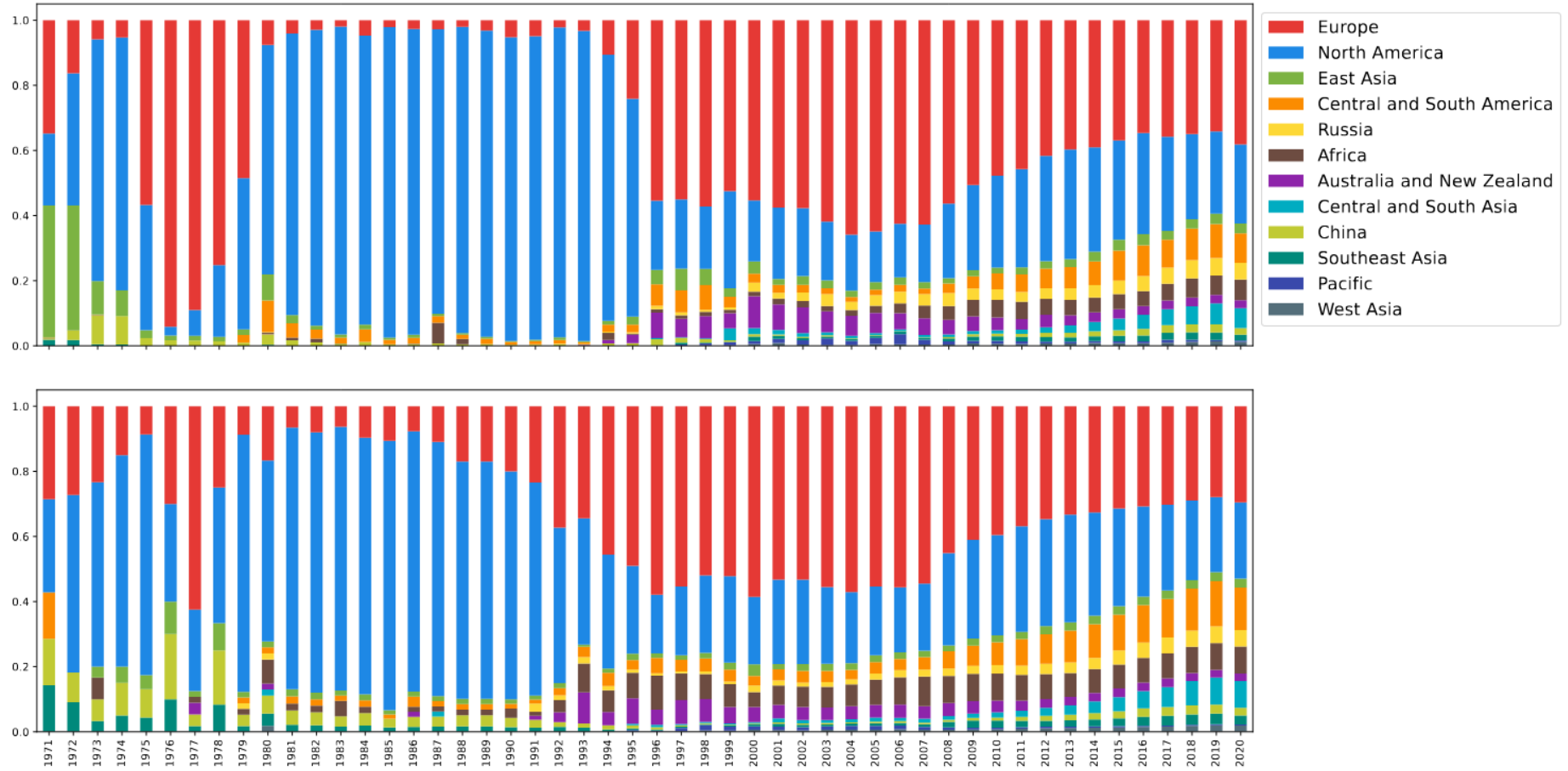
COORDINATOR of FRANCE 6G

Related to the national Industrial Strategic Comitee on telco and digitzal infrastructures (CSF Infrastructure Numérique)
In charge of the coordination of the support action of 6G french ecosysteme innovation to standards, an initiative of the french national strategy on 5G and future networks

WHY DOES THIS MATTER AT EU SNS4SNS?

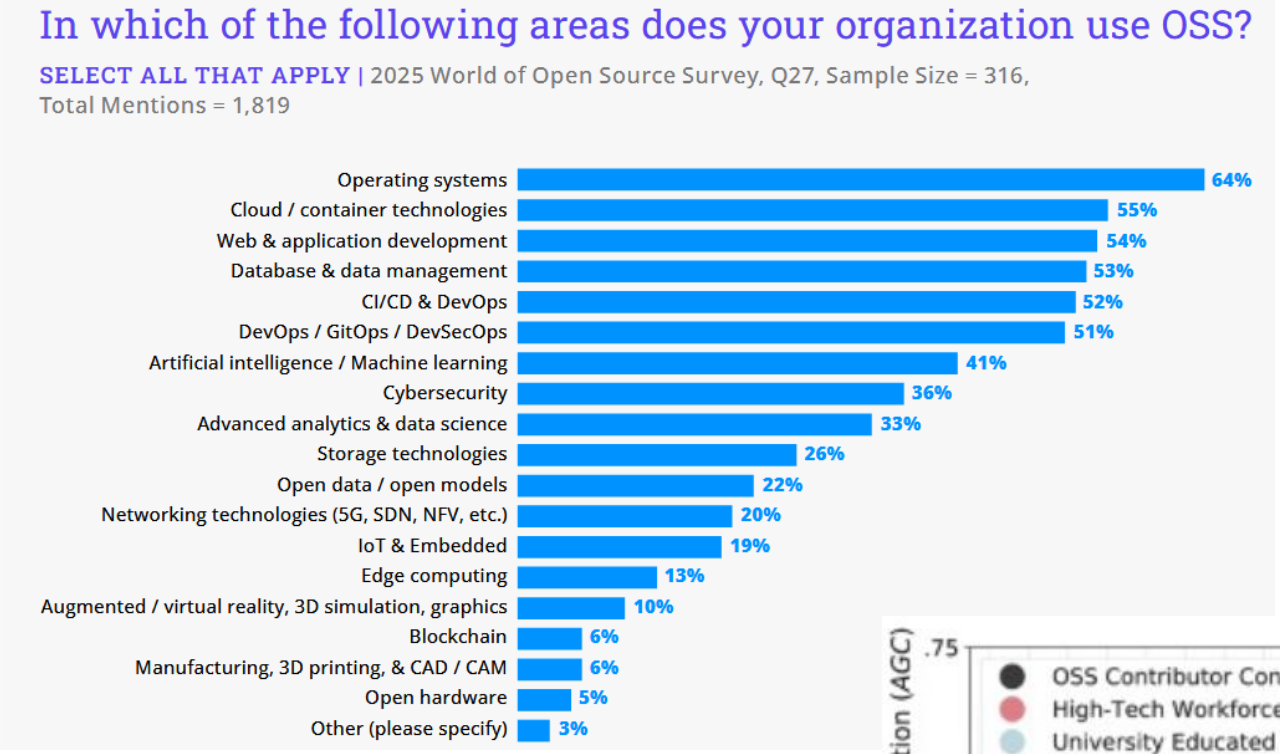
- European Digital Sovereignty identifies Open Source as key enabler of digital sovereignty
- N3C concept Telco cloud convergence is paving the way to future digital infrastructures
- Telco technologies are relying more and more on Software developments.
- **Need to identify and support the Open source talents capacity building and align strategies to maintain EU industrial leadership while adopting openess.**

STUDY FROM SOFTWARE HERITAGE: 1971-2020: NUMBER OF COMITS AND ACTIVE AUTHORS

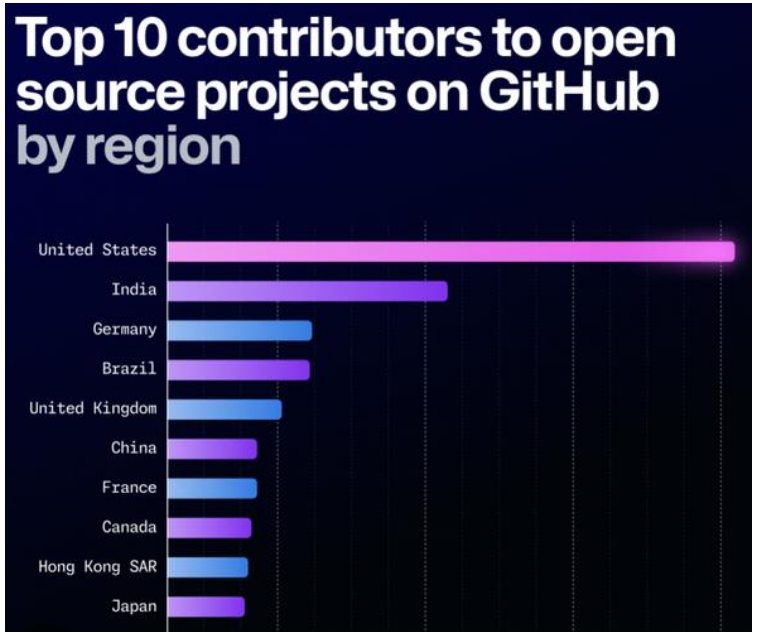


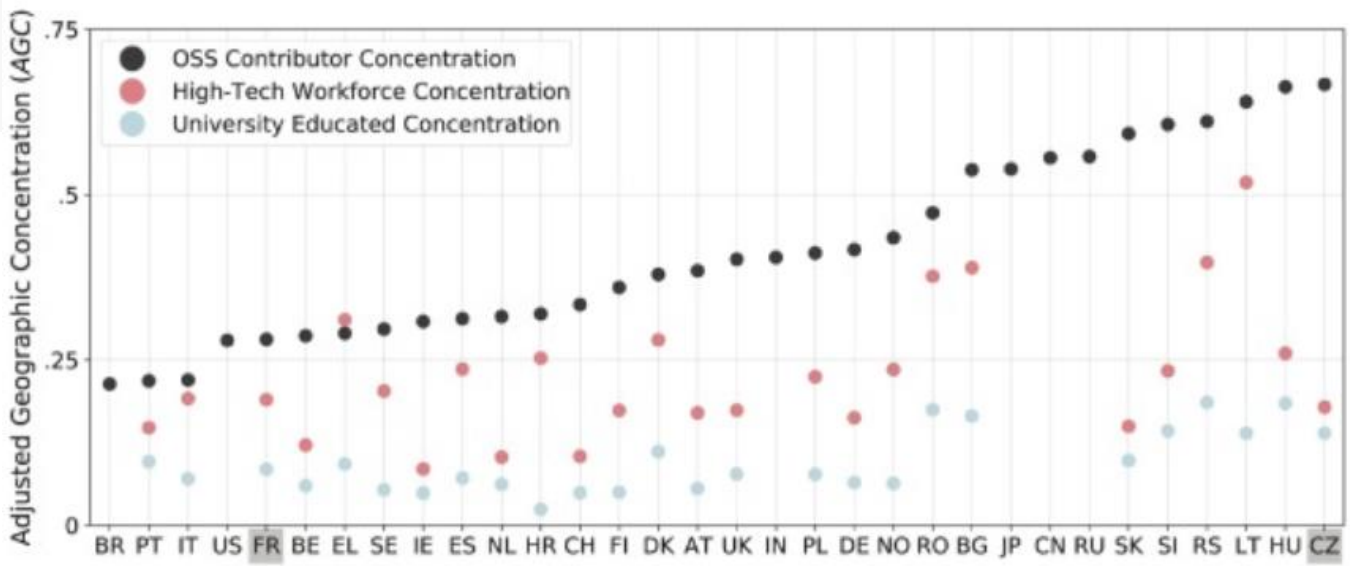
https://arxiv.org/pdf/2203.15369v1

OPEN SOURCE CONTRIBUTORS CONCENTRATION



Linux Foundation





TELCO & OPEN SOURCE

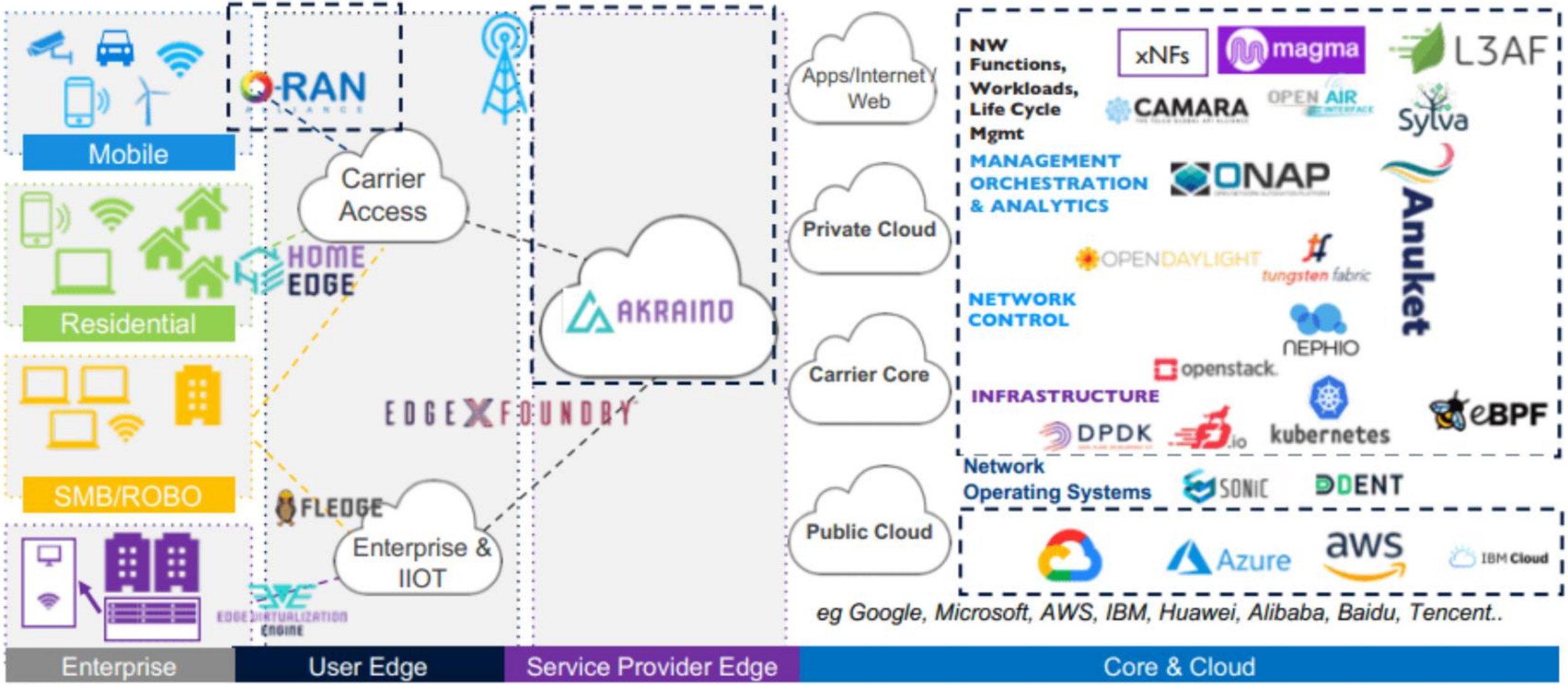
Innovations value

- Telco open source is driving innovations in 5G/6G, cloud native networks, and AI.
- Open source projects are central to strategic transformation across operators and vendors.
  - 92% of organizations see open source as critical to their future. (linuxfoundation.org)
  - 73% have integrated cloud native networking workloads. (linuxfoundation.org)

Business value

- Reduces vendor lock-in and speeds **innovation cycles for network software.**
- Supports differentiation in **5G value-added services** (AR/VR, IoT, edge compute).
- Enables **ecosystem collaboration** across operators, vendors, and developers.

Open Source Software, Open Interop, Open API, Open Collaboration



* Sample projects only

RISKS & CHALLENGES

Technical

- Security and compliance concerns
- Licensing complexity
- Interoperability

Organizational

- Standardisation model shift
- EU Talent shortages for Telco, cloud native and AI capabilities.

ACCADEMIA: A DRIVING FORCE OF OPEN SOURCE

- **Several open source software starts in research labs and universities; example: Open Air Interface in 5G domain, examples:**

- **50% of research software is over nine years old**
- **62% has an impact beyond academia**
- **The vast majority is FOSS**, and only 10% is proprietary.

https://www.softwareheritage.org/2025/10/28/open-source-skills-gap/

URGENT NEED FOR COORDINATED EFFORT

- Open source networking, driven by distributed global talent, is redefining how telcos build and operate next-generation networks.
- Policy to support the open source talents community growth
- Align Open Source Software strategy with business KPIs.
- Invest in training & cross-regional talent pipelines.

PANEL DISCUSSION

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