



NexusForum

19 September 2024

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DG CONNECT, European Commission*

The plan for today

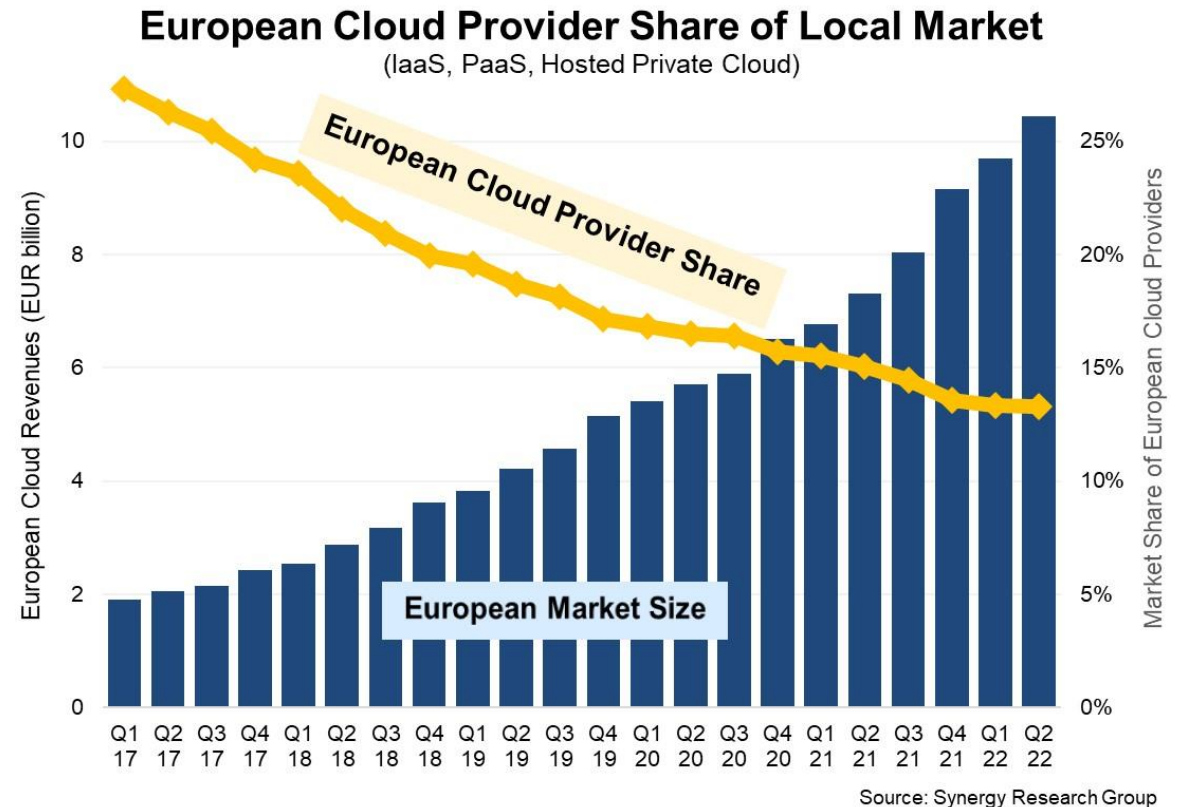
- Where do we stand?
- Where do we want to go?
- What did we do already?
- What comes next?

Where do we stand?

A look at the EU cloud market

Cloud market trends in Europe

- Since 2017, the European cloud market has quintupled (> EUR 10.4 bn in 2022)
- ...but the market share of European providers has declined (from 27% to under 13%)
- Amazon, Microsoft and Google hold 72% of the market share
- Biggest European providers account for 1-2% each (SAP, Deutsche Telekom, OVH)



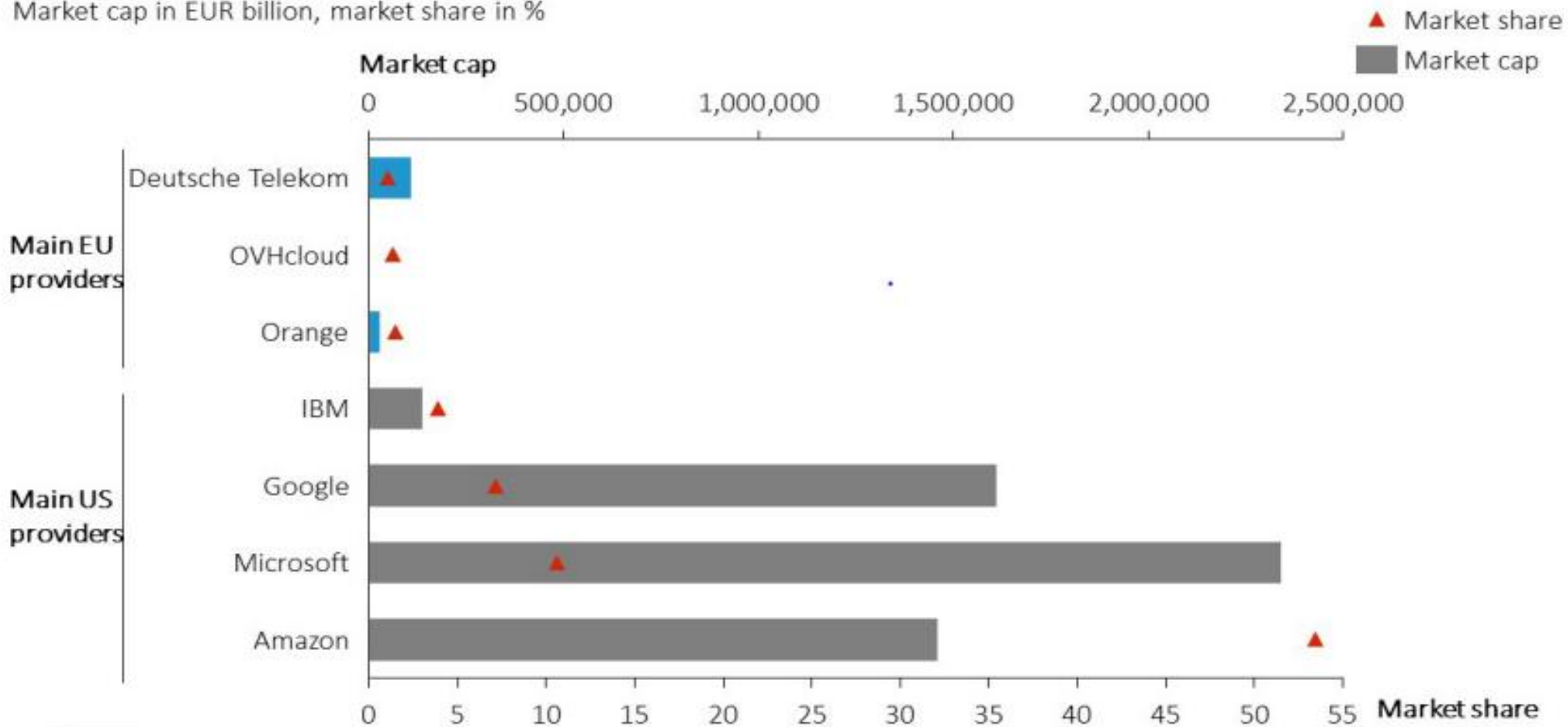
A situation well captured in the Draghi report

FIGURE 7

Market cap and share of main cloud providers

Market cap in EUR billion, market share in %

Market cap in EUR billion, market share in %

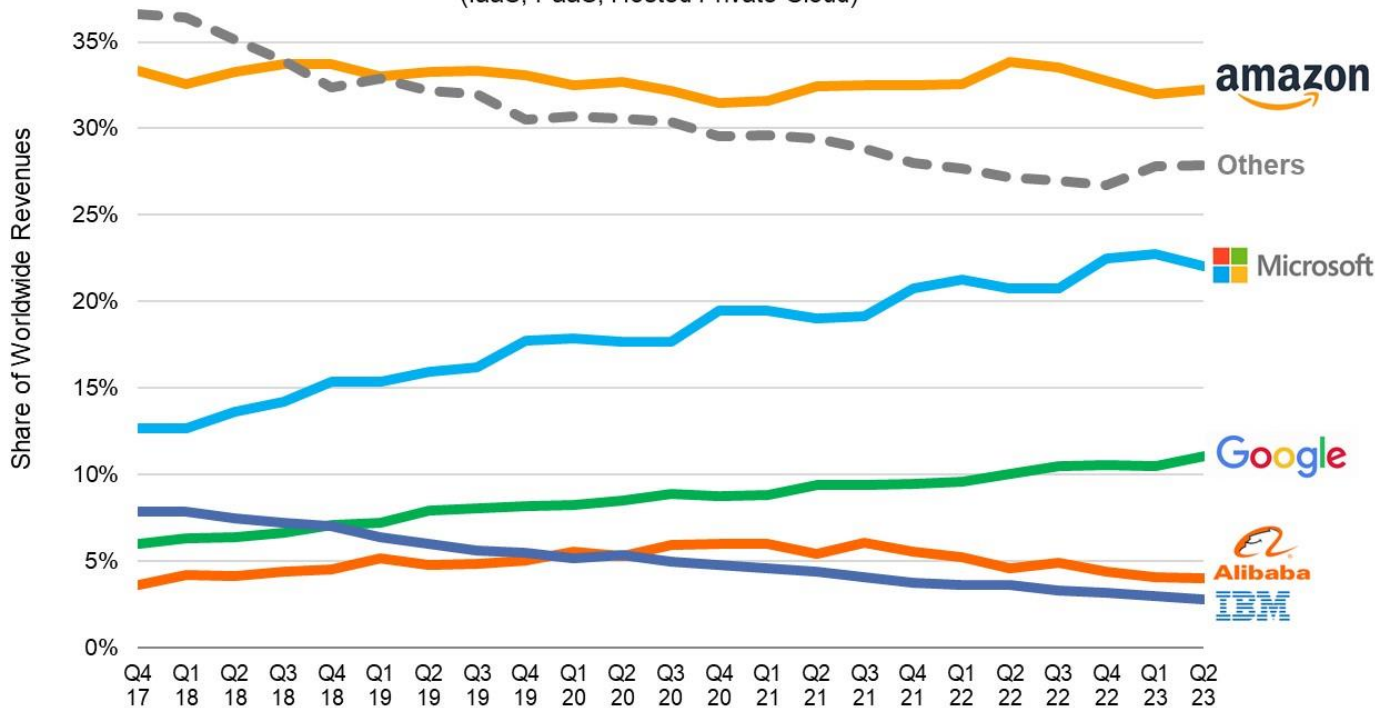


Source: IDC, 2024.

Cloud market trends worldwide

Cloud Provider Market Share Trend

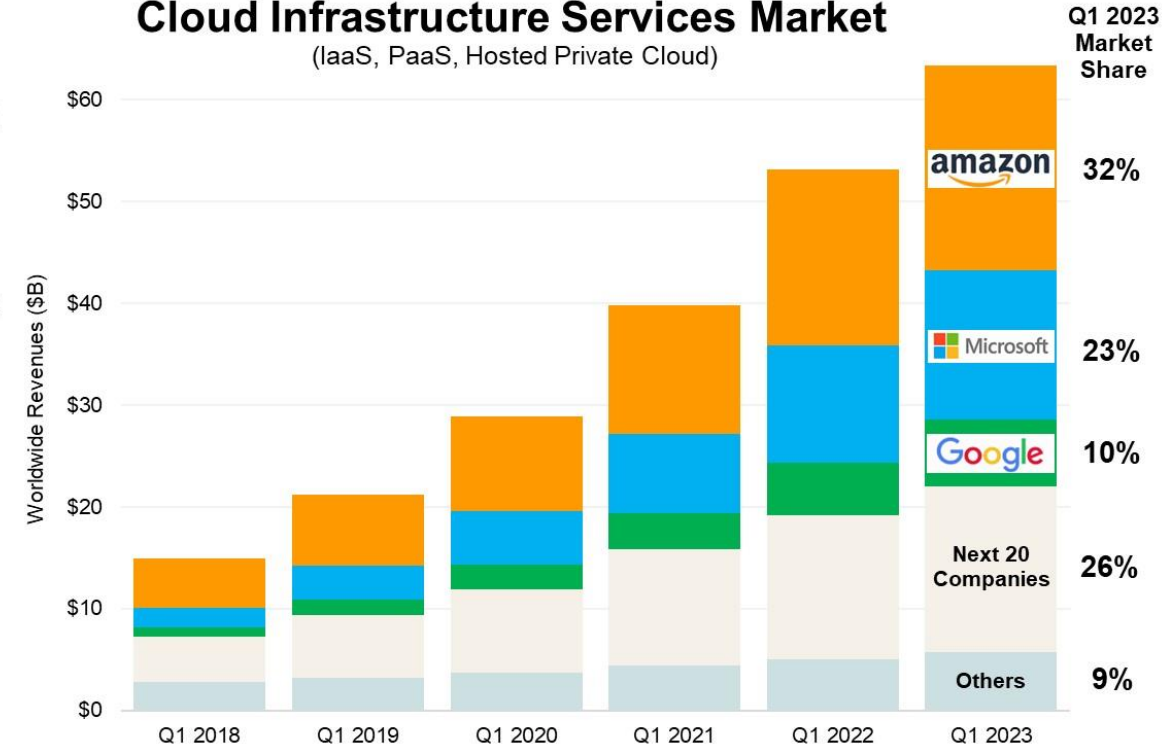
(IaaS, PaaS, Hosted Private Cloud)



Source: Synergy Research Group

Cloud Infrastructure Services Market

(IaaS, PaaS, Hosted Private Cloud)

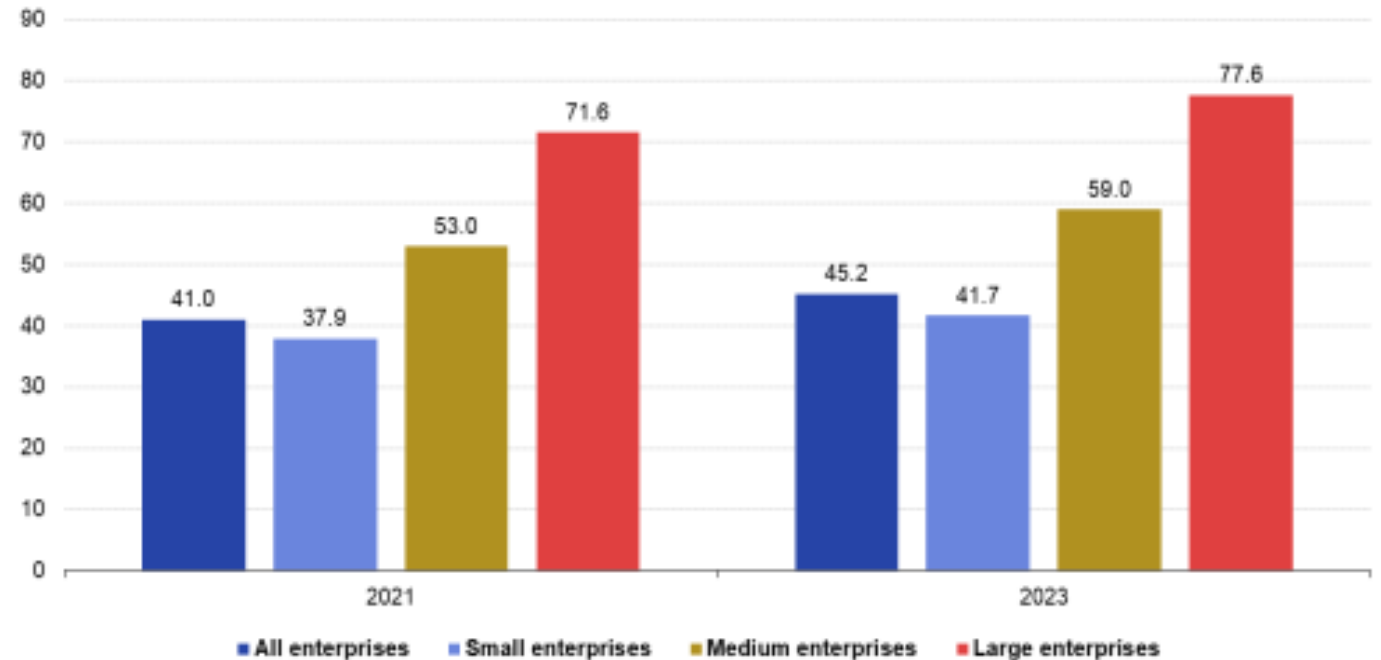


Source: Synergy Research Group

Cloud adoption in the EU

- An upward trend with important discrepancies
- Small vs large enterprises
- Nordics vs Greece, Romania, Bulgaria
- Dominance of 'basic' cloud services

Enterprises buying cloud computing services by size class, EU, 2021 and 2023
(% of enterprises)



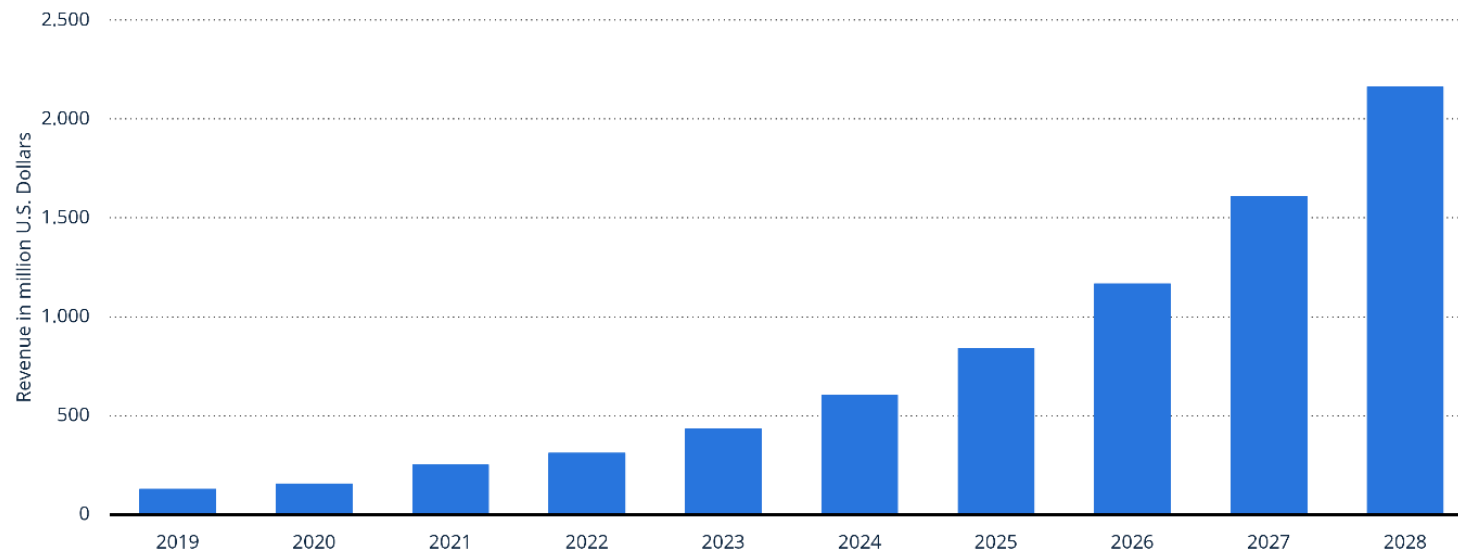
Source: Eurostat (online data code: isoc_cicce_use)

eurostat 

Cloud market outlook for Europe

Revenue of the cloud security market in Europe from 2019 to 2028 (in million U.S. dollars)

Revenue of the cloud security industry in Europe 2019-2028



- Growth in all segments, but strongest in SaaS
- Sovereign cloud offers
- Cloud as a key ingredient for AI
- Expensive and rare AI-optimized equipment
- Increasing energy demand

7 | Description: The revenue in the 'Cloud Security' segment of the cybersecurity market in Europe was forecast to continuously increase between 2023 and 2028 by in total 1.7 billion U.S. dollars (+400.96 percent). After the ninth consecutive increasing year, the indicator is estimated to reach 2.2 billion U.S. dollars and therefore a new peak in 2028. Notably, the revenue of the 'Cloud Security' segment of the cybersecurity market was continuously increasing over the past years. [Read more](#)
Note(s): 2019 to 2028
Source(s): Statista

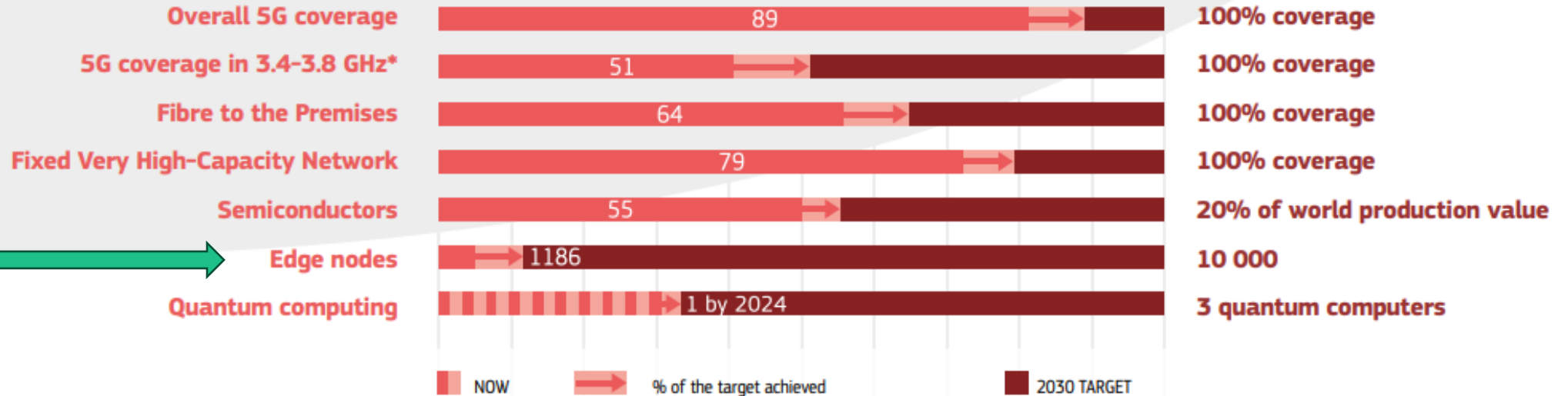
statista

Where do we want to go?

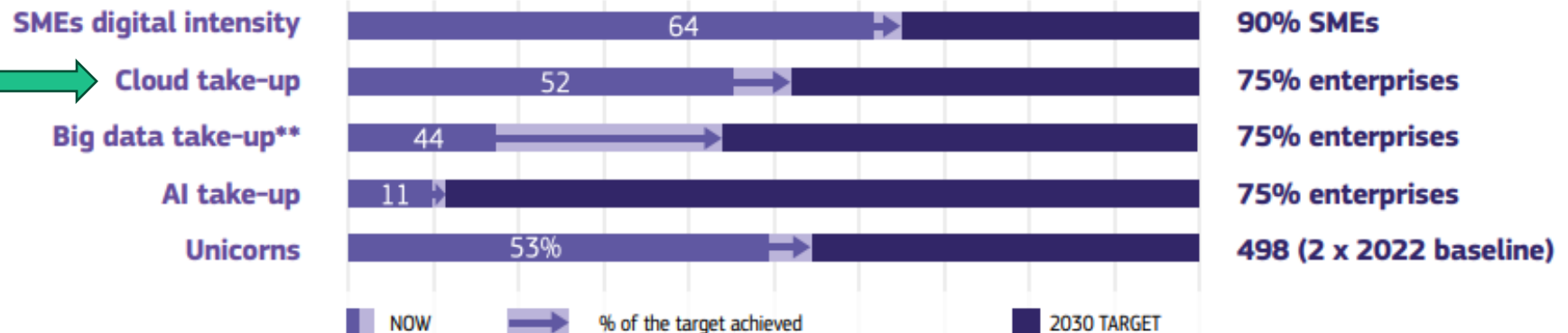
Targets for the Digital Decade

Digital Decade Report 2024

DIGITAL INFRASTRUCTURE



DIGITAL TRANSFORMATION OF BUSINESSES



Cloud target

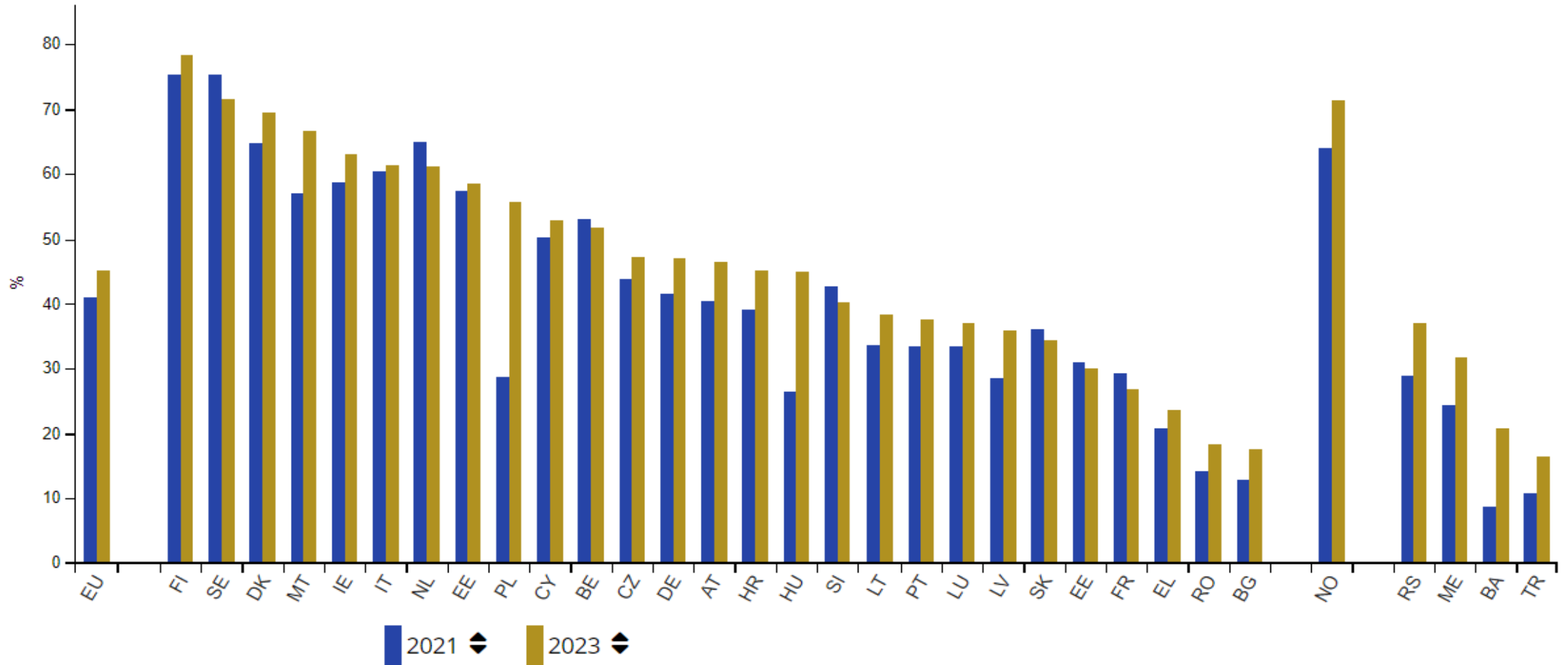
75% of European enterprises have taken up Cloud computing services

- Enable the EU to match the growth in cloud uptake with its global trade partners, in particular the US
- Any company with more than 10 employees
- 2023: 45.2 % of EU enterprises bought cloud computing services

Cloud target

Huge disparity in between geographies, size and sector

Enterprises buying cloud computing services, EU, 2021 and 2023

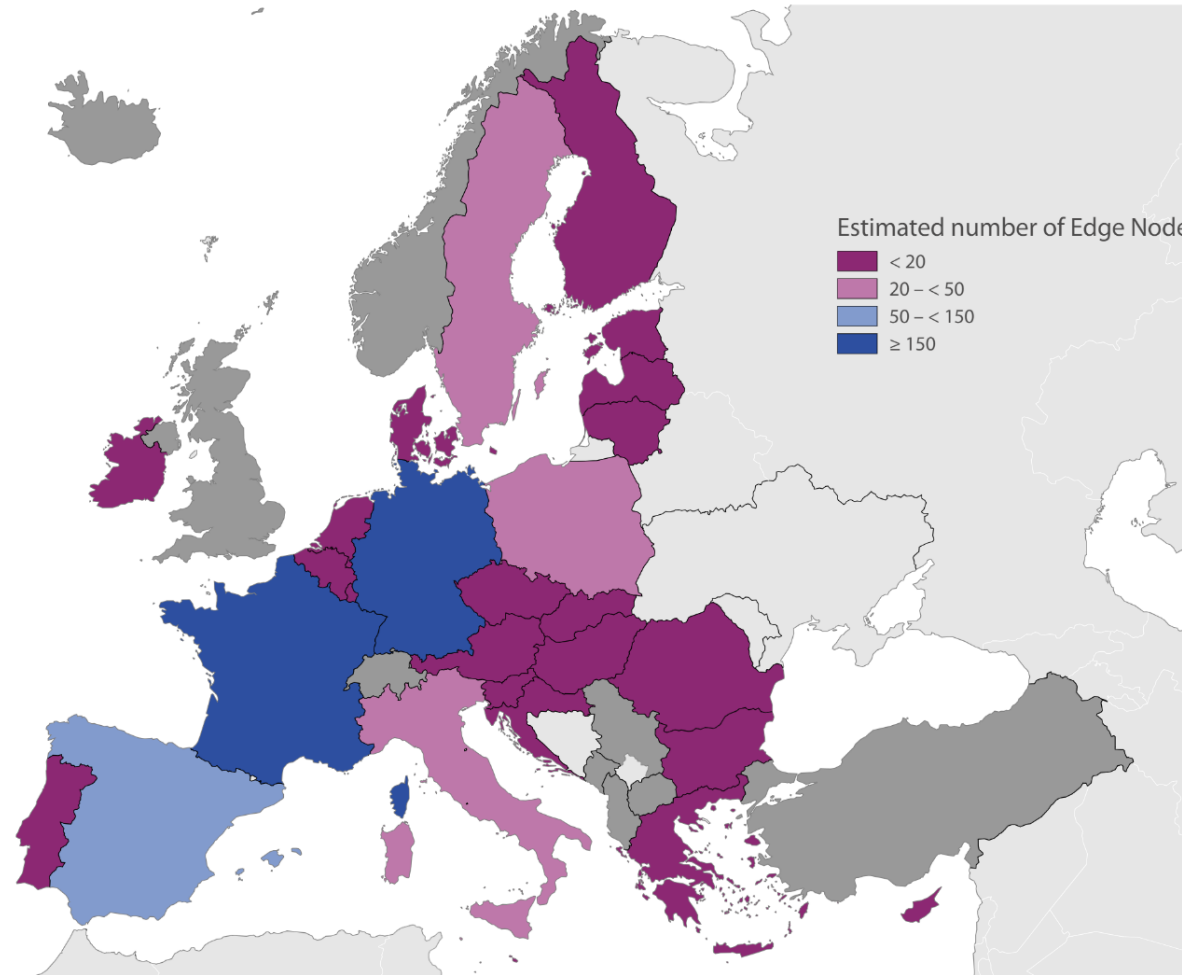


Edge target

10.000 climate neutral highly secure edge nodes

- *This is about enabling the most innovative applications & services: on-site IoT, digitisation of industry, Augmented Reality, real-time AI over video*
- *10.000 nodes would allow optimal coverage across the EU (including in less populated areas)*
- *Number of compute nodes providing latencies below **20 milliseconds**; such as an individual server or other set of connected computing resources, operated as part of an edge computing infrastructure, typically residing within an edge data centre operating at the infrastructure edge, and therefore **physically closer to its intended users** than a cloud node in a centralised data centre.*

Edge target – Deployment as of November 2023



Trend-setters (France, Germany, Italy, and Spain)

– Maintain the ecosystem, foster innovation, and disseminate best practices.

Fast trackers (Netherlands, Poland, and Sweden)

– Transition from gaining momentum to making a significant impact.

Trail Blazers (Austria, Belgium, Denmark, Finland, and Ireland)

– Strengthen governance, boost deployment.

Beginners (Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Luxembourg, Malta, Portugal, Romania, Slovakia, and Slovenia)

– Experimentation and target deployments.

What did we do already?

The political mandate coming to an end has launched/achieved a number of significant steps

Supply side

Investments in research and deployment
(Simpl, Dome, etc)

IPCEI-CIS

EUCS *

Energy Efficiency Directive: Reporting on data centre sustainability indicators, minimum performance standards

Demand side

Data Act

- Recognition of interoperability standards and specifications in repository, creating de facto market requirements
- Switching charges
- Standard contractual clauses

DMA

Public procurement guidance *

Cloud rulebook *

What comes next?

The future of European competitiveness

Part A | A competitiveness strategy for Europe

SEPTEMBER 2024

Cloud/edge computing in the Draghi report

SUMMARY TABLE

HPC / AI / QUANTUM / CLOUD PROPOSALS: A NEW 'EU CLOUD AND AI DEVELOPMENT ACT'

TIME HORIZON¹⁴

1	Increase the computational capacity dedicated to the training and fine-tuning of AI models and create an EU-wide framework for providing 'computing capital' to innovative SMEs in the EU	ST/MT
2	Identify priority AI vertical applications for the EU, encouraging EU companies to participate in their development and deployment in key industrial sectors	MT
3	Leverage the EU-wide coordination and harmonisation of national AI sandbox regimes, and ensure harmonised and simplified implementation of the GDPR	ST
4	Define a single EU-wide policy and residency requirements for public administrations' cloud services, as well as EU-wide sensitive data security policies for collaboration between private cloud providers and hyperscalers	ST/MT
5	Adopt a Single Market 'passporting' regime for all EU-provided cloud services	ST/MT
6	Support data brokers as preapproved data intermediaries with regulatory clearance ensured by a Data Ombudsman	MT/LT
7	Step up cooperation between the EU and the US to ensure access to cloud and data markets	MT

Cloud/edge computing in the Draghi report

CLOUD

- 4. Develop homogeneous and mandatory EU rules for sensitive areas of cloud services.** In particular, the EU and Member States should adopt:
 - A single EU-wide policy for public administrations' procurement of cloud service and data residency requirements, requiring as a minimum EU sovereign control of key elements for security and encryption. Public procurement should be aligned across Member States, standardising tenders and facilitating/promoting collaboration between EU companies to scale up commercially and support consolidation in the EU, with exceptions allowed only in nationally sensitive areas (e.g. defence, home affairs and justice).
 - EU-wide sensitive data security policies for collaboration between private EU cloud providers with US hyperscalers – given the valuable role of the latter to support adoption by European companies and due to their current scale and market presence – allowing access to hyperscalers' latest cloud technologies, while preserving encryption, security and ring-fenced services to trusted EU providers.
- 5. Guarantee a Single Market passporting regime for all EU-provided cloud services,** eliminating the possibility for Member States to 'gold-plate' protection requirements beyond the requirements of the GDPR and the AI Act.
- 6. Support data brokers (ex Data Governance Act) as 'pre-approved' data intermediaries,** certifying ex ante compliance with the EU acquis and guaranteeing regulatory clearance for instance via an 'EU Data Ombudsman' mechanism. This would help to favour industry-specific solutions promoted by EU companies.
- 7. Step up the cooperation between the EU and the US to ensure access to cloud and data markets.** As part of a low-barrier 'digital transatlantic marketplace', it is crucial to foster common standards for procurement and cooperation between US and EU, to guarantee supply chain security and favour industrial and trade opportunities for EU and US technological companies on fair and equal conditions –for both the US equipment and software needed by the EU's cloud industry as well as for trusted equipment and software originated in the EU.

Cloud/edge computing in the Draghi report

SUMMARY TABLE

HIGH-SPEED / CAPACITY BROADBAND PROPOSALS: A NEW 'EU TELECOMS ACT'

TIME HORIZON⁹⁸

1	Reform the EU's regulation and competition stance to complete the Digital Single Market for telecommunications, harmonising rules and favouring cross-border mergers and operations	ST/MT
2	Harmonise EU-wide spectrum licensing also for satellite connectivity, and design EU-wide auctions with longer duration and fewer restrictions	MT/LT
3	Simplify and harmonise the cybersecurity and Lawful Interception regulation, and improve cooperation among EU cybersecurity agencies	ST/MT
4	Incentivise the deployment of new infrastructure, by defining cut-off dates for older technologies	MT
5	Introduce 'passporting' of B2B services to enable operators in one Member State to offer services EU-wide	ST
6	Strengthen EU-based telecom equipment and software providers to underpin the EU's open strategic autonomy	ST/MT
7	Coordinate technical standards for edge computing, network APIs, and IoT at the EU level	MT/LT

Cloud/edge computing in the Draghi report

7. To sustain innovation and cooperation among EU players, coordinate EU-wide technical standards for the deployment of Network APIs, edge computing and IoT, as for roaming in the past, through appropriate EU bodies.

- Mandate an EU-level body with public-private participation to develop homogenous standards to enable innovation on competitive platforms seamlessly across Europe.
- Adopt the agreed standards across regulations throughout the EU to ensure critical mass and consistency in negotiations with non-EU partners.

Henna Virkkunen



Candidate Executive
Vice-President for
Tech Sovereignty,
Security and
Democracy

President von der Leyen's mission letter to Henna Virkkunen (1/2)

- Reaching Europe's 2030 Digital Decade targets. Lead their review in 2026.
- Boosting artificial intelligence
- Investments in next wave of frontier technology
- Develop a proposal for an EU Cloud and AI development Act to increase computational capacity and create an EU-wide framework for providing such capacity to innovative SMEs
- A single EU-wide cloud policy for public administration and public procurement
- Improve access to secure, fast and reliable connectivity

President von der Leyen's mission letter to Henna Virkkunen (2/2)

- Strengthening cybersecurity, notably by improving the adoption process of cybersecurity certification schemes
- Rapid and effective enforcement of Digital Markets Act
- Deploy digital public infrastructure (EU Wallet, etc)
- Present a European Data Union Strategy
- Promote EU digital norms and standards internationally

Thank you



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