



# COREnect

PAVING THE WAY FOR EUROPEAN TECHNOLOGICAL SOVEREIGNTY IN 5G AND BEYOND

Gerhard Fettweis, TU Dresden February 16, 2021

5G PPP Webinar: New 5G Core Technologies Innovation Projects

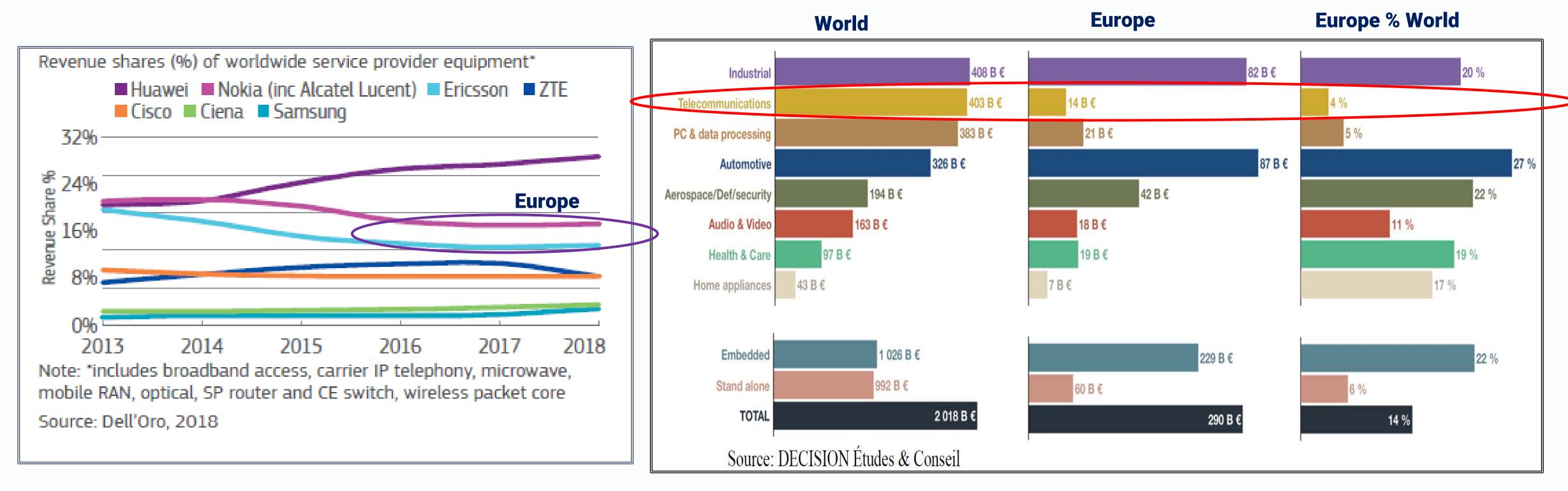








## A Problem of Technological Sovereignty in 5G and Beyond



**Network Equipment Vendor World [1]** 

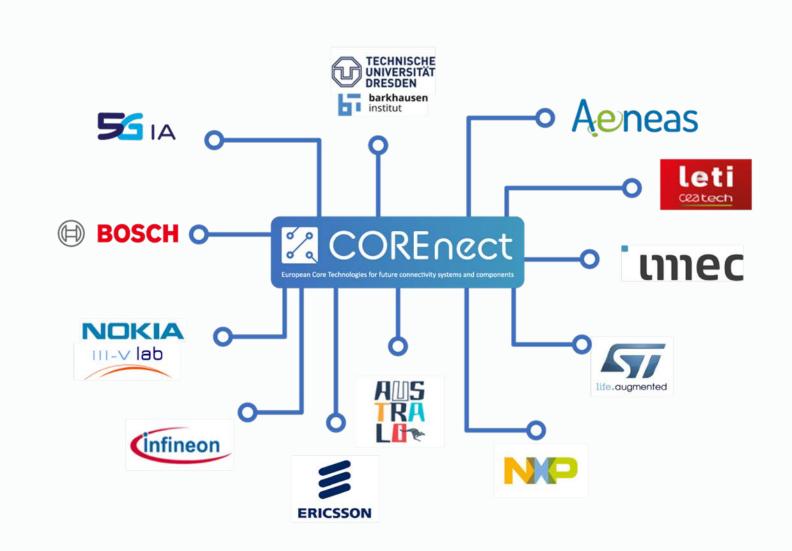
Electronic System Production – Position of Europe in 2018 (in euros) [2]

- Limited and even no European alternatives for suppling 5G electronic subsystems and components!!
  - Missing economic opportunities and low resilience to supply chain disruption
  - Security concern on data and critical infrastructure
  - Limit future prospects and innovation capability towards 6G, 7G, ...

<sup>[1]</sup> https://ec.eforuropa.eu/epsc/sites/epsc/files/epsc\_strategic\_note\_issue30\_strategic\_autonomy.pdf

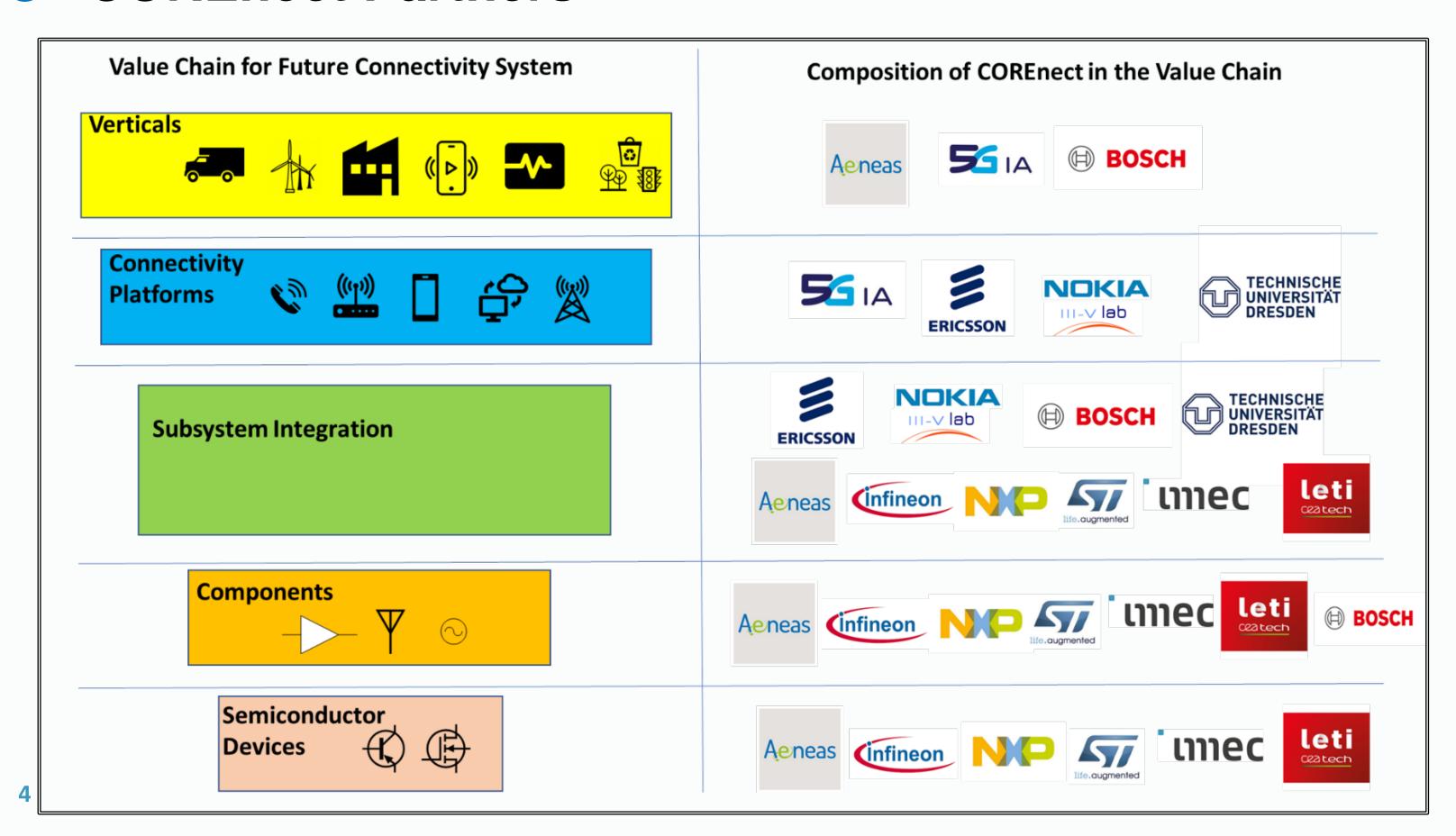


- COREnect European Core Technologies for future connectivity systems and components
  - o ICT-42-2020, 5G PPP Phase 3
  - O Project duration: July 1<sup>st</sup>, 2020 June 30<sup>th</sup>, 2022
  - Funding: €1 Mio
  - Coordinator: Technische Universität Dresden
  - 12 Partners from 7 countries





#### COREnect Partners



#### **Telecommunications**

- Big Industry: EAB, IIIV/Nokia
- Association: 5G IA
- Academia: TUD/BI

#### **Microelectronics**

- Big Industry: IFAG, NXP, ST
- Association: AENEAS
- Academia: CEA, IMEC

#### **5G** and Beyond Vertical

Big Industry: Bosch

#### **SME Community**

SME: AUSTRALO

**Major Stakeholders @ the Same Table** 



## COREnect Objectives

- To decrease European dependence on other continents for suppling electronic subsystems and components, paving the Way for European Technological Sovereignty in 5G and Beyond;
- O To bring European major players in microelectronics and telecommunications together to develop a strategic roadmap of core technologies for B5G/6G, laying a solid foundation for the long-term success of both industries;
- To establish a connection and collaboration between the Smart Networks and Services (SNS) community and the Key Digital Technologies (KDT) community at the strategic research & innovation agenda level;
- To promote COREnect results to stakeholders in both private and public sectors, including creating the condition for one or more European champion(s) in the domain of core technology for attaining technology sovereignty in 6G.



## **COREnect Methodology**



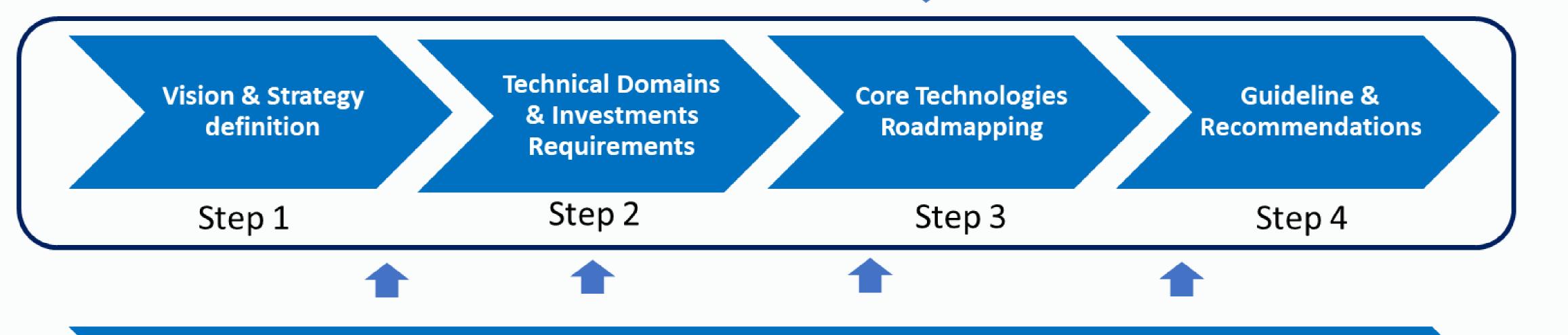
## 3 Expert Groups (EGs) for 3 technical domains:

- o EG #1: Compute/Storage
- o EG #2: Connect & Communicate
- o EG #3: Sense & Power

COREnect Expert Groups 61 Internal experts from project partners

35 External experts

EG1 currently recruiting experts info@corenect.eu



Community building and outreach



## COREnect interactions with other communities



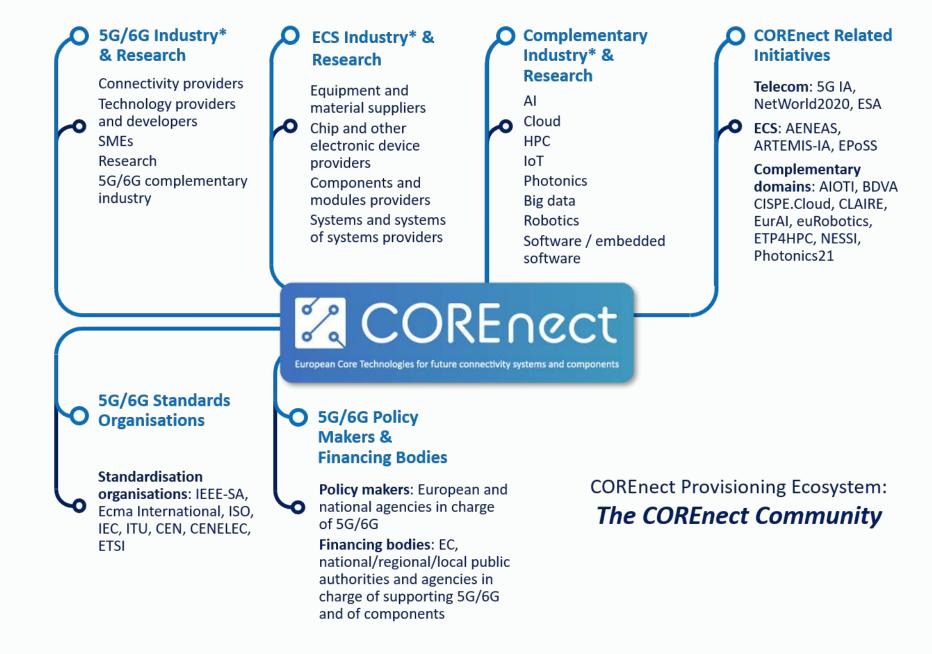
### Two main objectives

- COREnect provisioning ecosystem
   Identify/engage stakeholders to become part of the
   "European core technologies for future connectivity systems,"
- O COREnect use-case ecosystem

  Identify external communities that benefit from the results obtained and released by the COREnect community

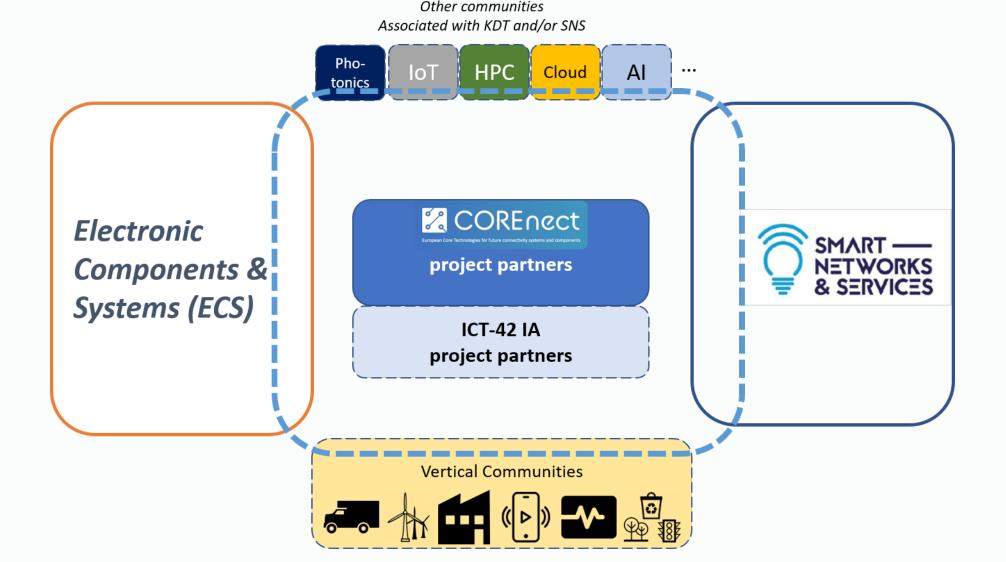
All stakeholders, i.e. ICT-42 IA project partners, welcome to comment on COREnect recommendations, and/or apply as COREnect experts – *by Feb-28-2021* 

- Public consultation on "Initial vision and requirement" report
  - o <a href="https://www.corenect.eu/publicconsultation">https://www.corenect.eu/publicconsultation</a>
- Recruitment of experts currently open
  - o <a href="https://www.corenect.eu/news/call-for-experts">https://www.corenect.eu/news/call-for-experts</a>



© 2020 - 2022 COREnect Consortium Parties

\* SMEs and large companies are stakeholders of this category and in all its sub-groups







## Disclaimer

This presentation is based on the work of COREnect project. It reflects the collected views of all experts involved. It does not reflect the opinion of any single COREnect partner or any of the organizations with which the experts are affiliated. The COREnect project and its consortium partners are not liable for any consequence stemming from the reuse of this publication.







Paving the Way for European Technological Sovereignty in 5G and Beyond

1 Roadmap2 Industries3 Expert Groups

