The New KDT JU

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Outline

- What is KDT?
- Differences w.r.t. ECSEL
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- 2030 Digital Compass
 - Not only KDT

What is KDT?

- KDT JU is one of the 10 new European Partnerships between the European Union, Member States and/or the industry.
- KDT = Key Digital Technologies.
 - They include electronic components, their design, manufacture and integration in systems and the software that defines how they work.
- KDT's objective is to support the digital transformation of all economic and societal sectors and the European Green Deal, as well as to support research and innovation towards the next generation of microprocessors.
- Successor of ECSEL, with and enlarged technical scope and modified administrative and procedural rules.

KDT vs. ECSEL

- Extended scope.
 - Integrated photonics.
 - Higher layers of software.
- Larger budget: EUR 6.1 Billion.
 - EC: EUR 1.8B; MS: EUR 1.8B; IA: EUR 2.5B.
 - ECSEL: EUR 4.9B.
- Differences in administrative and procedural rules.
 - Bigger PAB contribution to preparing WPs.
 - Different reimbursement rates.
 - Equal sharing of administrative costs between EC and private members.
 - Enforcement of 1:1 contribution between EC and MS.
 - CMFC: A central management of all financial contributions.
 - SRIA instead of MASP as basis for setting up the annual WP.

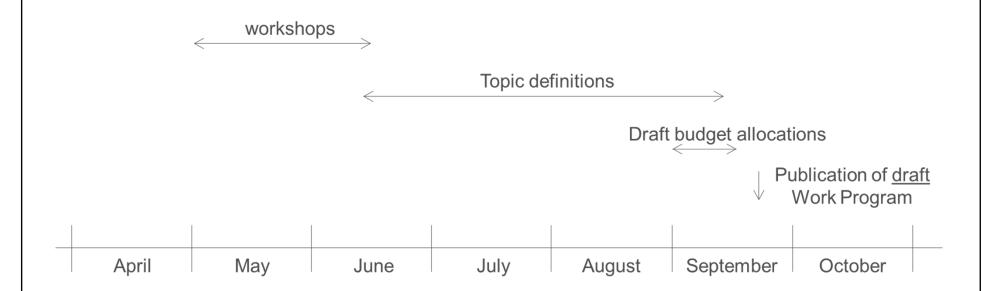
State of affairs

- SBA: Single Basic Act.
 - Proposal by EC to Council on Feb 23, 2021 to establish KDT and the other 9 partnerships.
 - Negotiations are on-going.
 - Adoption by Council expected by Sep/Oct 2021.
- KDT cannot be formally operational before SBA adoption.
- Work is in progress regarding:
 - CMFC: Negotiations with MS.
 - KDT will follow EuroHPC, which is ahead in negotiations.
 - Sharing of administrative costs: Negotiations with IA.
 - WP and calls: All actors involved.

SRIA and WP

- ECS SRIA 2021 released on Jan 12, 2021.
- WP 2021:
 - WP can only be adopted after KDT set-up.
 - Based on SRIA 2021.
 - Workshops organized by IA (May-Jun 2021).
 - From workshops to proposed priority topics.
 - Rounds of refinement via comments by MS, EC and IA.
 - Include topics initially proposed for HE Cluster 4 WP 2021-22.
 - From proposed priority topics to draft WP.
 - Budget commitment issues.
 - First WP "stable draft" by Sep 2021 to give proposers time to prepare, but approval will happen after SBA adoption.

Timeline



What about the Calls for Proposals?

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Goal:

Have a first call launched as soon as possible... © © ©

- Common intent by all actors involved.
- Most likely, single-step proposal selection.
 - To speed-up the overall process.
 - Applicable to 2021 call only (for the moment).

• Realistic assumptions:

- WP 2021 approved in Oct 2021.
- Call launched (IA, RIA, ???) by Nov 2021.
 - Necessary for yearly budget allocation by EC and MS.
- Call closing by Feb/Mar 2022.
- Provided that everything goes smoothly.

Italy in KDT

- Founding member and strong supporter.
 - As in ECSEL, ENIAC and ARTEMIS.
- Involved ministries:
 - MUR (confirmed, 2021 budget pre-allocated).
 - MISE (under discussion).
 - MTD (to be explored).
 - MTE (to be explored).

Europe at the forefront of digital innovation

Thierry **Breton**, Commissioner for Internal Market:

Investing in innovation is investing in our ability to be at the forefront of technological developments and develop strategic capacities. We must seize the opportunities brought by key developing technologies, such as **microprocessors** or **semiconductors**, so that Europe can be at the forefront of digital innovation on a global scale. These new joint approaches will be instrumental in supporting our industry for achieving our digital and green ambitions."

2030 Digital Compass

Skills

ICT Specialists: 20 millions + Gender convergence Basic Digital Skills: min 80% of population

Government

Key Public Services: 100% online **e-Health:** 100% availability medical records **Digital Identity:** 80% citizens using digital ID



Infrastructures

Connectivity: Gigabit for everyone, 5G everywhere
Cutting edge Semiconductors: double
EU share in global production
Data – Edge & Cloud: 10,000 climate
neutral highly secure edge nodes
Computing: first computer with quantum acceleration

Business

Tech up-take: 75% of EU companies using Cloud/AI/Big Data **Innovators:** grow scale ups & finance to double EU Unicorns **Late adopters:** less than 10% companies with very low digital intensity

It is EU's proposed level of ambition that by 2030:

The production of cutting-edge and sustainable semiconductors in Europe including processors is at least 20% of world production in value (meaning manufacturing capacities below 5nm nodes aiming at 2nm and 10 times more energy efficient than today).

Update of the Industrial strategy Deep dive on Semiconductors

Analysis

- critical dependencies in advanced manufacturing, packaging and design for digital
- increase design and manufacturing footprints in Europe
- communications, automotive, industrial manufacturing, Al and edge computing

Measures and policy toolbox

Industrial, research and trade policies

- New IPCEI, making use of RRF
- Alliance (under preparation by Com)
- HE (including KDT JU)
- DEP (edge Al TEF and DIH)
- Pact for Skills

Regulatory Framework

EU Foreign Direct Investment (FDI)

Trade

- Government Authorities Meeting on Semiconductors (GAMS)
- Collaboration with like-minded countries