ECSEL Calls 2020
ECSEL JU

Istanbul, 18/2/2020

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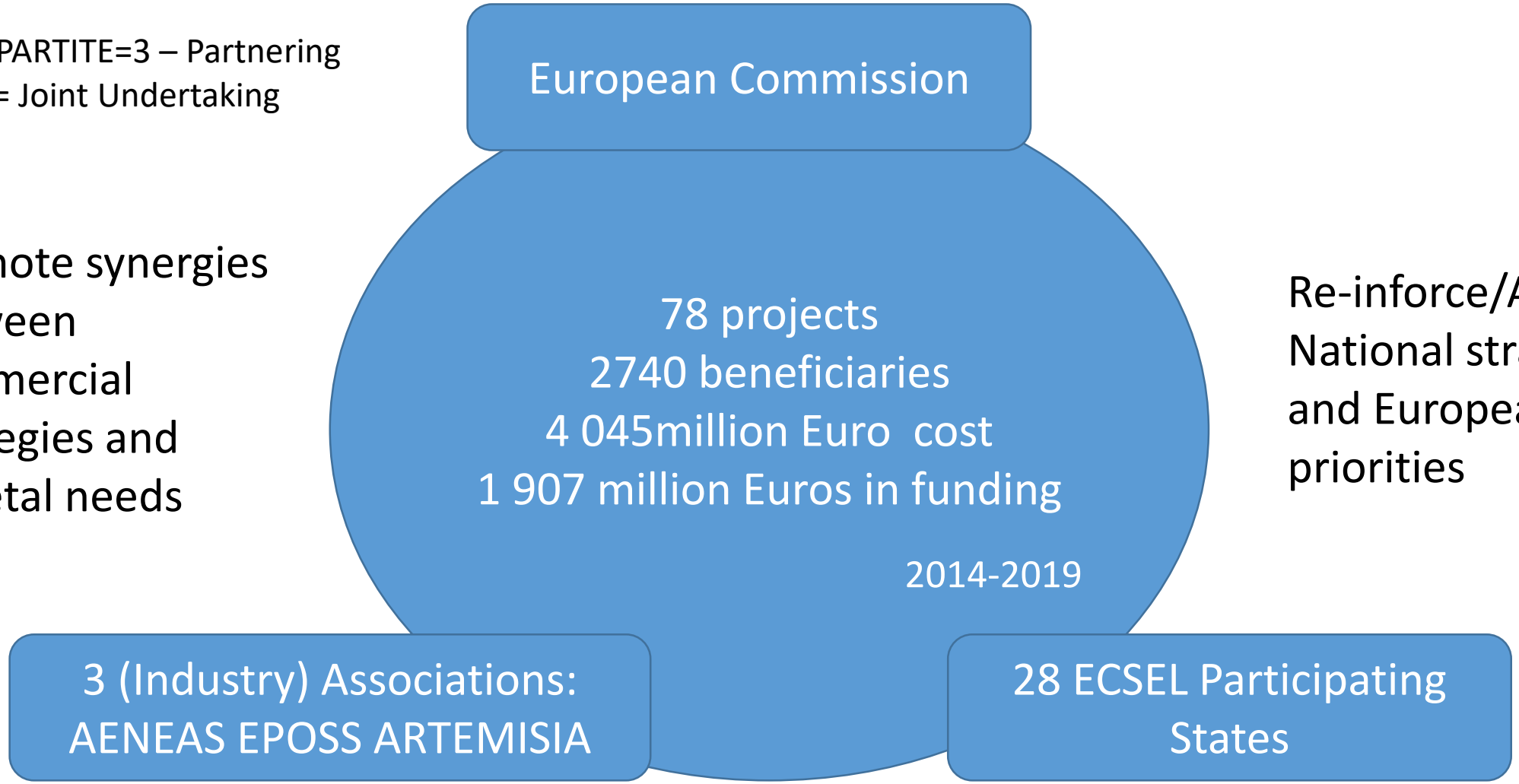
ECSEL : A UNIQUE MODEL TO PROMOTE EUROPEAN INNOVATION

TRIPARTITE=3 – Partnering
JU = Joint Undertaking



Promote synergies between commercial strategies and societal needs

Re-inforce/Align National strategies and European priorities

9 GOOD REASONS

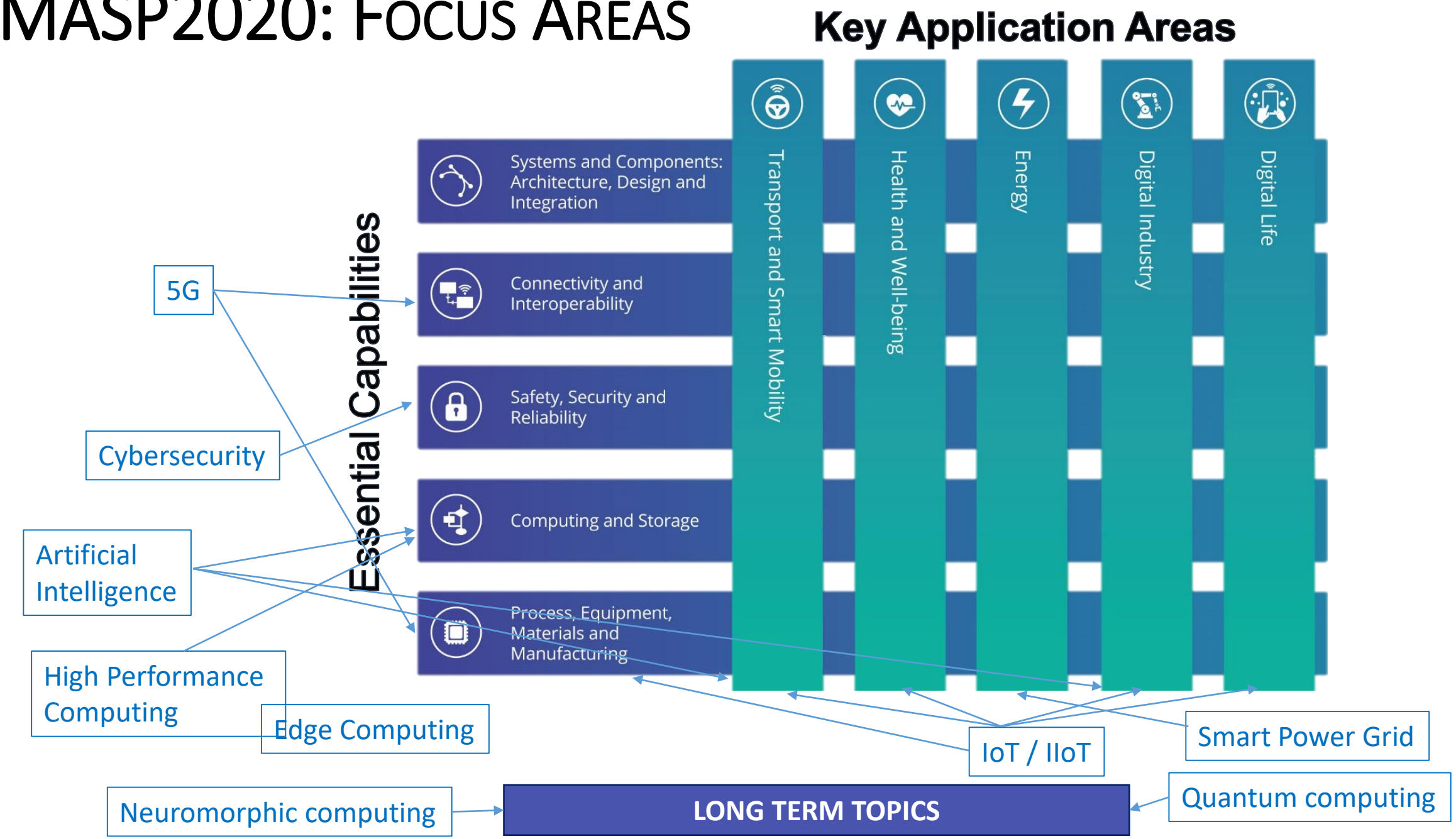
1. Critical mass
2. Value chain projects
3. Strengthen European demand, attract manufacturing capabilities, maximize the impact through strategic markets, including value chain partners is the motorway to accelerate co-innovation and market adoption
4. Building trust
5. Creating project pipelines for long-term continuity
6. Pushing new products/technologies in new markets, starting new companies
7. Exploitation of synergies across application and technology domains
8. Support working across competition, benchmarking technologies and sharing innovation risk
9. Allow the education of engineers/scientists in new technologies.

ECSEL CALLS 2019 OUTCOME

- 1 project running (Health.E CSA action)
- 14 projects selected: 6 IA and 8 RIA

- Calls 2019:
  - 57 participations from Turkey in 12 projects (for comparison: 2014 to 2018 resulted in 46 participations)
  - 26 selected beneficiaries in 5 projects (for comparison: 2014-2018 resulted in 10 selected beneficiaries)
  - 10 SMEs + 6 Universities + 6 Large enterprises

MASP2020: Focus Areas



GRAND CHALLENGES

MASP 2020 based on SRA 2020

4 general changes as compared to 2019

- **Technology developments for Artificial Intelligence** were added in all sections
- **Integrated photonics** and **flexible electronics** added in introduction
- The **reduction of energy consumption** of ECS was stressed as key for digitalization and broad implementation of Artificial Intelligence
- In the whole document additions with focus on **software technologies** and **edge computing** were made

GRAND CHALLENGES

GREEN DEAL

1. Transport and Smart Mobility
- Electrification topics to **fight climate change**
- Efficient systems to **convert electricity into hydrogen**
- **High-priority** on secure connected, cooperative and automated mobility and transportation

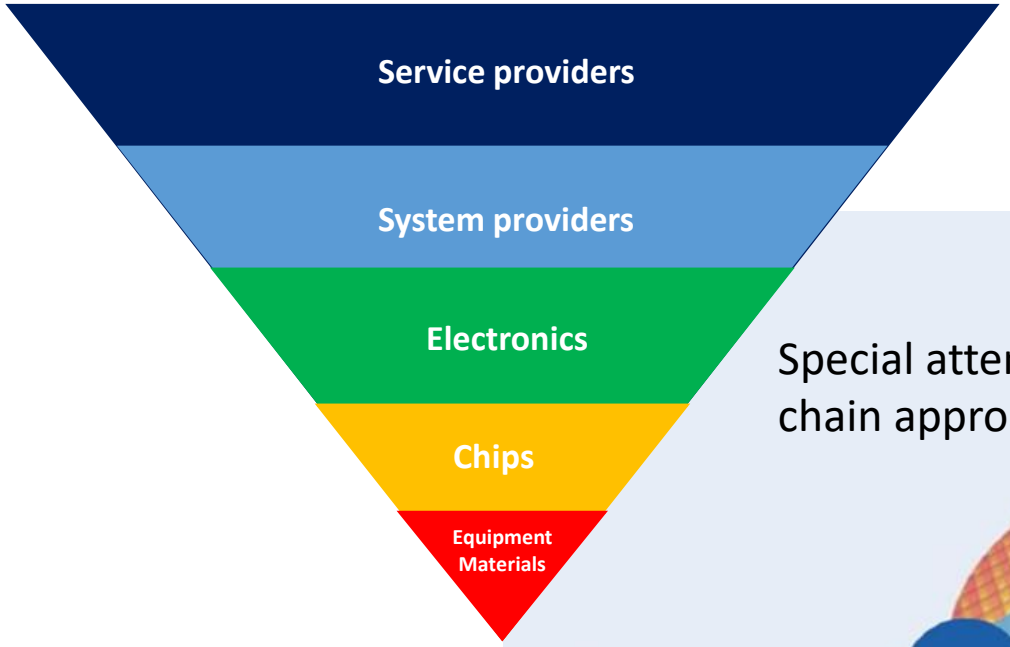
2. Health and Wellbeing
- Inputs of **HEALTH.E** Lighthouse Initiative integrated

3. Energy
- **Power consumption** of communications networks
- Digitalisation & Energy – new approaches including AI and Machine Learning.
- Make it happen: **Chapter on Decarbonisation** added

4. Digital Industry
- Significantly changed chapter: Inputs of **Industry4.E** Lighthouse Initiative lead to definition of new major challenges

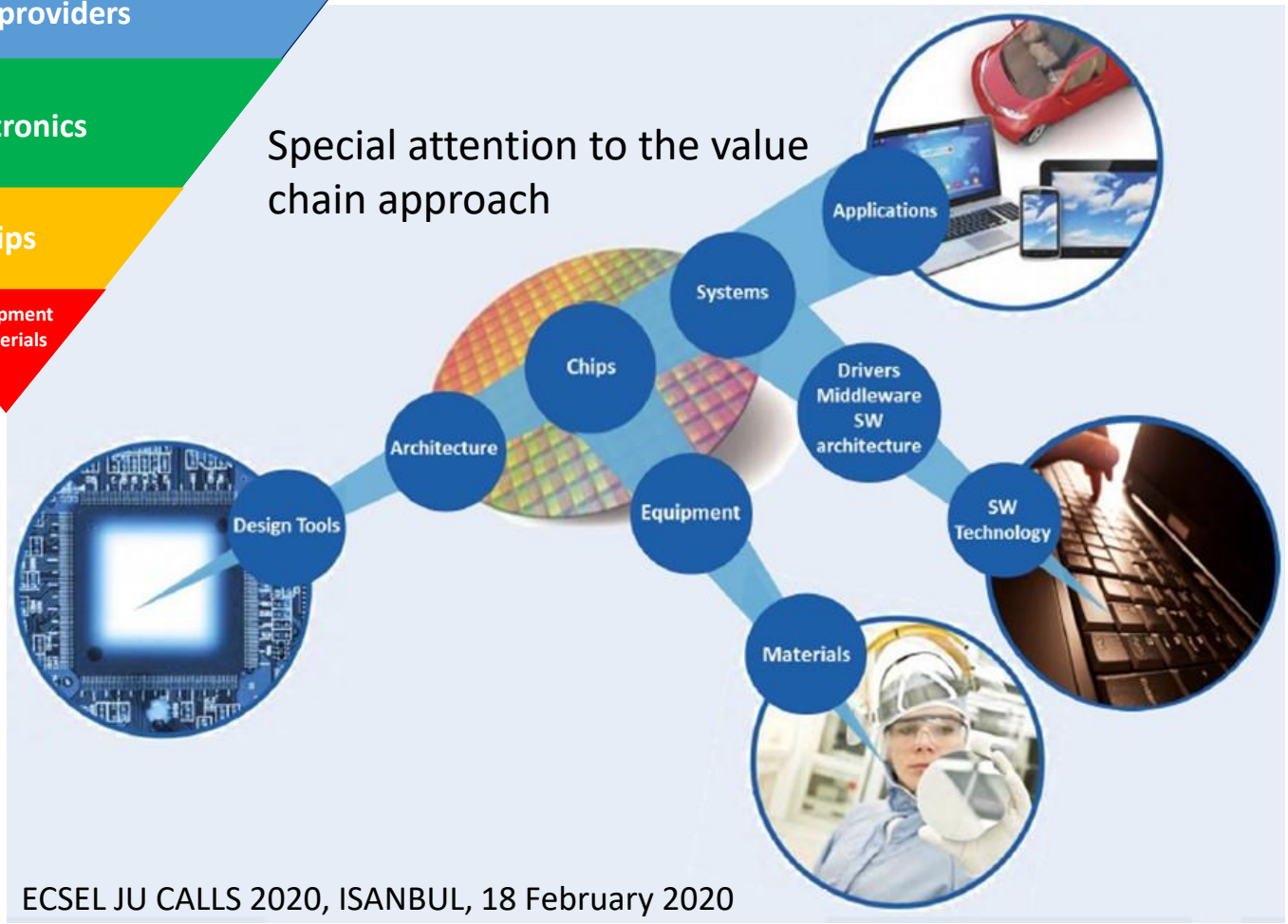
9. Computing and Storage
- **Energy consumption** (especially for data centers)
- **Low power and ultra-low power** intelligent computing (**edge and deep edge** computing)
- Development of model- driven **software techniques**
- **Multi-domain/multi-paradigm design and analysis** by holistic approaches, will be required to meet future CPS requirements

WHO CAN PARTICIPATE?



any organisation that can make a contribution to the RD&I objectives of the programme: large industry, SMEs, RTO, academia, public organizations, etc.

Special attention to the value chain approach



Check the specific eligibility criteria relevant in the each ECSEL Participating State

JOINING AN APPLICANT CONSORTIUM

- **Be proactive**
  - Develop your network & Reach out to potential coordinators, applicants in consortia (participate to brokerage events, info days, events in the ECS community)
- **Be prepared**
  - Summarise your skills/competences/expertise and proposed topic activities, define your team
  - Prepare your part of impact (market analysis, competition, exploitation, etc.)
  - Estimate the budget required and the funding amounts (EU and national) – get in touch with the national funding authorities in Turkey (TUBITAK) to check the specific eligibility criteria for national funding
- **Be flexible**

JOINING AN APPLICANT CONSORTIUM

The Industry Associations maintain a Collaboration Tool. This can be accessed at https://ecscollaborationtool.eu/

The project idea presentations from ECS Brokerage – Jan 14-15 2020 can be found on the website too.

Features in the tool

Create a project idea

Initiate a project idea in the ECS Collaboration Tool and invite partners, and browse other project ideas.

Look for a partner

Use the partner search on ECS Collaboration Tool to look for possible partners based on their expertise, and invite them to join your project idea.

Look for other project ideas

Browse through the ECS Collaboration Tool to find project ideas and send out an online request to join in a consortium.

Message Board - Get noticed even more

Leave a message on the message board for possible partners or interesting project ideas.

ECSEL CALLS 2020

- **Call ECSEL-2020-1-IA: Innovation action, two stage, high TRL (5-8),**
- **Call ECSEL-2020-2-RIA: Research and Innovation action, two stage, low TRL (3 to 4). same schedule as 1**
- **Call ECSEL-2020-3-RIA-IMI-ECSEL-joint-activity** *This call not fully finalized*
- **Call ECSEL-2020-4-CSA-DIGITAL EXCELLENCE**

Call 1 and 2: Schedule

CALLS 2020 LAUNCH	05/02/2020
CALLS 2019 PO DEADLINE Gating for project not for participant	05/05/2020
FEEDBACK ON PO	MID JUNE
CALLS 2020 FPP DEADLINE	16/09/2020
SELECTION AND FUNDING DECISION (PAB)	10/12/2020

EU Reimbursement rates

The **MAX** funding percentages of the EU contribution are **different than under H2020**.

Type	Call 1	Call 2	Call 3	Call 4
For profit (non SME)	**20%**	**25%**	**25%**	**100%**
SME	**25%**	**30%**	**30%**	**100%**
University/Other	**35%**	**35%**	**35%**	**100%**

EU Contribution as % of the eligible cost according to H2020 (beneficiaries may ask for a lower contribution)

National contributions: vary per state, see Section 10 of ECSEL JU Annual Work Plan 2020!
Contact the national authorities to inquire about specificities, limitations!

Commitments for the calls 2020

Action	Estimated
EU commitment	
Call 1 IA	93 M€
Call 2 RIA	61 M€
Call 3 RIA-IMI-ECSEL	5 M€
Call 4 CSA	2 M€
TOTAL EU Commitment	161 M€
Total national commitments	178 M€
Of which Turkey	5 M€

Some further conditions

- Capping:
  - Call 1: EU contribution per project capped at 25M€ and maximum contribution per partner in a project is limited to 50% of the total EU funding for the project.
  - Call 2: The EU contribution per project is capped at 12.5M€ and the maximum contribution per partner in a project is limited to 40% of the total EU funding for the project.

- Page limit Innovation/Impact/Implementation: 60 / 100 / 100
- Strive for a National funding to EU funding of 1.2

- Ranking: according to weigthed score
  - Call 1: Impact is more important than excellence
  - Call 2: Impact and excellence have the same weight

Some general comments

Project are encouraged to:

- **Build along the ECS value chain integration**
- **Cut across disciplines, support platform building, interoperability, establishment of open standards**; even outside the regular ECS sector (cooperation with other JUs for example).
- **support specific aspects of 'edge computing'**
- support some of **the important topics (annex)** in the fields of Mobility, Digital industry, Health and Energy

Edge computing

Proposals should encompass the design and manufacturing aspects and provides flexibility to accommodate to a broad scope of cases of edge computing and cover one or more of the aspects described in the non-exhaustive list below:

- Test and experimentation of **innovative computing architectures** suitable for embedded and autonomous operation. Of particular interest, computing approaches supporting Artificial Intelligence techniques.
- **Automated and semi-automated tools, possibly based on Artificial Intelligence techniques,** to simplify the development of systems and applications at the edge of the network and guarantee their quality while reducing the skill level required to the developer.
- Techniques and tools to guarantee secure (including privacy aspects), safe and time-critical behaviour in complex and **heterogeneous computing architectures for edge computing**, while guaranteeing interoperability with the environment.
- **Innovative integration of hardware and software** components for efficient operation in embedded edge applications with very limited energy budget.

ALL TOPICS ARE OPEN FOR Call 1 and 2

Also some possible directions (in annex of WP)

- **Mobility**: ENVIRONMENT PERCEPTION, PREDICTION AND ROBUST DECISION MAKING UNDER UNCERTAINTIES
- **Digital industry**: Artificial intelligence (AI) enabled inclusive and resilient manufacturing – The Human in the Loop
- **Health**: ARCHITECTURES, COMPONENTS AND SYSTEMS FOR BIOELECTRONIC MEDICINES
- **Energy**: Electronics in the Energy Sector: Condition and Health Monitoring (C&HM) for Power Electronics in Energy Applications

Call 2020-3 Joint action with imi

- **PRELIMINARY INFORMATION**
- Grafts on the IMI JU Project: Trials@Home
- According to RIA conditions
- Late call launch: September ?
- Topic: **Next Generation Digital Technologies for Clinical Trials at Home:** This project should address the issues and gaps to bring all the scattered activities, technologies, platforms to a higher TRL level by addressing the technical, regulatory, compatibility and acceptability issues that at the moment block endorsement by pharma and hospitals:
    - Lack of accuracy (compared to clinical instruments)
    - Data integration (into the workflow of hospitals and pharma)
    - User friendliness (should be straightforward for non-technical staff and elderly)
    - Data security and Privacy (most hospitals don’t want to have data outside the hospital)
    - Patch to patch communication (how to prevent latency)

Call 2020-4 Coordination and support actions

PRELIMINARY INFORMATION

- Topic: Different industrial partners described the Generic Semiconductor Data Model and provided production data on this structural basis, which have to be maintained available to develop cutting edge solutions for semiconductor supply chains. The requirement is to make these structural descriptions as well as the corresponding data samples available for future projects and the public in general.
- 1 phase, call launch same as RIA and IA

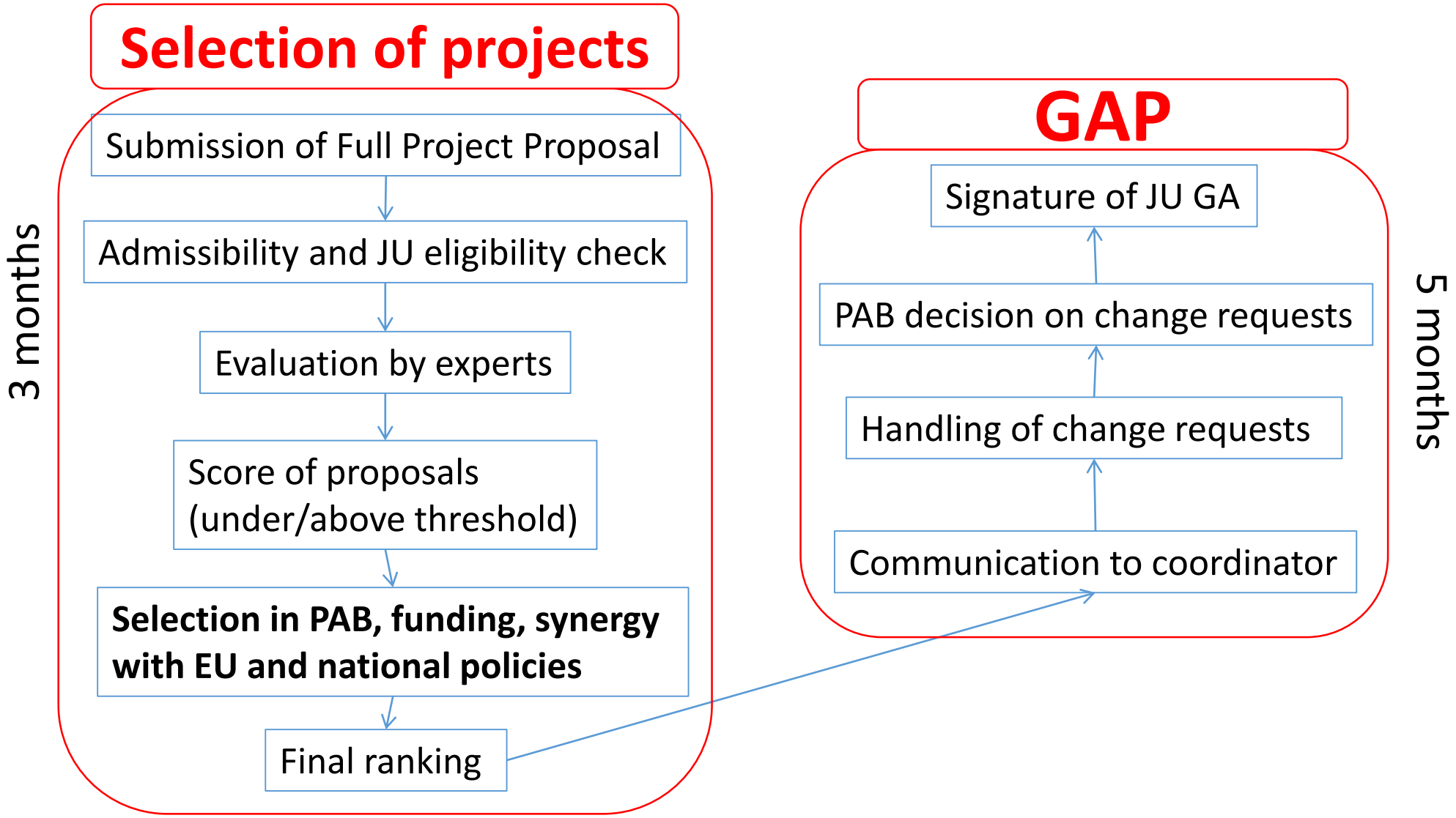
Submitting a proposal

1. Only the coordinator can submit the proposal but each applicant is requested to provide a certain amount of information (administrative/technical)

2. Follow the instructions received from the coordinator and liaise with the other applicants in the consortium

3. Some information would need to be provided to the coordinator/work package leader some would need to be filled in directly in the Funding and Tenders portal

From proposal to project



Questions?

For updates check: https://www.ecsel.eu/calls/calls-2020

E-mail: calls@ecsel.europa.eu