
KEY DIGITAL TECHNOLOGY JOINT UNDERTAKING CALLS

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ECSEL JU 2014-2021

First generation JUs ENIAC & ARTEMIS JU 2008-2014

- full bottom-up
- 2011-2013: **pilot lines, building critical mass**
- payments of EU funding part linked to national cost recognition
- start as first of its kind **tripartite** in the universe of European institutions



Second generation JU ECSEL JU 2014-2021

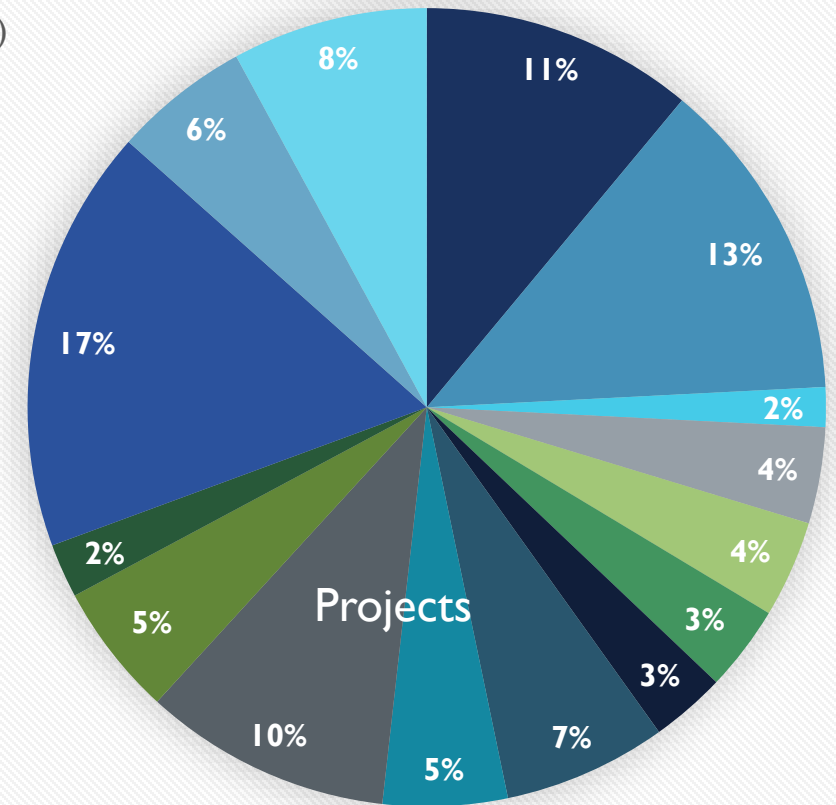
- along the **value chain**
- focussed on **industrial leadership** that promote synergies between commercial strategies and societal needs
- full bottom-up **with some special topics** that re-inforce/align national strategies and European priorities
- programme based on the **common agenda of Europe's ECS**
- **lighthouse initiatives**: Mobile.E, Industry4.E, Health.E
- payments of EU funding based on H2020 rules, national funding on national cost recognition (with few NA adopting the H2020 rules)
- start as merger of the first two joint undertakings: growing bigger



ECSEL JU 2014-2021

- 96 projects including 4 CSAs
- 3 220 beneficiaries
- 4 690 million Euro cost
- 2 280 million Euros in funding (EU+national)
- 408 500 Personmonths
- project participants from 35 countries of which 29 participating states

- More Moore: CMOS; SOI
- More Than Moore - Power (GaN, Si SiC)
- MtM - Imaging
- MtM - Sensors and MEMS
- MtM - LED, microbatteries, acoustics
- MtM - Packaging
- Neuromorphic chips
- Mobility related hardware
- Edge Computing systems
- Autonomous systems
- Medtech
- Smart Grid
- Industry4.0
- CPS connected
- CPS general

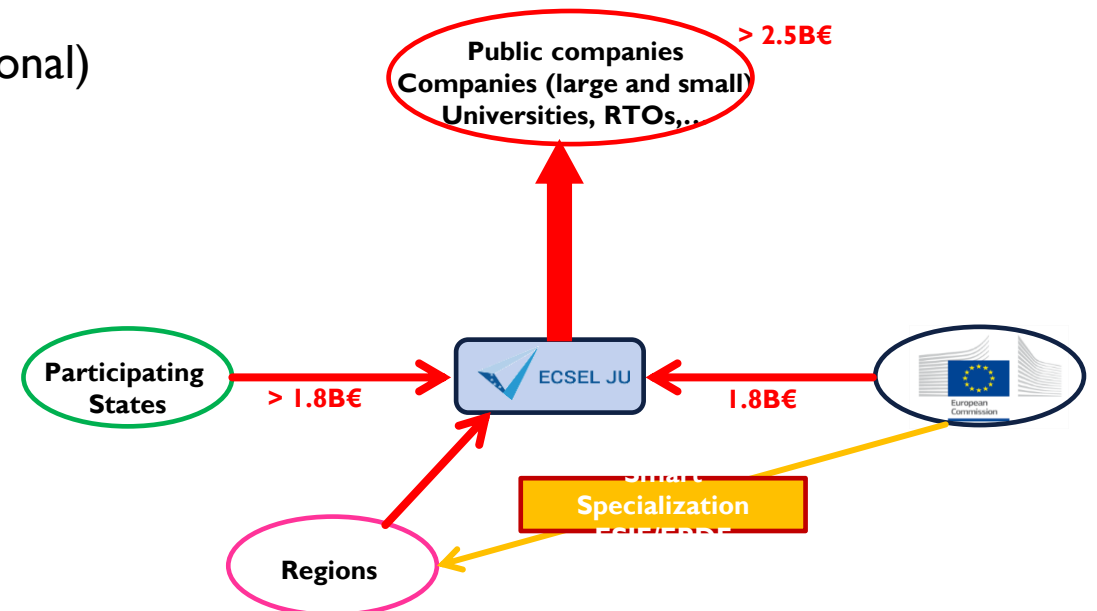
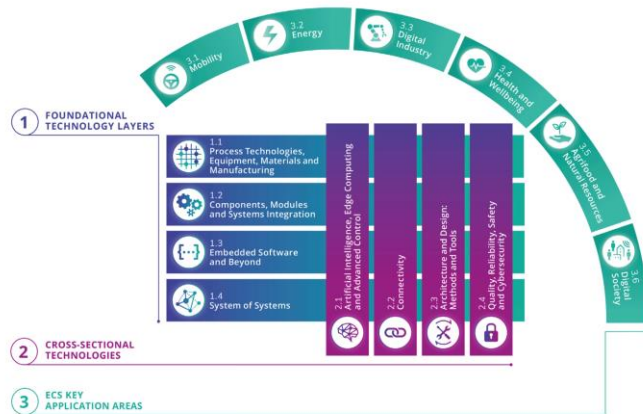
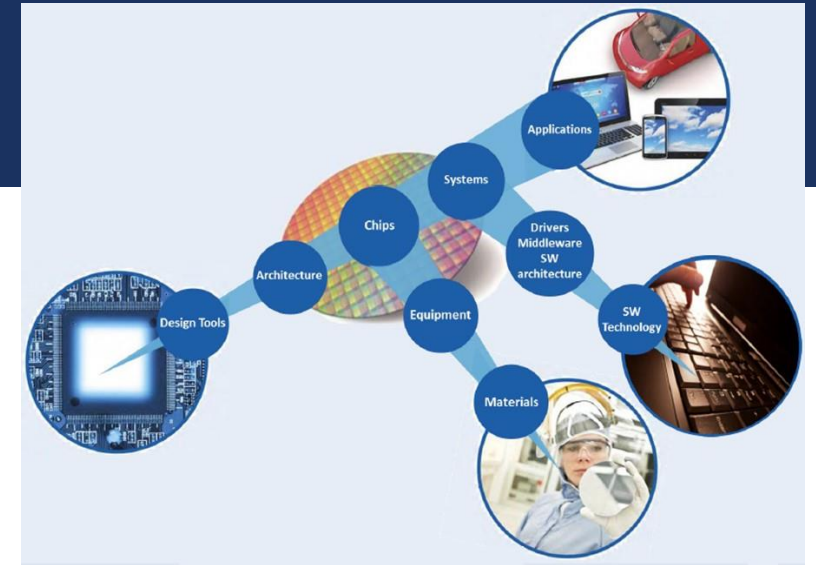


Visit the booths of the projects to get a better idea of the achievements supported by ECSEL JU

So, what is next?

KDT JU 2021-2027

- Third generation JU
- KDT JU = Key Digital Technology Joint Undertaking
- Tripartite: Commission Participating states 3 associations
- Associations: AENEAS, INSIDE, EPOSS
- Start : 30 November 2021 (ECSEL JU -> KDT JU)
- Budget ambition : 6B€ funded by 1,8 B€ (EU)+1,8 B€ (national)
- Based on new framework programme (Horizon Europe):



KDT JU 2021-2027

Element of urgency

- Chip act: role of KDT
- Industrial alliance for processors and semiconductor technologies

results in mix of bottom-up and top down (focus topics) and involvement of KDT JU in those initiatives

Horizon Europe

- coherence and cooperation for impact
- overarching objectives such as green deal results in importance of cooperation and support to green deal in KDT JU

Objectives

- **Reinforce Europe's technology sovereignty** in electronic components and systems to support future needs of vertical industries and the economy
- Establish EU scientific excellence and innovation leadership in **emerging components and systems technologies (role for SMEs)**
- Ensure that components and systems technologies **address Europe's societal and environmental challenges**

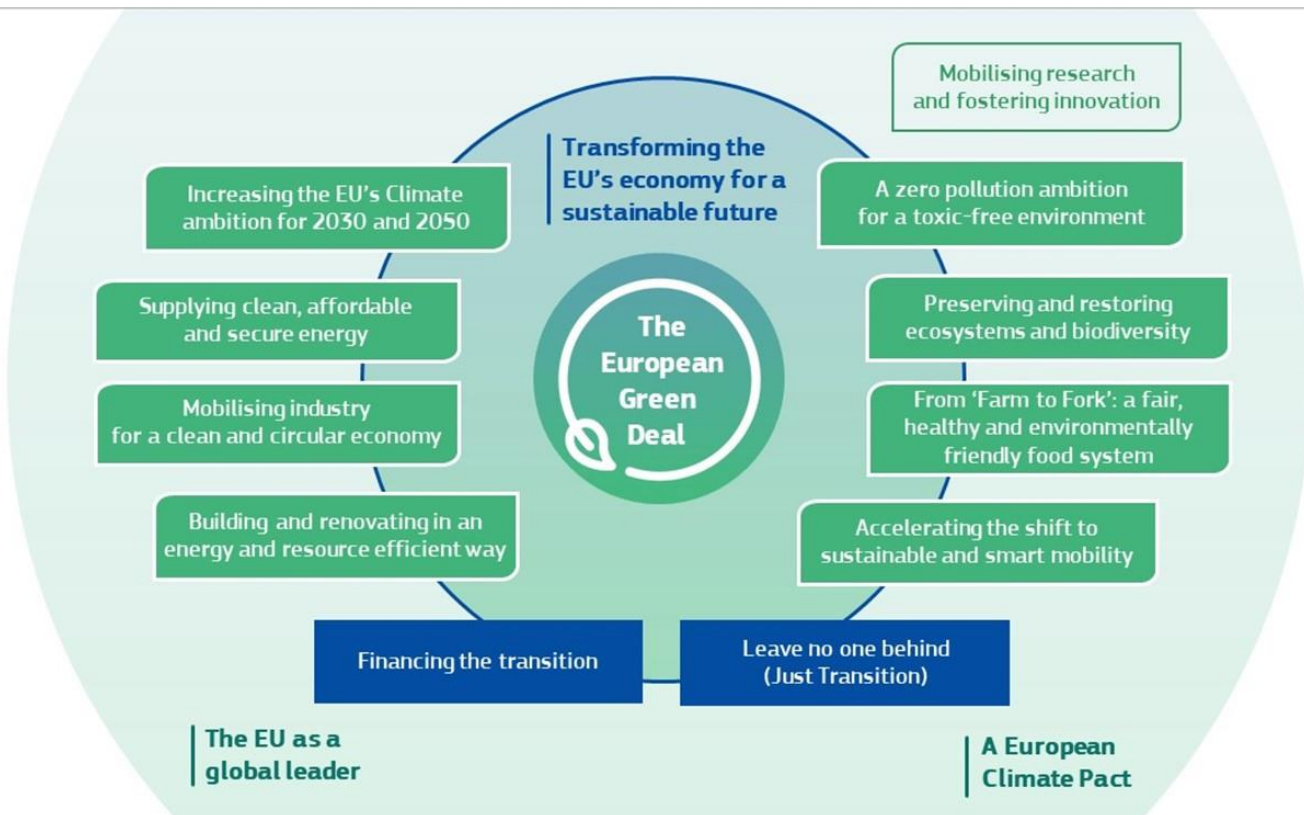
KDT JU 2021-2027: COOPERATION ASPECTS

For KDT the potential for synergies to be addressed through cooperative actions (e.g. joint calls, coordinated support activities, etc.) are multiple :

- Smart Networks and Services initiative on 5G and 6G connectivity
- European High Performance Computing initiative on underlying supercomputing capacities
- Photonics, AI, data, robotics, Global competitive space system and Made in Europe: synergies are needed where EU industry has to develop leadership and competitiveness in the global digital economy.
- Digital Europe Programmes with testing facilities, skills development and capacity building activities in specific digital domains, similar for Connecting Europe Programmes
- Global competitive space system
- Health, Mobility and Energy partnerships
- IPCEI, other national programmes
- Eureka clusters
- Coordination with regional clusters such as Silicon Europe, Silicon Saxony (Dresden), Minalogic (Grenoble), and DSP Valley (Leuven-Eindhoven)

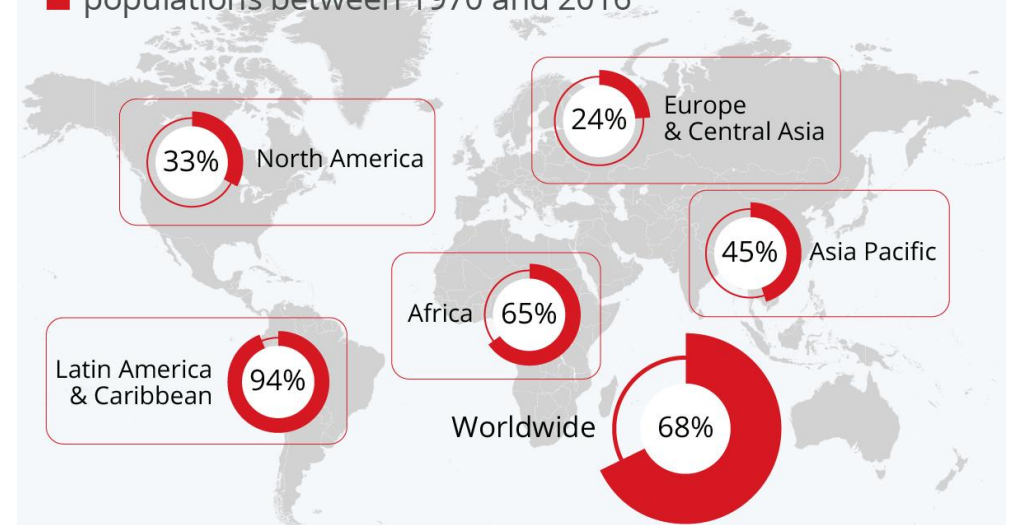
KDT JU 2021-2027: GREEN DEAL

Green deal is more than climate!
Biodiversity



Global Wildlife Populations Suffer Catastrophic Collapse

Decline in monitored vertebrate species populations between 1970 and 2016*



* Based on 20,811 populations of 4,392 species (mammals, birds, amphibians, reptiles and fish).

Source: 2020 Global Living Planet Index



8 GOOD REASONS TO PARTICIPATE IN ECSEL PROJECTS

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

FOR KDT ADD:

1. Participate to projects that **make a difference** to the planet and humanity
2. Leverage your participation through **cooperation across programmes**

A WORD OF CAUTION ON THE FIRST CALL OF KDT JU

1. The work programme has not yet been decided: details on the calls can change
2. Calls can only be launched if all decisions required to set up KDT, its bodies, its procedures, and the decisions for launching KDT calls are taken in due time before the launch of the calls, otherwise the first call could be cancelled

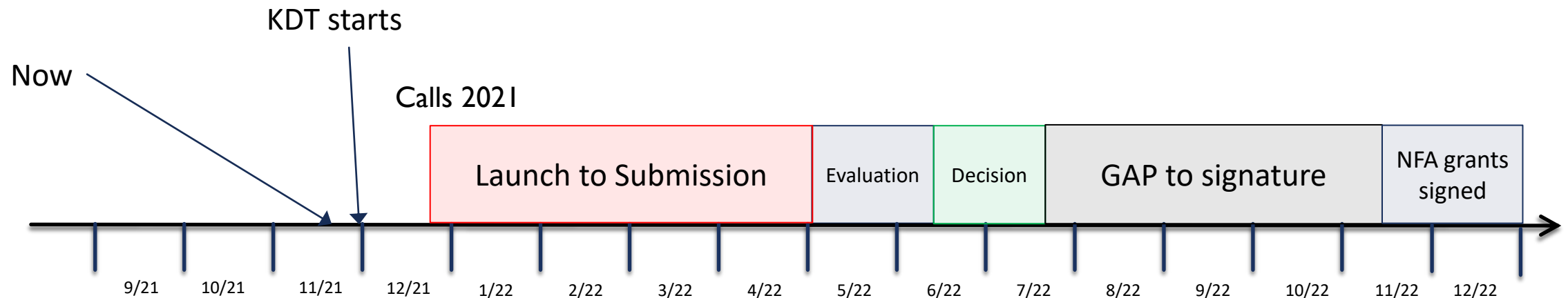
THEREFORE CHECK THE WEBSITE OF KDT JU WHERE YOU WILL FIND ALL THE ACTUAL INFORMATION

www.kdt-ju.europa.eu

KDT CALL 2021

The first call shall be launched with following characteristics:

- launch date 16 December 2021 (with caveat)
- one phase call with a deadline for the full project proposal end April 2022.
- selection decision July 2022
- grant signature before end of 2022
- no possibility for central financial management facility
- small projects are welcome
- special attention to SMEs



KDT CALL 2021: OTHER CHARACTERISTICS

- Call 2021-1 IA call: all major challenges open
- Call 2021-2 RIA call
 - General part: all major challenges are open
 - Focus topic 1:
 - Artificial intelligence at the edge
 - SMEs are encouraged to participate to this call
 - Focus topic 2:
 - Open-source building blocks (RISC-V)
- Call 2021-3 CSA call: A Pan-European chip infrastructure for design innovation

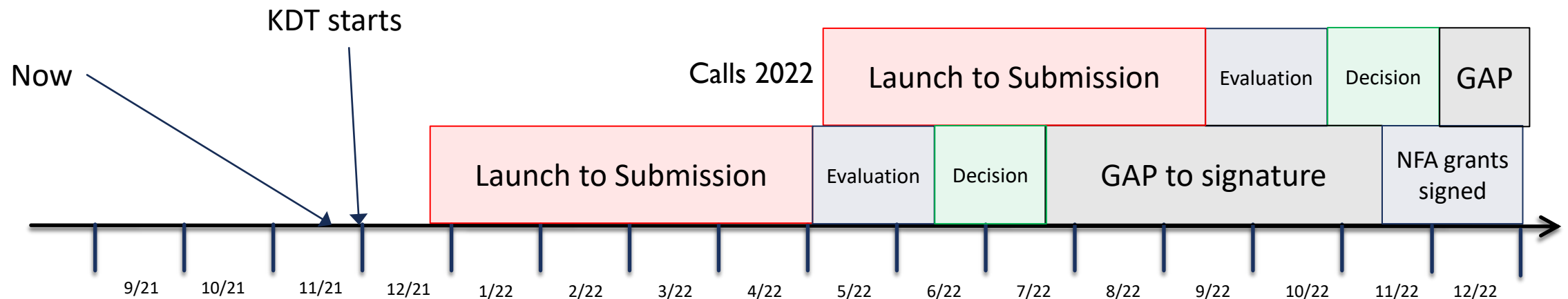
Number of focus topics not yet decided, on going discussion on topic 2

- Major challenges according to ECS SRIA 2021
- Conditions are very similar to the ECSEL calls 2020 (page limits, sizes, etc.)
- EU funding rates very similar to ECSEL except for SMEs (higher)
- National funding shall be commensurate to the EU funding rates
- EU budget maximum 210 million Euro (amount not yet decided)
- Total national budget 147 million Euro (some authorities have not yet communicated their budget)

KDT CALL 2022

The second call would be launched right after the first call with following characteristics:

- one phase call with a deadline for the full project proposal mid September.
- selection decision before the end of the year
- with focus topics
- larger budget than first call
- possibility for central financial management facility

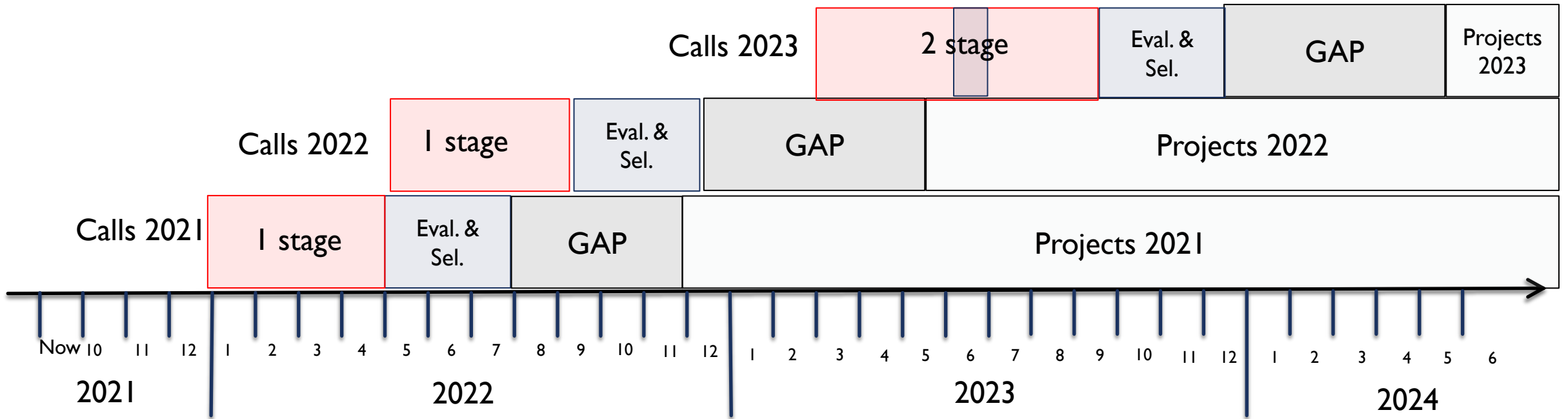


KDT CALL 2023

The third call would be launched begin 2023 with following characteristics:

- 2 phase call wth decision towards end of 2023

The schedule is provisional and conditional on certain requirements.



HOW TO PARTICIPATE?

ECS Collaboration tool (check the website of the associations)
ECS Brokerage event 18-19 January 2022



ECS Collaboration Tool

A networking tool for project ideas and potential partners.

Inside and AENEAS have now merged their collaboration support tools into a single co-managed service: the ECS Collaboration Tool. AENEAS and Inside Industry Association wanted to create one tool to facilitate easy information exchange within the ECS community and allow the collection and management of all relevant data, ideas and project proposals in one place.



Create a project idea

Initiate a project idea in the ECS Collaboration Tool, 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.

<https://aeneas-office.org/collaboration/ecs-tool/>



ECS Brokerage Event 2022

The 2022 edition of the ECS Brokerage Event will be held online on 18-19 January 2022. [More here.](#)



QUESTIONS?