"Europe will not be made all at once, or according to a single plan. It will be built through concrete achievements which first create a de facto solidarity." Robert Schuman

# KDT JU Call 2022

**Yves GIGASE** 

Head of Programmes

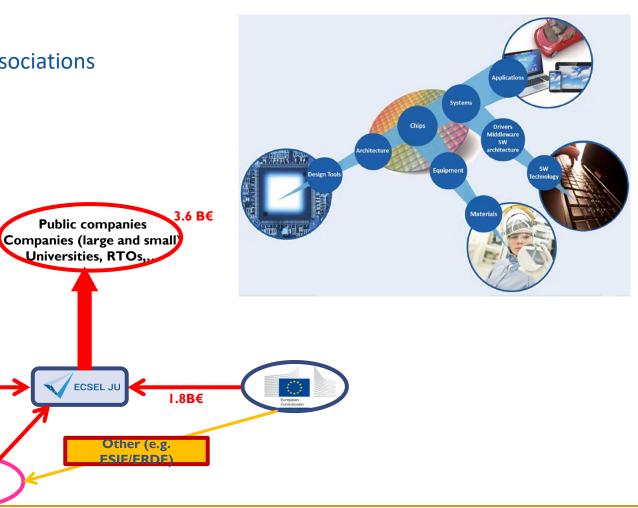
Italy Event 30 May 2022





# KDT JU 2021-2027

- Third generation JU
- KDT JU = Key Digital Technology Joint Undertaking
- Tripartite: Commission Participating states Industry associations
- Associations: AENEAS, INSIDE, EPoSS
- Started : 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)





Regions

> I.8B€

Participating

States

2



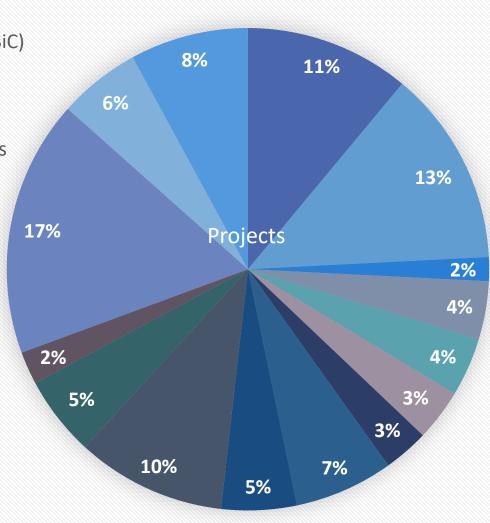
# ECSEL JU 2014-2021

- 96 projects including 4 CSAs
- 3 220 beneficiaries
- 4 690 million Euro cost
- 2 280 million Euros in funding (EU+national)
- 408 500 Persons-month

(DT JU

 project participants from 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





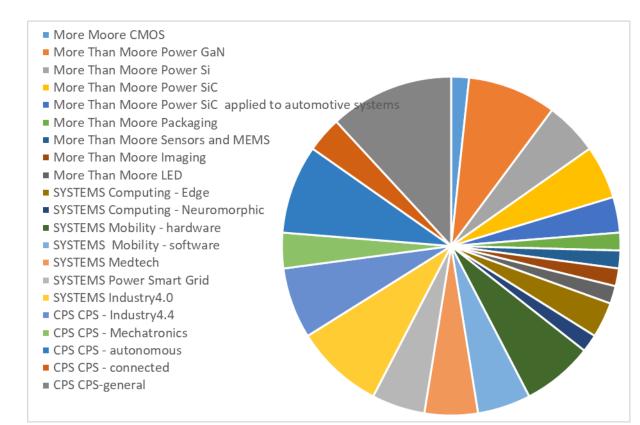
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### **ITALIAN PARTICIPATION UNDER ECSEL**

Italian participation:

- 59 projects with Italian beneficiaries
- 279 participations
- 6 Italian coordinators
- 419 million Euro in cost by Italian beneficiaries
- 90 million Euro in EU funding
- 75 million Euro in National funding (excl ESI funding)





## WHAT ABOUT THE EUROPEAN CHIPS ACT?

European Commission	En	iglish ы		Search	
Home > Press corner > Digital se	overeignty: Commission proposes C	hips Act			
Available languages: English					
Press release   8 February 202 Digital sovere confront sem Europe's tech	eignty: Comm iconductor sh	nortages and	oses Chips Act Strengthen	to	
Page contents	and the second	pposes a comprehensive set o			

Top Print friendly pdf Related media Press contact Today, the Commission proposes a comprehensive set of measures ensure the EU's security of supply, resilience and technological leadership in semiconductor technologies and applications. The <u>European Chips Act</u> will bolster Europe's competitiveness, resilience and help achieve both the digital and green transition.

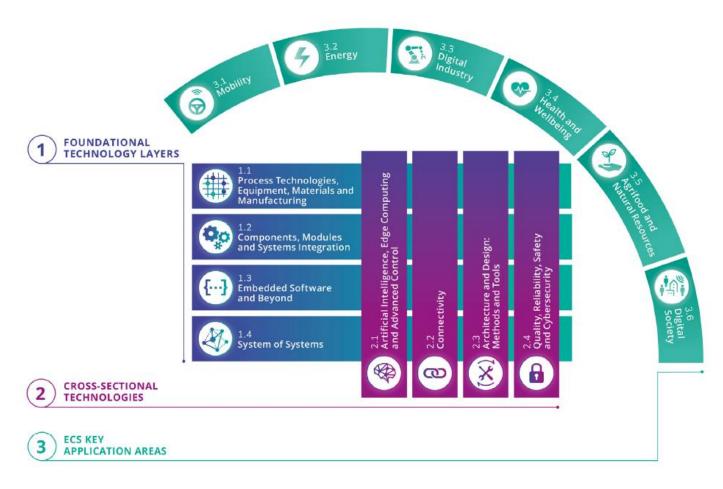
### This will affect the KDT JU (previous presentation), but not the selected projects! Nor the calls 2021, 2022!



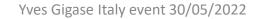


# ECS SRIA

- Boost industrial competitiveness through interdisciplinary technology innovations.
- Ensure/reinforce **EU strategic autonomy** through secure, safe and reliable ECS supporting key European application domains.
- Establish and strengthen sustainable and resilient ECS value chains supporting the **Green Deal**.
- Unleash the full potential of intelligent and autonomous ECS-based systems for the European digital era.



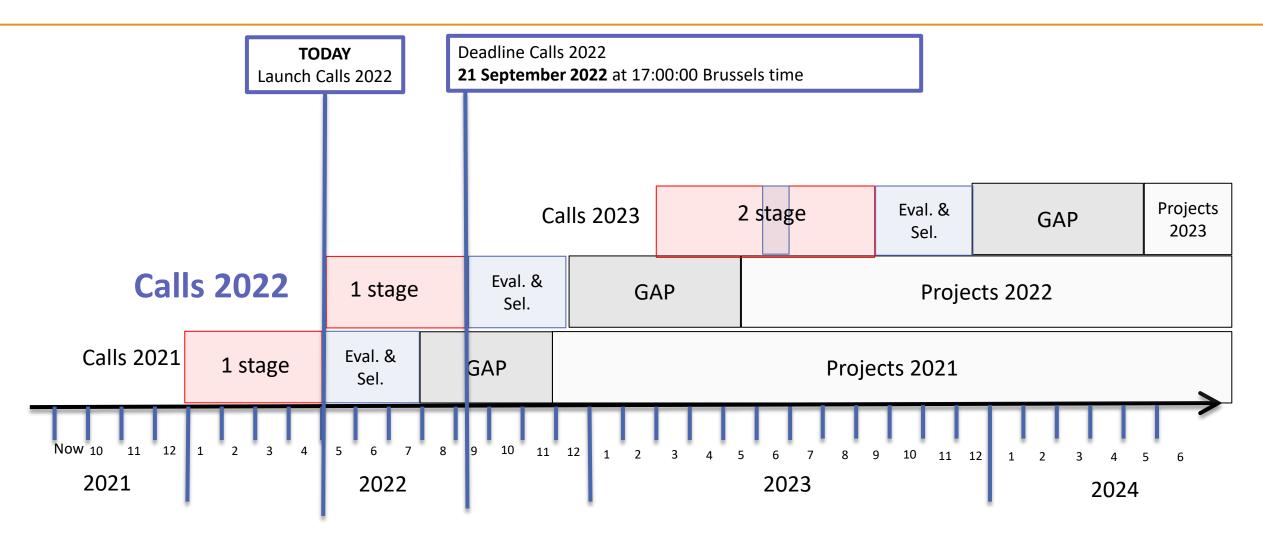




6



### **KDT CALL PLANNING**





### CALL 2021?

- Call 2021-1-IA: 13 proposals
- Call 2021-2-RIA: 16 proposals
- CSA: 1 proposal
- Now under evaluation
- Expect selection of projects: mid-July





### **A WORD OF CAUTION**

### Check regularly our call website under the KDT website: <u>www.kdt-ju.europa.eu</u>

**Changes in National conditions are to be expected!** 

### Contact email for your questions (please use ONLY this email): calls@kdt-ju.europa.eu

But for every IT issue contact the IT helpdesk (link in participant portal). We cannot help you on IT issues!







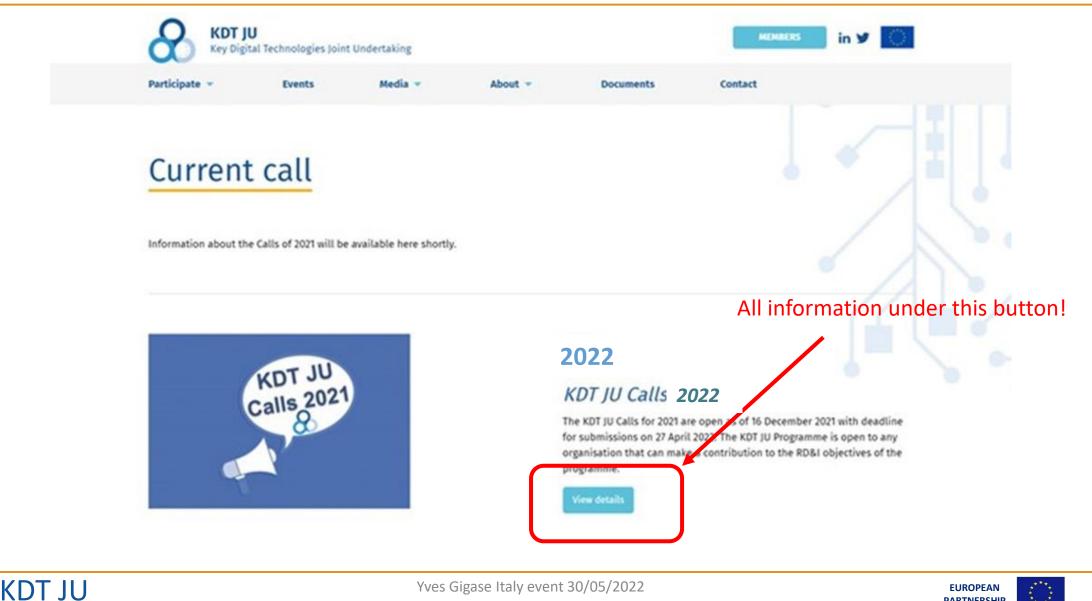
# WHAT IS NEW? WHAT IS DIFFERENT?

- H2020 very similar to Horizon Europe for calls
- KDT Call 2022 very similar to previous ECSEL calls (eg Call 2020)! But there are differences!!!!
- Therefore read the sections on the calls in the Work Plan 2022, read the documents, etc.





# How to start? Go to KDT Call webpage!



### **STRUCTURE AND TOPICS**

### KDT JU opens 2 concurrent Calls in 2021

#### + HORIZON-KDT-JU-2021-1 IA

- HORIZON-KDT-JU-2021-1-IA
- HORIZON-KDT-JU-2021-1-IA Focus Topic 1: Development of open-sources RISC-V building blocks

#### HORIZON-KDT-JU-2021-2 RIA

#### Similar for 2022

- HORIZON-KDT-JU-2021-2-RIA
- HORIZON-KDT-JU2021-2-RIA FocusTopic 1: Processing solutions for AI at the edge addressing the design stack and middleware
- HORIZON-KDT-JU-2021-3-CSA A Pan-European chip infrastructure for design innovation

### Who can participate?

The KDT JU Programme is open to any organisation that can make a contribution to the RD&I objectives of the programme. However, there are specific eligibility criteria relevant in the each KDT JU Participating State: these are listed in the KDT JU Work Programme 2021 (see below).





Yves Gigase Brokerage event Brussels 03/05/2022 Yves Gigase Italy event 30/05/2022



### **STRUCTURE AND TOPICS**

### 2 calls, 3 focus topics

Action	Торіс
Call 2022-1 T1	Topic 1 General according to SRIA 2022 (IA)
Call 2022-1 T2	Topic 2: Focus topic on Industrial supply chain for
	silicon photonics (IA)
	Topic 3: Focus topic on Design of Customisable and
Call 2022-1 T3	Domain Specific Open-source RISC-V Processors (IA)
Call 2022-2 T1	Topic 1: General according to SRIA 2022 (RIA)
	Ttopic 2: Focus topic on Ecodesigned smart electronic
Call 2022-2 T2	systems supporting the Green Deal objectives (RIA)
	Total





### FOCUS TOPIC ON INDUSTRIAL SUPPLY CHAIN FOR SILICON PHOTONICS (IA)

**Overall strategy:** goal to set up an **industrial manufacturing capability** for **current and next generation silicon photonic integrated circuits** and including the various elements of the value chain such as packaging of those PIC-components. In parallel also develop agile heterogeneous PIC platforms of separately manufactured components or CMOS-uncommon materials onto silicon photonics wafers (wafer-level heterogeneous integration).

#### Details (some):

- establish an (eventually distributed) industrially based (meaning pilot line established in an industrial environment) pilot line for a silicon photonics manufacturing platform, that is the pilot line must cover the full process for silicon photonics circuits (including if possible heterogenous integration aspects for PICs) covering front and back end, integration and packaging (SiP) as well as wafer-level-test, chip testing, device testing to industrial standards with special attention to the scalability of the backend packaging and testing.
- enable breakthroughs in silicon PIC platforms, overcoming their current limitations, by wafer-level heterogeneous integration of CMOS-uncommon materials or processed chiplets and prepare the transfer to the industrial silicon manufacturing platform.
- At least two demonstrators should be built including PICs made on the pilot line covering distinctive high volume applications such as LIDAR technology, consumer medical applications, etc.
- etc.
- Read the WP2022 section on this topic!
- Please note the added evaluation criterion:



This call shall bring together the ECS community and the Photonics community. A well balanced composition with members of the two communities in the consortium should reflect this. This will be evaluated by the experts in the implementation criterion

### FOCUS TOPIC ON DESIGN OF CUSTOMISABLE AND DOMAIN SPECIFIC OPEN-SOURCE RISC-V PROCESSORS (IA)

**Overall strategy:** 

- A. Customizable high-end RISC-V based multi-processor core (including dedicated hardware & supporting software IP, enhanced or new libraries of HW peripherals and software), to be applied for high-end computing or domain-specific applications, including features as a.o. dependability, reliability and security.
- **B.** Based on A, domain specific adaptations of RISC-V customisable processor solutions for safe, secure and reliable computationally intensive applications, e.g., for automotive and other sectors. Such solutions are expected to address appropriate functional and non-functional, high-performance requirements aiming at realizations on advanced technology, e.g. 22nm FDSOI, 16 nm FinFET or below

#### **Details**:

- foundational RISC V compliant building blocks, both hardware and software, with appropriate models and tools support, for customizable high-end application cores for high-performance embedded systems and/or general purpose HPC processors
- Apply the RISC-V developments and tools towards an industrial application demonstrator down to chip implementation
- etc.
- Read the WP202 section on this topic!





# FOCUS TOPIC ON ECODESIGNED SMART ELECTRONIC SYSTEMS SUPPORTING THE GREEN DEAL OBJECTIVES (RIA)

**Overall strategy:** 

- Innovative solutions that **demonstrate a reduced environmental footprint**, allow full recycling, include repair options or demonstrate significantly increased lifetime or second life concepts of ECS.
- Development of **new concepts, metrics and standards** to **assess** and **support** reduced environmental footprint and sustainability of ECS products.

#### **Details**:

- Develop **innovative design and manufacturing methodologies for smart electronic systems**, considering eco-design principles, including aspects related to life cycle, end-of life, standardisation, certification, easy repair and regulation compliance. Accessible environmental data repository and exchange framework should also be taken into account.
- Demonstrate that reliability-by-design principles maximise the durability of the smart electronic systems proposed or else allow second life of electronic components, products or systems in future. Important factors are repair-friendly product designs, solution to enable predictive maintenance and availability of spare parts, implemented through new business models.
- Target more efficient recovery and recycling solutions or/and optimisation of the use of resources (i.e. reuse/repair/repurpose, recovery and recycling of waste and materials with a special attention to rare earth metals) over the lifetime of smart electronic systems (for example by appropriate packaging design). Specifications for equipment and systems for sorting, waste stream separation, recycling processes of such electronic components.

etc.

#### • Read the WP202 section on this topic!





### **CALL DOCUMENTS**

Access to the Call Documents via these links (also available through the Funding and Tenc	lers Portal):	
<ol> <li>KDT JU Work Programme 2021</li> <li>ECS-SRIA-2021</li> <li>Guide for Applicants to KDT JU Calls for proposals</li> </ol>	Similar for call 2022	• WHO CAN PARTICIPATE?
<ol> <li>Proposal Template Model for IA and RIA Actions – KDT JU</li> <li>Proposal Template Model for CSA Actions – KDT JU</li> </ol>		CALL DOCUMENTS     UPDATES
<ol> <li>Essential Information for Clinical Studies (only for proposals including clinical studies)</li> <li>Evaluation Form IA an RIA Actions – KDT JU</li> </ol>		DEADLINES
8. Evaluation Form CSA Actions - KDT JU		GENERAL CALLS INFORMATION
9. KDT PAB Decision on evaluation and selection procedures		BUDGET
<ol> <li>Model Grant Agreement</li> <li>Rules for Legal Entity Validation, LEAR Appointment and Financial Capacity Assessment</li> </ol>		COLLABORATION TOOL
2. EU Grants AGA — Annotated Model Grant Agreement		• GUIDELINES / CALLS HELPDESK
For reference:		
KDT-JU Regulation of Establishment		
KDT PAB Decision on KDT-JU Calls 2021		
<ul> <li>HE Programme Guide</li> <li>HE Framework Programme and Rules for Participation Regulation 2021/69</li> <li>UE Specific Programme Decision 2021/264</li> </ul>	Check the HE inform	nation on the portal!
HE Specific Programme Decision 2021/764		

EUROPEAN PARTNERSHIP 17

**KDT JU** 

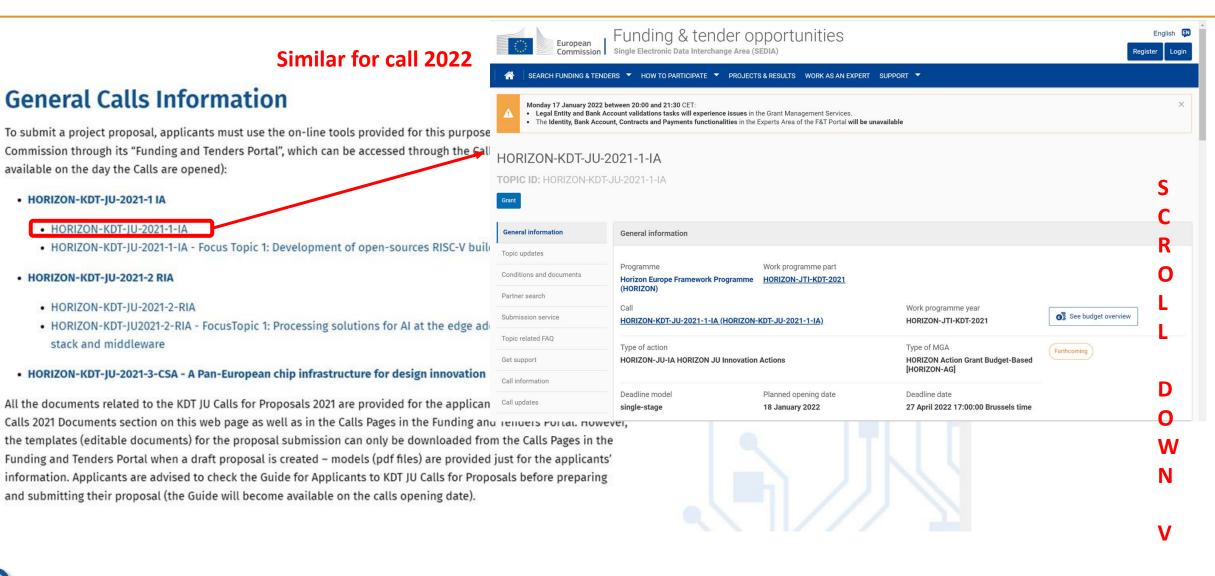
### **UPDATES**

	Similar for call 2022		
Date	Change		
21/012022	The KDT JU Work Programme 2021 has been updated with information about the national eligibility rules for IT (MUR) (pages 98-101) and ES (MINAETD, AEI) (pages 125-132); a clerical error copy/paste was corrected in the sections "Artificial Intelligence" and "Connectivity" (pages 18 & 33); the national budgets table has been updated for IT(MUR), EL and SE (page 16)	WHO CAN PARTICIPATE?     CALL DOCUMENTS	
21/01/2022	The complex funding rates of IA and RIA KDT JU calls 2021 and the limitations of the submission system resulted in the fact that the <b>funding rates of the large enterprises (for profit not SMEs)</b> are not adequately integrated in the JU/EU Budget table in the Part A. Consequently, these organizations need to calculate their JU/EU Funding as <b>instructed in the Guide for Applicants</b> (examples for each Call/topic are presented). Similarly, the <b>National Budgets/Funding Table</b> are not anymore integrated into the Part A (as it was the case in the past for the ECSEL JU) and it <b>needs to be uploaded as a separate xls file</b> in the dedicated place holder in the submission tool. More details/ <b>instructions are provided in the Guide for Applicants</b> <b>The Part C are now named National Part in the submission tool</b> to avoid confusion with the Part C (dynamic forms) used by other programmes. More <b>details</b> are <b>provided in the Guide for Applicants</b>	<ul> <li>UPDATES</li> <li>DEADLINES</li> <li>GENERAL CALLS INFORMATION</li> <li>BUDGET</li> <li>COLLABORATION TOOL</li> <li>GUIDELINES / CALLS HELPDESK</li> </ul>	
19/01/2022	The <b>"Guide for Applicants to KDT JU Calls for proposals</b> " and the <b>"Template Model National Budgets</b> <b>Table</b> " are now available		
18/01/2022	The submission sessions in the Funding and Tenders Portal are now available (submission tools opened) for all KDT JU Calls 2021		



\*\*\*\*

# **READY? GO!**





# How to Participate?



#### **ECS Collaboration Tool**

#### A networking tool for project ideas and potential partners.

Three industry organisations: AENEAS INSIDE Industry Association EpoSS

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.

https://aeneas-office.org/collaboration/ecs-tool/ https://www.inside-association.eu/ https://www.smart-systems-integration.org/



Create a project idea



Look for a partner

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





### **EU FUNDING RATES**

Type of beneficiary	IA	IA Focus Topic	RIA	RIA Focus Topic
Large Enterprise	20 %	25 %	25 %	25 %
SME	30 %	35 %	35 %	35 %
University/Other (not for profit)	35 %	35 %	35 %	35 %

### National funding shall be commensurate to the EU funding rates.







### **STRUCTURE AND TOPICS**

### 2 calls, 3 focus topics

Action	Торіс	Estimated EU Expenditure (M€)
Call 2022-1 T1	Topic 1 General according to SRIA 2022 (IA)	120.0
Call 2022-1 T2	Topic 2: Focus topic on Industrial supply chain for silicon photonics (IA)	20.0
Call 2022-1 T3	Topic 3: Focus topic on Design of Customisable and Domain Specific Open-source RISC-V Processors (IA)	20.0
Call 2022-2 T1	Topic 1: General according to SRIA 2022 (RIA)	74.5
Call 2022-2 T2	Ttopic 2: Focus topic on Ecodesigned smart electronic systems supporting the Green Deal objectives (RIA)	20.0
	Total	254.5 M€





### **NATIONAL BUDGETS**

Missing budgets: BG, CY, ES-MAETD, HR, IL, IS, LT, MT, PT, RO, SL.

IT MISE = only IA calls IT MUR = only RIA calls

	2022-1 T1	2022-1 T2	2022-1 T3	2022-2 T1	2022-2 T2	Total (M€)
AT						7.00
BE						14.00
CZ	1.20	0.20	0.20	1.20	0.20	3.00
DE incl Thuring						33.20
DK						2.00
EE						0.60
EL						2.00
ES AEI						3.00
FI						7.00
FR						30.00
HU						2.00
IE						2.00
IT MISE						20.00
IT MUR						3.40
LV						0.60
LU						3.00
NL						30.00
NO						2.00
PL						1.50
SE	2.00	0.10	0.20	2.25	0.15	4.70
SK						0.80
TR						6.00
– <b>Total</b> Yves Gigase Ital	ly event 30/05/20	022			EUROPEAN PARTNERSHIP	<b>177.80</b> -



### **IMPORTANT DIFFERENCES WITH ECSEL CALLS**

- EU Funding Rates in the Budget table (EU Budget/EU Funding) in the Part A
- National Budgets Table
- National Part (previous Part C)

(Look for detailed instructions in the Guide for Applicants)



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### FUNDING RATES IN THE BUDGET TABLE IN PART A

Due to limitations of the submission tool the funding rate of the large enterprises is not taken into account in the budget table of the Part A. Therefore, the large enterprises need to check the funding rates they are entitled to in the Work Programme, calculate the EU Funding/contribution outside the portal and fill in the calculated amount in the budget table in the column named "**Requested EU contribution to eligible costs**"

An example provided below for a large enterprise (LE) participating to the IA call – funding rate 20%; portal indicates 30% (which is for SMEs only). Large enterprise calculates 20% of the total eligible costs and introduces manually the amount in the "Requested EU contribution to eligible costs"





### FUNDING RATES IN THE BUDGET TABLE IN PART A

#### 3 - Budget

KDT JU

No	Name of beneficiary	Country	Role	Personnel costs/€	Subcontracti ngcosts/€	Purchase costs - Travel and substistence/€	Purchase costs - Equipment/€	Purchase costs - Other goods, works and services/€	Internally invoiced goods and services/€ (Unit costs- usual accounting practices)	Indirect costs/€	Total eligible costs	Funding rate	Maximum EU contribution to eligible costs	Requested EU contribution to eligible costs/€	Max grant amount		45,000.00 funding ra		Total estimated income
1	Test Camelia- valeria	BE	Coordinator	45,000,000	400,000	30,000		230,000	7,000,000	11315000.00	63975000.00	35	22391250.00	22,391,250	223 1250.00				22391250.00
2	Large enterprise	BE	Partner	2,000,000	450,000		500,000		70,000	625000.00	3645000.00	30	1093500.00	729,000	729000.00				729000.00
3	Sme Test	BE	Affiliated	600,000		50,000		5,000,000	39,999	1412500.00	7102499.00	30	2130750.00	2,130,750	2130750.00				2130750.00
4	Baird Consulting Scs	BE	Associated							0.00	0.00	30	0.00	0	0.00				0.00
5	Tokio	ЛР	Partner	5,000,000	10,000	2,000,000	500,000	700,000	800,000	2050000.00	11060000.00	35	3871000.00	3,871,000	3871000.00				3871000.00
			TOTAL	52,600,000	860,000	2,080,000	1,000,000	5,930,000	7,909,999	15402500.00	85782499.00		29486500.00	29,122,000	29122000.00	0	0	0	29122000.00



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# NATIONAL PART (FORMERLY KNOWN AS PART C)

The previous Part C are now named **National Part** and have a dedicated Place Holder for each of the KDT JU Participating State that request such an annex.

Instructions about these annexes are provided in the Annex 3 of the Work Programme of the respective Participating States.

(The name changed in order to avoid the system blockages due to confusion with the Part C which is now dedicated nomenclature in some Horizon Europe programme (dynamic forms which are automatically checked by the system every time a "Part C" name appears.)

TEST MODE	i In this step you can edit the Administrative Forms and upload the propo	osal itself. 🛛 🛛 👋
Deadline 27 April 2022 17:00:00 Brussels Local Time	8 Your proposal contains changes that have not yet been submitted.	
	Administrative forms (Part A)	
call data:	Edit forms 🖋 View history Print preview 0	
all: HORIZON-KDT-JU-2021-2-RIA opic: HORIZON-KDT-JU-2021-2-RIA-Focus-Topic-1 ype of action: HORIZON-JU-RIA ype of MGA: HORIZON-AG	Part B and Annexes	
	In this section you may upload the technical annex of the proposal (in PDF form	
A Topic and type of action can only be changed by creating a new proposal.	Part B	Upload
	National Budgets Table	Upload
roposal data: • Rectangular Snip	National Part (BB V AlO)	😧 Upload 🕰
	National Part (BE- BXL)	🕑 Upload 🕰
cronym: TEST RIA Call raft ID: SEP-210826456	National Part (BE-	Upload 🕰
	WA) National Part (DE)	Upload
ownload Part B templates	National Part (DK)	Upload
Download part B templates		
	National Part (ES)	Upload
upport & Helpdesk	National Part (FR)	Upload
	National Part (IE)	😧 Upload 🕰
Online Manual     IT How To	National Part (IT)	😧 Upload 🕰
IT Helpdesk ? FAQ	National Part (LV)	Upload
	National Part (NL)	9 Upload 🕰
ervice Desk:	National Part (NO)	Upload
EC-FUNDING-TENDER-SERVICE-DESK@ec.europa.eu	National Part (PL)	Image: Optimized state     Image: Optimized state
•	National Part (SE)	Upload
	ational Part	Upload



## NATIONAL BUDGETS TABLE

(Due to limitations of the submission tool the table for the national funding (eligible costs according to the national rules and national contributions requested) is not anymore integrated in the Part A (Administrative Forms) but has to be submitted separately as am xls file which must be uploaded to the dedicated placeholder named "**National Budgets Table**")

The template is provided in the "**Download Part B** template" tab together with the Part B template (as a zip file which includes the xls template for the National Budgets Table and the rft template for the Part B)

TEST MODE	i In this step you can edit the Administrative Forms and upload the proposal itself. @	×
Deadline	Your proposal contains changes that have not yet been submitted.	
27 April 2022 17:00:00 Brussels Local Time	Administrative forms (Part A)	
Call data:	Edit forms  View history Print preview	
call: HORIZON-KDT-JU-2021-2-RIA Topic: HORIZON-KDT-JU-2021-2-RIA-Focus-Topic-1		
ype of action: HORIZON-JU-RIA	Part B and Annexes	
ype of MGA: HORIZON-AG	In this section you may upload the technical annex of the proposal (in PDF format only) and any other requ	iested attachments. 📀
Topic and type of action can only be changed by creating a new proposal.	Part B	O Upload
	National Budgets Table	Upload
Proposal data:   Rectangular Snip	National Part (BE- VLAIO)	Upload
Acronym: TEST RIA Call	National Part (BE- BXL)	Upload
oraft ID: <b>SEP-210826456</b>	National Part (BE- WA)	Upload
Download Dart B tomplates	National Part (DE)	Upload
	National Part (DK)	Upload
Download part B templates	National Part (ES)	Upload
Support & Helpdesk	National Part (FR)	Upload
	National Part (IE)	Upload
Online Manual     IT How To	National Part (IT)	Upload
T Helpdesk	National Part (LV)	Upload
Service Desk:	National Part (NL)	Upload
C-FUNDING-TENDER-SERVICE-DESK@ec.europa.eu	National Part (NO)	Upload
+32 2 29 92222	National Part (PL)	Upload
	National Part (SE)	Upload
	National Part	Upload





### Q&A

- Good Luck with your application!
- Don't hesitate to contact us
- Please read the documents!



