



WORK PROGRAMME 2021

V9_2022-01-11

In accordance with Council Regulation (EU) 2021/2085 of 19 November 2021, Official Journal: OJ L 427, 30.11.2021, p. 17–119, establishing the Joint Undertakings under Horizon Europe, and with the KDT JU Financial Rules (KDT GB 2021.02, Annex 30)

The annual work programme will be made publicly available after its adoption by the Governing Board.

Decision/Date	Version	Change	Pages
02/11/2021	Initial Work Programme V1	Draft for submission to GB	
08/11/2021	V2	Corrections to national budgets IL, TR, BE-WL Inclusion of national rules for PT, LU, BE-WL Correction of typos	
09/11/2021	V3	Corrections to national budgets IT Inclusion of national rules for IT Corrections national rules for PL	
10/12/2021 KDT GB 2021.05	V4	Corrections national rules by DK Corrections by DE as discussed in GB Names of appointed chairpersons	
14/12/2021 KDT ED 2021.06	Amendment through ED decision V5	Changes in national rules of AT and IT	58-50; 99-105
16/12/2021 KDT ED 2021.07	Amendment through ED decision V6	Changes in national rules of CZ ES NO LV Changes in national budget of CZ, LV Adopted by ED decision	70-71 121-126 111-112 104 15-16
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1. Introduction

This is the first work programme of the Key Digital Technologies Joint Undertaking (KDT JU). It covers the activities of the KDT JU for the remainder of 2021 (from 30 November 2021 to 31 December 2021). This mainly consists of the launch of the first KDT JU calls and some communication activities. In a spirit of business continuity other aspects such as IT, HR, Internal Control, Monitoring of projects, etc. are covered by the work plan of ECSEL that was due to be valid till end 2021 (decision ECSEL GB 2020.151).

The scope of the work programme is mainly to inform potential beneficiaries in a transparent manner about the Joint Undertaking's intentions to support and fund actions in their specific field of research, in accordance with the legal provisions, in particular :

- Council Regulation (EU) 2021/2085 of 19 November 2021¹; Official Journal: OJ L 427, 30.11.2021, p. 17–119 establishing the KDT Joint Undertaking in the following, referred to as KDT Regulation OR **Single Basic Act (SBA)**
- Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012
- REGULATION (EU) 2021/695 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination;
- Commission Delegated Regulation (EU) 2019/887 of 13 March 2019 on the model financial regulation for public-private partnership bodies referred to in Article 71 of Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council;
- Financial rules of the Joint Undertaking, Decision ECSEL GB 2020.138, taken over by KDT JU (KDT GB 2021.02)
- The Strategic Research and Innovation Agenda (SRIA) 2021 issued by the Private Members Board² and adopted by the GB as KDT GB 2021.03.

¹ EU <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R2085&qid=1638259641660>

² https://aeneas-office.org/wp-content/uploads/2021/01/2021_ECS-SRIA-final_1501.pdf

Objectives of the KDT JU

All joint undertakings have 3 general objectives (Article 4 of the SBA, COUNCIL REGULATION (EU) 2021/2085) on strengthening and integrating the scientific, innovation and technological capacities and facilitating collaborative links, securing sustainability-driven global leadership and resilience of Union value chains in key technologies and industries and on developing and accelerating the uptake of innovative solutions throughout the Union addressing climate, environmental, health, digital and other global challenges.

The same document also lists 5 specific objectives for the Joint Undertakings: enhance the critical mass and scientific and technological capabilities and competences, accelerate the green and digital transitions, enhance the research and innovation capabilities and performance of existing and new European innovation ecosystem and economic value chains, including in start-ups and small and medium-sized enterprises (SME), accelerate the deployment, uptake and diffusion of innovative solutions, technologies, services and skills and deliver environmental, energy, resource-saving, societal, circularity and productivity improvements in new products, technologies, applications and services by exploiting Union capabilities and resources.

In addition to the objectives set out above, the KDT JU has the following general objectives (article 126 of SBA, COUNCIL REGULATION (EU) 2021/2085):

- (a) reinforce the Union's strategic autonomy in electronic components and systems to support future needs of vertical industries and the economy at large. The overall target is to contribute towards doubling the value of the design and production of electronic components and systems in Europe by 2030, in line with the weight of the Union in products and services;
- (b) establish Union scientific excellence and innovation leadership in emerging components and systems technologies, including in activities related to lower TRLs; and promote the active involvement of SMEs, which shall represent at least one third of the total number of participants in indirect actions and at least 20 % of public funding should go to them;
- (c) ensure that components and systems technologies address Europe's societal and environmental challenges. The target is to align with the Union policy on energy efficiency and contribute towards the reduction of energy consumption by 32.5 % in 2030.

Next to those general objectives, the KDT JU also has the following specific objectives:

- (a) support research and development for establishing design and production capabilities in Europe for strategic application areas;
- (b) launch a balanced portfolio of large and small projects supporting the fast transfer of technologies from the research to the industrial environment;

- (c) foster a dynamic Union-wide ecosystem based on digital value-chains with simplified access to newcomers;
- (d) support research and development for enhancing component technologies that guarantee security, trust and energy-efficiency for critical infrastructures and sectors in Europe;
- (e) foster mobilisation of national resources and ensure coordination of Union and national research and innovation programmes in the field of electronic components and systems;
- (f) establish coherence between the Strategic Research and Innovation Agenda of the Key Digital Technologies Joint Undertaking and Union policies so that electronics components and systems technologies contribute efficiently.

Besides the objectives in the HE regulation and the SBA, the KDT JU also contributes to a larger effort envisioned in:

- A. Joint Declaration on Processor and Semiconductor Technologies³ (7 Dec 2020). In this declaration the signatory Member States agree to work together in order to bolster Europe's electronics and embedded systems value chain. This will include a particular effort to reinforce the processor and semiconductor ecosystem and to expand industrial presence across the supply chain, in order to address key technological, security and societal challenges.
This Declaration aims at creating synergies among national research and investment initiatives and ensuring a coherent European approach of sufficient scale. It builds on, and will expand, collective efforts, including the KDT JU and EuroHPC Joint Undertakings, the European Processor Initiative and the existing IPCEI on microelectronics.
- B. Digital Compass communication⁴ (COM(2021) 118 9 March 2021). The Digital Compass proposed by the Commission translates the EU's digital ambitions for 2030 into concrete targets to ensure that these objectives will be met. It will include the means to deliver the vision and set out key milestones along four cardinal points. The first two are focused on digital capacities in infrastructures and education & skills, and the two other are focused on digital transformation of business and public services. Under the "Secure and performant sustainable digital infrastructures" cardinal point, the communication highlights the importance of the microprocessors that are at the start of most of the key, strategic value chains such as connected cars, phones, Internet of Things, high performance computers, edge computers and Artificial Intelligence. While Europe designs and manufactures high-end chips, there are important gaps, notably in state-of-the-art fabrication technologies and in chip

³ <https://digital-strategy.ec.europa.eu/en/library/joint-declaration-processors-and-semiconductor-technologies>

⁴ <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0118>

design, exposing Europe to a number of vulnerabilities. The communication further proposes 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).

The communication proposes to set up Digital Partnerships that will for example offer the opportunity to carry out joint research activities, including under Joint Undertakings on industrial issues, which will support EU leadership in evolving technologies such as 6G, Quantum or the use of digital technology in the fight against climate change and environmental challenges.

- C. European Chips Act⁵ (announced by European Commission President Ursula von der Leyen in her Speech of the Union on 15 September 2021). Though the details of the Chips Act are still being worked out, there is already a role for the KDT JU under the European Semiconductor Research Strategy⁶ point. As commissioner Breton explains that "... building on the existing research partnership (the KDT Joint Undertaking), we need to up our game, and design a strategy to push the research ambitions of Europe to the next level while preserving our strategic interests." The Commission's 2022 work programme foresees the Chips Act adopted in the second quarter of next year.

The work programme of KDT JU shall deliver on:

- Reinforcing Europe's strategic autonomy in electronic components and systems through collaboration with key trusted partners
- Involving more active participation of SMEs
- Addressing Europe's societal and environmental challenges

KDT JU contributing to Horizon Europe

KDT JU contributes to Cluster 4 of Horizon Europe. Although KDT JU is not part of the work programme 2021-2022 of Horizon Europe, part 7 Digital, Industry and Space (European Commission Decision C(2021)7804 of 28 October 2021), its introduction provides some further insights into the challenges shared by KDT JU and the other parts of Horizon Europe and the urgency to resolve them. Understanding those shared challenges and their causes, is crucial in view of the increased importance of collaboration

⁵ https://ec.europa.eu/commission/presscorner/detail/ov/SPEECH_21_4701

⁶ https://ec.europa.eu/commission/commissioners/2019-2024/breton/blog/how-european-chips-act-will-put-europe-back-tech-race_en

and cooperation between the different programmes of the Horizon Europe. In the introduction one reads:

“Actions under this cluster will support key enabling technologies that are strategically important for Europe’s industrial future, and deliver on the following six expected impacts in the Strategic Plan, through matching destinations in this Work Programme”

The most relevant expected impact for KDT, as outlined, is:

“Sovereignty in digital technologies and in future emerging enabling technologies by strengthening European capacities in key parts of digital and future supply chains, allowing agile responses to urgent needs, and by investing in early discovery and industrial uptake of new technologies.”

The recital 11 in the SBA develops this cooperation approach:

“(11) The new policy approach for European partnerships, and in particular institutionalised European partnerships, calls for a novel way of establishing the legal framework under which they would operate. While the setting up of joint undertakings on the basis of Article 187 TFEU for the purpose of Horizon 2020 has proven to be effective as far as the implementation is concerned, it is necessary to step it up. Therefore, this Regulation aims at increasing the coherence, efficiency, openness, effectiveness and impact-orientation of implementation through translating the Horizon Europe provisions and the experience gained from programme implementation under Horizon 2020 into common provisions across the joint undertakings in a harmonised way. It aims at **facilitating the creation of collaboration and synergies between European partnerships**, thereby making full use of their interconnections at the organisational level. Joint undertakings should seek opportunities to involve representatives of other European partnerships in discussions during the drafting of their work programmes, identify the areas in which complementary or joint activities would address the challenges more effectively and efficiently, avoid overlaps, align timing of their activities and ensure access to results and other relevant means of knowledge exchange.”

Cooperation and collaboration with the other partnerships and activities in Horizon Europe shall be an integral part of the work programme of KDT JU.

The urgency of certain topics and the new approach for the work programme of the KDT JU

ECSEL JU and its predecessors ENIAC JU and ARTEMIS JU were conceived as bottom up programmes. This approach has succeeded to bolster the European electronic components and systems sector in various strategically important domains such as power electronics, industrial systems, medical technology, autonomous driving, etc. KDT JU operates in a different environment as is noted in recital (78) of the SBA that reads:

“(78) The term Key Digital Technologies refers to electronic components and systems that underpin all major economic sectors. The Commission highlighted the need to master those technologies in Europe, notably in the context of delivering on European policy priorities such as digital leadership. The importance of the area and the challenges faced by the stakeholders in the Union require urgent action in order to leave no weak link in Europe’s innovation and value chains. A mechanism at Union level should therefore be set up to combine and focus the provision of support to research and innovation in electronic components and systems by member states, the Union and the private sector.”

The urgency⁷ requires a different approach. The work programme shall tackle this by promoting focus topics in a more top down manner, in line with national and European policy objectives. For certain focus topics, this may require a multi-annual strategy for focus topics coordinated with activities of related JUs such as EuroHPC and discussed with Participating States and industry associations.

Main objectives described in the ECS SRIA 2021

The ECS SRIA 2021 (KDT GB 2021.03) identifies 65 different major challenges that have emerged from the analysis of the foundational technologies, the cross-sectional technologies and the application key areas. The challenges are frequently interdependent – they influence each other, become increasingly demanding, and impact on many areas, including technology innovation, industrial competitiveness, security, safety, business and environmental sustainability, society, etc. From this perspective, the Major challenges represent key factors for the achievement of the four main common objectives, which are aligned with the European Commission Strategic Targets. The four main common objectives are:

1. Boost industrial competitiveness through interdisciplinary technology Innovations
2. Ensure EU digital autonomy through secure, safe and reliable ECS supporting key European application domains

⁷ <https://digital-strategy.ec.europa.eu/en/news/key-digital-technologies-new-partnership-help-speed-transition-green-and-digital-europe>

3. Establish and strengthen sustainable and resilient ECS value chains supporting the Green Deal
4. Unleash the full potential of intelligent and autonomous ECS-based systems for the European digital era

2. Annual work programme 2021

The KDT JU WP-2021 foresees the launch of 3 calls for proposals with an estimated EU expenditure of EUR 208.00 million. Some additional communication activities related to the launch of KDT JU are foreseen.

Launch of KDT JU calls 2021

In 2021, the KDT JU will launch 3 Calls for Proposals, described below.

The first two calls aim at the reinforcement of the industrial competitiveness, by supporting the growth of existing partnerships and/or fostering new partnerships on technologies that already are at a higher TRL level. Research and Innovation Actions (RIA) and Innovation Actions (IA) essentially differ by the Technology Readiness Level (TRL) they focus on and therefore by the reimbursement rates. Projects selected should demonstrate high impact, Europe wide collaboration with a mixed participation of large enterprises, SMEs and academia. Expected outputs are novel technologies, pilot lines, large scale demonstrators, and platforms for innovative product developments.

Two focus topics are included :

- RIA Focus Topic 1: Processing solutions for AI at the edge addressing the design stack and middleware.
- IA Focus Topic 1 : Development of open-source RISC-V building blocks.

The CSA call will support the establishment of a “Pan European chip infrastructure for design innovation”. This will guarantee a service to academia, research institutes and SMEs that provides access to EDA tools, multi-project wafers, nurtures growth of the design ecosystem, and stimulates design reuse.

EU estimated expenditure for the Calls 2021-1 to 2021-3.

Action		Estimated EU Expenditure (M€)
Call 2021-1 IA	General according to SRIA 2021	108.0 M€
Call 2021-1-IA-Focus Topic	Development of open-source RISC-V building blocks	20.0 M€
Call 2021-2 RIA	General according to SRIA 2021	50.0 M€
Call 2021-2-RIA-Focus Topic 1	Processing solutions for AI at the edge addressing the design stack and middleware	20.0 M€
Call 2021-3-CSA	A Pan-European chip infrastructure for design innovation	10.0 M€
	Total	208.0 M€

National Budgets and the EU estimated expenditure for the Calls 2021-1, 2021-2 and 2021-3.

EPS	Call 2021-1 IA	Call 2021-2 RIA General	Call 2021-2 RIA Focus Topic 1	Call 2021-1 IA Focus Topic 1	Total (M€)
AT					6.0
BE					14.0
BE-WL					0.4
BG					
CY					
CZ	1.25	1.25	0.25	0.25	3.0
DE					20.0
DE Thuringia					1.2
DK					2.0
EE					0.0
EL	0.4	0.7	0.6	0.3	2.0
ES AEI					3.0
ES MAETD					9.0

FI					7.0
FR					30.0
HR					
HU					2.0
IE					2.0
IL					3.5
IS					
IT MISE					10.0
IT MUIR					3.3
LT					
LV					0.6
LU					3.0
MT					
NL (1)					25.0
NO					2.0
PL					1.5
PT					2.0
RO					
SE					2.0
SK					0.8
SL					
TR					6.0
Total					161.3

(1) € 5 mln of this total amount of € 25 mln comes from the AiNed National Growth Fund Investment Programme 2021 – 2027. From the total budget of € 25 mln, € 5 mln can only be used for the support of the AI R&D activities of Dutch participants in KDT JU projects

Call 2021-1, IA**Scope and objectives**

This call is part of the bottom-up programming. The call will be open to the following topics:

Topics and Major Challenges		Open/ Closed
Process technology, equipment, materials and manufacturing		
	Major Challenge 1: Advanced computing, memory and in-memory computing concepts	Open
	Major Challenge 2: Novel devices and circuits that enable advanced functionality	Open
	Major Challenge 3: Advanced heterogeneous integration and packaging solutions	Open
	Major Challenge 4: World-leading and sustainable semiconductor equipment and manufacturing technologies	Open
Components, modules and systems integration		
	Major challenge 1: Physical and functional integration	Open
	Major challenge 2: Materials	Open
	Major challenge 3: Technologies, manufacturing and integration processes	Open
	Major challenge 4: Decarbonisation and recyclability	Open
Embedded software and beyond		
	Major Challenge 1: Efficient engineering of embedded software	Open
	Major Challenge 2: Continuous integration of embedded software	Open
	Major Challenge 3: Lifecycle management of embedded software	Open
	Major challenge 4: Embedding data analytics and Artificial Intelligence	Open
	Major challenge 5: Green Deal and embedded software	Open
	Major challenge 6: Embedding reliability and trust	Open
System of Systems		
	Major Challenge 1: SoS architecture	Open
	Major challenge 2: SoS interoperability	Open
	Major Challenge 3: Major challenge 3: Composability of embedded and cyber-physical systems in SoS	Open

	Major Challenge 4: Systems of embedded and cyber-physical systems engineering	Open
	Major challenge 5: Open system of embedded and cyber-physical systems platforms	Open
Artificial intelligence, edge computing and advanced control		
	Major challenge 1: Strengthening the EU connectivity technology portfolio to maintain leadership, secure sovereignty and offer an independent supply chain	Open
	Major challenge 2: Investigate innovative connectivity technology (new spectrum or medium) and new approaches to improving existing connectivity technology to maintain the EU's long-term leadership 1	Open
	Major challenge 3: Autonomous interoperability translation for communication protocol, data encoding, compression, security and information semantics	Open
	Major challenge 4: Architectures and reference implementations of interoperable, secure, scalable, smart and evolvable IoT and SoS connectivity	Open
Connectivity		
	Major Challenge 1: Strengthening the EU position on differentiated technologies and enabling it to capture higher value by moving to system/module level	Open
	Major challenge 2: Investigate innovative connectivity technology (new spectrum or medium) and new approaches to improving existing connectivity technology to maintain the EU's long-term leadership	Open
	Major Challenge 3: Autonomous interoperability translation for communication protocol, data encoding, security and information semantics	Open
	Major Challenge 4: Architectures and reference implementations of interoperable, secure, scalable, smart and evolvable IoT and SoS connectivity	Open
Architecture and design: methods and tools		
	Major challenge 1: Extending development processes and frameworks (to handle connected, intelligent, autonomous, evolvable systems)	Open
	Major Challenge 2: Managing new functionality in safe, secure and trustable systems	Open
	Major Challenge 3: Managing complexity	Open
	Major Challenge 4: Managing diversity	Open
Quality, reliability, safety and cybersecurity		
	Major challenge 1: Ensuring HW quality and reliability	Open

	Major challenge 2: Ensuring dependability in connected software	Open
	Major challenge 3: Ensuring cyber-security and privacy	Open
	Major challenge 4: Ensuring of safety and resilience	Open
	Major challenge 5: Human systems integration	Open
Mobility		
	Major challenge 1: Enable electrification and sustainable alternative fuels for CO2-neutral mobility	Open
	Major challenge 2: Enable affordable safe and environmentally neutral light mobility (bicycles, tricycles, wheelchairs, small drones, etc) and mobile machinery (as smart farming)	Open
	Major challenge 3: Enable affordable, automated and connected mobility for passengers and freight on road, rail, air and water	Open
	Major challenge 4: Provide tools and methods for validation and certification of safety, security and comfort of embedded intelligence in mobility	Open
	Major challenge 5: Achieve real-time data handling for multimodal mobility and related services	Open
Energy		
	Major challenge 1: Smart and efficient – managing energy generation, conversion, and storage systems	Open
	Major challenge 2: Energy management from on-site to distribution and transmission systems	Open
	Major challenge 3: Achieving clean, efficient and resilient urban/regional energy supply	Open
	Major challenge 4: Cross-sectional tasks for energy system monitoring and control	Open
Digital Industry		
	Major challenge 1: Responsive and smart production	Open
	Major challenge 2: Sustainable production	Open
	Major challenge 3: Artificial Intelligence in digital industry	Open
	Major challenge 4: Industrial service business, lifecycles, remote operations and teleoperation	Open
	Major challenge 5: Digital twins, mixed or augmented reality, telepresence	Open

	Major challenge 6: Autonomous systems, robotics	Open
Health and wellbeing		
	Major challenge 1: Enable digital health platforms based upon P4 healthcare	Open
	Major challenge 2: Enable the shift to value-based healthcare, enhancing access to 4P's game-changing technologies	Open
	Major challenge 3: Support the development of the home as the central location of the patient, building a more integrated care delivery system	Open
	Major challenge 4: Enhance access to personalised and participative treatment for chronic and lifestyle-related diseases	Open
	Major challenge 5: Ensure more healthy life years for an ageing population	Open
Agrifood and natural resources		
	Major challenge 1: Food security	Open
	Major challenge 2: Food safety	Open
	Major challenge 3: Environmental protection and sustainable production	Open
	Major challenge 4: Water resource management	Open
	Major challenge 5: Biodiversity restoration for ecosystems resilience, conservation and preservation	Open
Digital Society		
	Major challenge 1: Facilitate individual self-fulfilment	Open
	Major challenge 2: Facilitate empowerment and resilience	Open
	Major challenge 3: Facilitate inclusion and collective safety	Open
	Major challenge 4: Facilitate supportive infrastructure and a sustainable environment	Open

- Detailed descriptions can be found in the ECS SRIA2021
- Aspects of ECS value chain integration are important for the KDT programme and the whole European ECS sector, across applications and across capabilities. Consortia are encouraged to submit proposals that take this aspect into account.
- Proposals that cut across disciplines, support platform building, interoperability, establishment of open standards are particularly encouraged; even outside the regular ECS sector.
- Proposals shall encourage SMEs to participate in the developments, in particular paying attention to the needs of SMEs, involve SMEs in project execution, and develop solutions that can be taken up and/or exploited by SMEs

- Proposals shall attempt to establish links with other projects and consortia from the Horizon Europe family (within cluster 4 or in other clusters) working on topics related to the proposal.
- Note that National priorities may be applicable to specific topics (refer to Annex 3 “COUNTRY SPECIFIC ELIGIBILITY RULES”).
- Objectives, Scope and Outcomes of each topic can be found in the SRIA 2021.

Specific Conditions

Type of action: Innovation Action (IA)

Mode: 1 stage call with submission of Full Project Proposal (FPP)

Publication date: 16 December 2021⁸

Deadline (FPP proposals): at 17:00:00 Brussels time on 27 April 2022

In this Call the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement

Type of action: KDT Innovation Action

An Innovation Action (IA) in the frame of the KDT JU, primarily consists of activities aiming at technology or method introduction, pilot lines, test beds, demonstrators, innovation pilots and zones of full-scale testing. These activities produce plans and arrangements or designs for new, altered or improved products, processes, methods and tools or services. For this purpose they may include prototyping, testing, demonstrating, piloting, large-scale product validation and market replication.

A ‘technology or method introduction’ aims at the development, testing, and implementation of new technologies, tools or methods, which are a critical element of innovative products, which will be created in subsequent projects.

A ‘demonstration or pilot’ aims to validate the technical and economic viability of a new or improved technology, product, process, service or solution in an operational (or nearly operational) environment, whether industrial or otherwise, involving, where appropriate, a larger scale prototype or demonstrator.

A ‘market replication’ aims to support the first application/deployment in the market of an innovation that has already been demonstrated but not yet applied/deployed in the market due to market failures/barriers to uptake. ‘Market replication’ does not cover multiple

⁸ Provided all necessary decisions were adopted in time by the boards of KDT JU.

applications in the market of an innovation that has already been applied successfully once in the market. ‘First’ means new at least to Europe or new at least to the application sector in question. Often such projects involve a validation of technical and economic performance at system level in real life operating conditions provided by the market.

The activities have their centre of gravity at the TRL 5-8. An IA proposal in KDT JU is characterized by one or more of the following:

- Execution by an industrial consortium that may consist of large enterprises and SMEs but also including universities, institutes, public organizations;
- Using innovative technology;
- Establishment of a new and realistic innovation environment connected with an industrial environment, such as:
 - a pilot line facility capable of manufacturing
 - a zone of full-scale testing;
 - a development of new processes or tools and their introduction in several domains;
 - the development of frameworks or platforms together with the usage of these frameworks or platforms in innovative products.
- Having a deployment plan leading to short to mid term economic value creation in Europe.

In order to maximize effective implementation of the KDT JU top-level objectives, the list of IA proposals to be retained for public funding should constitute a balanced portfolio of projects developing innovative technologies (as defined in the ECS SRIA 2021 in the functional technology layers and cross-sectional technologies sections) and applying them in different domains (as defined in the ECS SRIA 2021 in key application areas section). The domains represent the demand side of technologies, and the development of new technologies represents the supply side of technologies.

The size of the proposal is not an evaluation criterion. KDT JU is looking at a balanced portfolio of small and large projects.

Admissibility and Eligibility conditions:

Admissibility conditions: Refer to Annex 1, and regarding page limits:

- The page limit for the chapter on EXCELLENCE is 60 pages
- The page limit for the chapter on IMPACT is 100 pages
- The page limit for the chapter on IMPLEMENTATION is 100 pages.
- The application of those page limits (font size etc) is further described in the Guide for Applicants. The selected proposals maybe required to submit further information regarding the IMPLEMENTATION after selection.

- Proposals with more pages will be evaluated but the pages in excess of those maxima will not be considered for the evaluation.

Eligibility conditions: Refer to Annex 1, but in addition:

- For the partners of a Participating State that coordinates grants, specific rules may apply regarding the eligibility to national funding.
- Size limit: the maximum size of the project is 70 participants.
- Capping: The EU contribution per project is capped at 25M€ and the maximum contribution per partner in a project is limited to 30% of the total EU funding for the project.
- Proposals that do not comply to the above will be excluded.

For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

Evaluation criteria, scoring and threshold

The proposals will be evaluated along the following three evaluation criteria:

Excellence: The following aspects will be taken into account, to the extent that the proposed work corresponds to the relevant work programme topic description in the ECS SRIA 2021:

- a) Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
- b) Soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

Impact: The extent to which the outputs of the project should contribute at the European and/or International level to:

- a) Credibility of the pathways to achieve the expected outcomes and impacts specified in the ECS SRIA 2021, and the likely scale and significance of the contributions to the project.
- b) Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

Quality and efficiency of the implementation: The following aspects will be taken into account:

- a) Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- b) Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

Scoring

The scores will be given with a resolution of one decimal.

Criteria	Range	Weight (**)	Threshold (*)
Excellence	0-5	1.0	3
Impact	0-5	1.5	3
Quality and efficiency of the implementation	0-5	0.7	3
Total	0-15		11

(*) threshold applies to unweighted score

(**) the weight is only used to establish the ranking of the proposals

Selection criteria

- Financial capacity: In line with the Financial Regulation and the Rules for Participation of Horizon Europe. At the full project proposal stage, coordinators will be invited to complete a self-assessment using an on-line tool.
- Operational capacity: As a distinct operation, carried out during the evaluation of the award criterion 'Quality and efficiency of the implementation', experts will indicate whether the participants meet the selection criterion related to operational capacity, to carry out the proposed work, based on the competence and experience of the individual participant(s).

Priority order for proposals with the same score

The following method will be applied. As part of the evaluation by independent experts, a panel review will recommend a ranked list for the proposals under evaluation, following the scoring systems indicated above. A ranked list will be drawn up for every indicative budget shown in the call conditions. If necessary, the panel will determine a priority order

for proposals which have been awarded the same score within a ranked list. The following approach will be applied successively for every group of ex-aequo proposals requiring prioritisation, starting with the highest scored group, and continuing in descending order:

1. Proposals that address aspects of the call that have not otherwise been covered by more highly ranked proposals will be considered to have the highest priority
2. The proposals identified under 1) (if any) will themselves be prioritised per the scores they have been awarded for the criterion “Impact”. When these scores are equal, priority will be based on scores for the criterion “Excellence”.
3. Further ex-aequo proposals are discussed by the panel of experts and scored on the merit of the proposal to fulfil the objectives of KDT JU considering elements such as the enhancement of the quality of the project portfolio through synergies between projects, balance between the type of partners, SME participation, and gender balance. These factors will be documented in the report of the Panel.

Indicative timetable for evaluation and grant agreement

Information on the outcome of the evaluation	Indicative date for the signing of grant agreements
Maximum 5 months from the final date for submission	Maximum 8 months from the final date for submission

Consortium agreement

In line with the Rules for Participation of Horizon Europe and the KDT JU Model Grant Agreement, participants are required to conclude a consortium agreement.

Reimbursement rate for establishing the EU contribution

Reimbursement rates as percentages of the eligible cost according to HE.

Type of beneficiary	EU Contribution as % of the Eligible Cost according to HE (*)
Large Enterprise (for profit organization but not an SME)	20 %
SME (for profit SME)	30 %
University/Other (not for profit)	35 %

(*) beneficiaries may ask for a lower contribution

Call 2021-1-IA. Focus topic 1: Development of open-source RISC-V building blocks

Specific conditions	
<i>Indicative budget</i>	The total indicative EU budget for the topic is EUR 20 million.
<i>Type of Action</i>	IA
<i>Technology Readiness Level</i>	Targeted TRL is between 5 and 8

This call relates to the first general objective of the KDT-JU: reinforce the Union's strategic autonomy in electronic components and systems to support future needs of vertical industries and the economy at large. The overall target is to contribute towards doubling the value of the design and production of electronic components and systems in Europe by 2030, in line with the weight of the Union in products and services.

The availability of an industrially supported library of open-source building blocks based on the RISC-V Instruction Set Architectures (ISA) and software frameworks for heterogeneous SoC integration is essential to have European sovereignty and maintain a competitive advantage for IC-developments in strategic European application domains.

The overall goal is to develop RISC-V to become a widespread industry standard alternative to today's proprietary Instruction Set Architectures (ISA). For this, RISC-V needs a powerful ecosystem comprising technology, business models and pioneering use-case applications. Consortia should include partners to cover this entire value chain.

The long-term strategy is to tackle domain specific solutions by a series of calls throughout KDT and other initiatives. Therefore funding initiatives will be aligned and priorities will be set based on technologies and domain-specific applications. This call and future calls concerning RISC-V will be based on a common, long-term roadmap for developing a RISC-V ecosystem. This common European roadmap includes efforts in Horizon Europe, EuroHPC, and KDT.

Proposals need to give evidence of readiness to cooperate with and provide clear inputs to future RISC-V actions and/or initiatives.

Selected actions will be implemented as 'linked actions', i.e. they are linked with other actions selected under 'RISC-V' topics in this call and future calls. A collaboration agreement with other selected projects and future projects should be established, that sets out requirements for IP sharing, a common governance model, and conformity with

specifications set by suitable industry bodies. Respective options under Article 3 and Article 7 of the Model Grant Agreement will be used to this end.

Expected Outcomes

Proposal results are expected to contribute to:

- Multiple levels of the computer design hierarchy, ranging from (semiconductor) technologies for low power, secure, or high-performance hardware realisations, through hardware organisations (microarchitectures), up to customised RISC-V Instruction Set Architectures. The expected results must have the potential for quick commercialisation after the end of the project, in order to demonstrate industrial relevance, feasibility and possible business models. The expected results must be aligned with demands and conform with user requirements. The IP- and functional blocks must be validated for industrial use, in order to create low-threshold access to RISC-V.
- System software and support by appropriate design approaches and toolchains.
- Development of industrial qualified open-source building blocks should be in line with the roadmaps developed under HORIZON-CL4-2021-DIGITAL-EMERGING-01-05: Open Source Hardware for ultra-low-power, secure processors

Proposals should also lay the groundwork for future exploitation and further enhancements. If successful, those could be supported by future calls within KDT and/or other programs. Ultimately, the efforts should accelerate the developments in the field of open-source hardware and render it accessible to a wider community.

Special attention should be paid to the inclusion of industrial players and a user centric view in the consortia.

Scope

Proposals for this call will develop RISC-V compliant IP blocks. Certain IP blocks may be proprietary solutions; however, a large share of developed building blocks provided with a permissive open-source licence is preferred. All developed blocks must come with publicly available documentation, benchmarks, verification suites, and validated reference designs (including firmware/drivers, if required).

For this call, the RISC-V architectural aspect of the proposed IP building blocks should be clearly identifiable. Furthermore, each IP block should be able to demonstrate the optimisation goals it was designed for (low power, high security, processing acceleration, etc.) in realistic application contexts and appropriate use cases.

The following is a list of building blocks of which some must be developed in the proposed project. This list is not definitive but rather an indication of the kind of blocks. A definitive list should be discussed with the consortia selected under HORIZON-CL4-2021-

DIGITAL-EMERGING-01-05. In addition, the selected building blocks must support the common European roadmap and the ecosystem for RISC-V.

- Extend the RISC-V core IP towards a scalable and fit-for-purpose architecture ranging between MCU-like (lower end) and microprocessors/network processors-like (higher end).
- High-speed memory interfaces for advanced DDR (at least DDR3+ SDRAM) controllers, high-speed peripheral interfaces like scalable advanced PCI (at least PCIe Gen3+) interfaces, including the required SerDes PHYs.
- Support for heterogeneous many-core SoCs, specifically scalable coherent cache infrastructure, scratchpad memory infrastructure with smart DMA, and a flexible NoC to connect cores (including accelerators)/memory/IO while considering caching/coherency.
- Inter-chip communication links (e.g., for interfacing with FPGAs or other ASICs) with at least 2 Gb/s per pin.
- Support for extended virtualization mechanisms and hardware multitasking, in particular in the area of cache management and interrupt controllers (PLIC, CLINT);
- A minimum set of test, trace and debug IPs (JTAG controllers, ...).
- System and SoC simulation as well as validation environments and tools to allow for very early SW migration and respective performance assessments. Accelerating the design and validation process to shorten time-to-market for new architectures and system concepts.

In addition to the RISC-V blocks listed above, the following technologies are considered as examples of useful complements to the base blocks, and are considered in scope for this call if developed in open-source form, again with documentation, verification and validation suites:

- Holistic architectural approaches for HW/SW co-design of computing systems (compilers, design tools, architectural extensions or microarchitectures targeting various semiconductor technologies) under open-source licenses.
- Chiplet, interposer and especially high-bandwidth, low-latency, low-energy die-to-die communication technologies.
- Template PCB designs for PCIe-attached accelerators, similar to existing FPGA evaluation/prototyping boards, but allowing the easy integration of a user-provided ASIC instead of an FPGA,
- Communication peripheral interfaces, specifically Ethernet (at least 1G) and USB (at least 2.0).

According to the strategy defined in the projects of HORIZON-CL4-2021-DIGITAL-EMERGING-01-05 and the common European roadmap for RISC-V, proposals will also

need to develop re-usable verification infrastructure that supports a repository, which includes IP blocks accompanied by test frameworks for safety/security.

A compliance standard is defined that certifies interoperability and industrial readiness of open-source hardware solutions. For the application in safety-critical environments, this compliance standard should include the requirements in accordance with relevant safety standards, e.g. ISO 26262. If other standards are relevant, they should be considered in the proposal too.

One or more demonstrators should be built in a close to industrial environment with a number of RISC-V building blocks in combination with necessary proprietary IP relevant for the application areas of interest. For instance, in the safety/security area, hardware/software co-certification for safety and security should be demonstrated.

A software development platform must be created (for compiler, linker, debugger, middleware, etc.) that proposes highly efficient code (in terms of power, speed, etc.) based on state-of-the-art programming languages.

Some of the developed building blocks could be supported by the current EUROPRACTICE- processes at 65 nm and smaller.

In terms of exploitation, the proposals must assess the sustainable provisions to support industrial use, including administrative and legal support, especially towards SMEs. The developed methods and standards should be prepared for incorporation into an organisation/setup that makes the results industrially available beyond project duration.

Of importance to this call are:

- All proposals are encouraged to allocate tasks to cohesion activities with relevant actions funded nationally, under EuroHPC (including the European Processor Initiative), or any other actions on RISC-V.
- All proposals are encouraged to allocate tasks to cohesion activities with the projects selected under the call HORIZON-CL4-2021-DIGITAL-EMERGING-01-05: Open Source Hardware for ultra-low-power, secure processors (CSA) and to support and lay the groundwork for the further development of the common European roadmap for RISC-V.
- Where relevant, synergies with other European partnerships and any of the Horizon Europe Clusters are encouraged. . Proposals must describe how the consortia ensure complementarity to other funded actions.

Reminding that of general importance to the KDT calls are:

- Re-use of results from previous ECSEL JU, H2020 or EUREKA-cluster projects is encouraged.
- Developing synergies with other relevant European, national or regional initiatives and/or funding programmes.
- Encouraging SMEs to participate in those developments, in particular paying attention to the needs of SMEs, involve SMEs in project execution, and develop solutions that can be taken up and/or exploited by SMEs

In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

The same rules apply regarding admissibility, eligibility, evaluation criteria, scoring and threshold, etc. as in the general call, except for:

Evaluation criteria, scoring and threshold

The Impact criterion is modified as follows:

- a) Credibility of the pathways to achieve the expected outcomes and impacts, and the likely scale and significance of the contributions to the project.
- b) Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

Scoring

The scores will be given with a resolution of one decimal.

Criteria	Range	Weight (**)	Threshold (*)
Excellence	0-5	1.0	3
Impact	0-5	1.0	3
Quality and efficiency of the implementation	0-5	0.7	3
Total	0-15		11

(*) threshold applies to unweighted score

(**) the weight is only used to establish the ranking of the proposals

Reimbursement rate for establishing the EU contribution

Reimbursement rates as percentages on the eligible costs according to Horizon Europe.

Type of beneficiary	EU Contribution as % of the Eligible Cost according to HE (*)
Large Enterprise (for profit non SME)	25 %
SME (for profit SME)	35 %
University/Other (not for profit)	35 %

(*) beneficiaries may ask for a lower contribution

Grant conditions

Selected actions will be implemented as ‘linked actions’, i.e. they are linked with other actions selected under ‘RISC-V’ topics in this call and future calls. Respective options under Article 3 and Article 7 of the Model Grant Agreement will be used to this end.

Call 2021-2, RIA**Scope and objectives**

This call is part of the bottom-up programming. The call will be open to the following topics:

Topics and Major Challenges		Open/ Closed
Process technology, equipment, materials and manufacturing		
	Major Challenge 1: Advanced computing, memory and in-memory computing concepts	Open
	Major Challenge 2: Novel devices and circuits that enable advanced functionality	Open
	Major Challenge 3: Advanced heterogeneous integration and packaging solutions	Open
	Major Challenge 4: World-leading and sustainable semiconductor equipment and manufacturing technologies	Open
Components, modules and systems integration		
	Major challenge 1: Physical and functional integration	Open
	Major challenge 2: Materials	Open
	Major challenge 3: Technologies, manufacturing and integration processes	Open
	Major challenge 4: Decarbonisation and recyclability	Open
Embedded software and beyond		
	Major Challenge 1: Efficient engineering of embedded software	Open
	Major Challenge 2: Continuous integration of embedded software	Open
	Major Challenge 3: Lifecycle management of embedded software	Open
	Major challenge 4: Embedding data analytics and Artificial Intelligence	Open
	Major challenge 5: Green Deal and embedded software	Open
	Major challenge 6: Embedding reliability and trust	Open
System of Systems		
	Major Challenge 1: SoS architecture	Open
	Major challenge 2: SoS interoperability	Open
	Major Challenge 3: Major challenge 3: Composability of embedded and cyber-physical systems in SoS	Open
	Major Challenge 4: Systems of embedded and cyber-physical systems engineering	Open

	Major challenge 5: Open system of embedded and cyber-physical systems platforms	Open
Artificial intelligence, edge computing and advanced control		
	Major challenge 1: Strengthening the EU connectivity technology portfolio to maintain leadership, secure sovereignty and offer an independent supply chain	Open
	Major challenge 2: Investigate innovative connectivity technology (new spectrum or medium) and new approaches to improving existing connectivity technology to maintain the EU's long-term leadership 1	Open
	Major challenge 3: Autonomous interoperability translation for communication protocol, data encoding, compression, security and information semantics	Open
	Major challenge 4: Architectures and reference implementations of interoperable, secure, scalable, smart and evolvable IoT and SoS connectivity	Open
Connectivity		
	Major Challenge 1: Strengthening the EU position on differentiated technologies and enabling it to capture higher value by moving to system/module level	Open
	Major challenge 2: Investigate innovative connectivity technology (new spectrum or medium) and new approaches to improving existing connectivity technology to maintain the EU's long-term leadership	Open
	Major Challenge 3: Autonomous interoperability translation for communication protocol, data encoding, security and information semantics	Open
	Major Challenge 4: Architectures and reference implementations of interoperable, secure, scalable, smart and evolvable IoT and SoS connectivity	Open
Architecture and design: methods and tools		
	Major challenge 1: Extending development processes and frameworks (to handle connected, intelligent, autonomous, evolvable systems)	Open
	Major Challenge 2: Managing new functionality in safe, secure and trustable systems	Open
	Major Challenge 3: Managing complexity	Open
	Major Challenge 4: Managing diversity	Open
Quality, reliability, safety and cybersecurity		
	Major challenge 1: Ensuring HW quality and reliability	Open
	Major challenge 2: Ensuring dependability in connected software	Open

	Major challenge 3: Ensuring cyber-security and privacy	Open
	Major challenge 4: Ensuring of safety and resilience	Open
	Major challenge 5: Human systems integration	Open
Mobility		
	Major challenge 1: Enable electrification and sustainable alternative fuels for CO2-neutral mobility	Open
	Major challenge 2: Enable affordable safe and environmentally neutral light mobility (bicycles, tricycles, wheelchairs, small drones, etc) and mobile machinery (as smart farming)	Open
	Major challenge 3: Enable affordable, automated and connected mobility for passengers and freight on road, rail, air and water	Open
	Major challenge 4: Provide tools and methods for validation and certification of safety, security and comfort of embedded intelligence in mobility	Open
	Major challenge 5: Achieve real-time data handling for multimodal mobility and related services	Open
Energy		
	Major challenge 1: Smart and efficient – managing energy generation, conversion, and storage systems	Open
	Major challenge 2: Energy management from on-site to distribution and transmission systems	Open
	Major challenge 3: Achieving clean, efficient and resilient urban/regional energy supply	Open
	Major challenge 4: Cross-sectional tasks for energy system monitoring and control	Open
Digital Industry		
	Major challenge 1: Responsive and smart production	Open
	Major challenge 2: Sustainable production	Open
	Major challenge 3: Artificial Intelligence in digital industry	Open
	Major challenge 4: Industrial service business, lifecycles, remote operations and teleoperation	Open
	Major challenge 5: Digital twins, mixed or augmented reality, telepresence	Open
	Major challenge 6: Autonomous systems, robotics	Open

Health and wellbeing		
	Major challenge 1: Enable digital health platforms based upon P4 healthcare	Open
	Major challenge 2: Enable the shift to value-based healthcare, enhancing access to 4P's game-changing technologies	Open
	Major challenge 3: Support the development of the home as the central location of the patient, building a more integrated care delivery system	Open
	Major challenge 4: Enhance access to personalised and participative treatment for chronic and lifestyle-related diseases	Open
	Major challenge 5: Ensure more healthy life years for an ageing population	Open
Agrifood and natural resources		
	Major challenge 1: Food security	Open
	Major challenge 2: Food safety	Open
	Major challenge 3: Environmental protection and sustainable production	Open
	Major challenge 4: Water resource management	Open
	Major challenge 5: Biodiversity restoration for ecosystems resilience, conservation and preservation	Open
Digital Society		
	Major challenge 1: Facilitate individual self-fulfilment	Open
	Major challenge 2: Facilitate empowerment and resilience	Open
	Major challenge 3: Facilitate inclusion and collective safety	Open
	Major challenge 4: Facilitate supportive infrastructure and a sustainable environment	Open

- Detailed descriptions can be found in the ECS SRIA2021
- Aspects of ECS value chain integration are important for the KDT programme and the whole European ECS sector, across applications and across capabilities. Consortia are encouraged to submit proposals that take this aspect into account.
- Proposals that cut across disciplines, support platform building, interoperability, establishment of open standards are particularly encouraged; even outside the regular ECS sector.
- Proposals shall encourage SMEs to participate in the developments, in particular paying attention to the needs of SMEs, involve SMEs in project execution, and develop solutions that can be taken up and/or exploited by SMEs
- Proposals shall attempt to establish links with other projects and consortia from the Horizon Europe family (within cluster 4 or in other clusters) working on topics related to the proposal.

- Note that National priorities may be applicable to specific topics (refer to Annex 3 “COUNTRY SPECIFIC ELIGIBILITY RULES”).
- Objectives, Scope and Outcomes of each topic can be found in the SRIA 2021.
- Re-use of results from previous ECSEL JU, H2020 or EUREKA-cluster projects is encouraged.
- Developing synergies with other relevant European, national or regional initiatives and/or funding programmes.
- Proposals should include a preliminary analysis/roadmap of bringing successfully to the market the proposed research (for this call either as IP blocks or as standalone chips) in the form of exploitation plans

Specific Conditions

Type of action: Research and Innovation Action (RIA)

Mode: 1 stage call with submission of Full Project Proposal (FPP)

Publication date: 16 December 2021⁹

Deadline (FPP proposals): at 17:00:00 Brussels time on 27 April 2022

In this Call the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

Type of action: KDT Research and Innovation Action

A KDT Research and Innovation Action (RIA) primarily consists of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service, method, tool or solution. For this purpose they may include applied research, technology development and/or method/tool and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment. The activities have their centre of gravity at TRL 3-4.

A RIA proposal is characterised by:

- Execution by a consortium that may consist of SMEs, large enterprises, universities, institutes, public organizations;
- Developing innovative technologies and/or using them in innovative ways;
- Targeting demonstration of the innovative approach in a relevant product, service or capability, clearly addressing the applications relevant for societal challenges;
- Demonstrating value and potential in a realistic lab environment reproducing the targeted application;

⁹ Provided all necessary decisions were adopted in time by the boards of KDT JU.

- Having a deployment plan showing the valorisation for the KDT ecosystem and the contribution to the KDT goals and objectives.

In order to maximize effective implementation of the KDT top-level objectives, the list of RIA proposals to be retained for public funding shall constitute a balanced portfolio of projects developing innovative technologies (as defined in the ECS SRIA 2021 in the functional technology layers and cross-sectional technologies sections) and applying them in different domains (as defined in the ECS SRIA 2021 in key application areas section). The domains represent the demand side of technologies, and the development of new technologies represents the supply side of technologies.

Admissibility and Eligibility conditions:

Admissibility conditions: Refer to Annex 1, and regarding page limits:

- The page limit for the chapter on EXCELLENCE is 60 pages
- The page limit for the chapter on IMPACT is 100 pages
- The page limit for the chapter on IMPLEMENTATION is 100 pages.
- The application of those page limits (font size etc) is further described in the Guide for Applicants. The selected proposals maybe required to submit further information regarding the IMPLEMENTATION after selection.
- Proposals with more pages will be evaluated but the pages in excess of those maxima will not be considered for the evaluation.

Eligibility conditions: Refer to Annex 1, but in addition:

- For the partners of a Participating State that coordinates grants, specific rules may apply regarding the eligibility to national funding.
- Size limit: the maximum size of the project is 50 participants.
- Capping: The EU contribution per project is capped at 12M€ and the maximum contribution per partner in a project is limited to 40% of the total EU funding for the project.
- Proposals that do not comply to the above will be excluded.

For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

Evaluation criteria, scoring and threshold

The proposals will be evaluated along the following three evaluation criteria:

Excellence: The following aspects will be taken into account, to the extent that the proposed work corresponds to the relevant work programme topic description in the SRIA 2021:

- a) Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state of the art.
- b) Soundness of the proposed methodology, including the underlying concepts, models, assumptions, inter-disciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices, including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

Impact: The extent to which the outputs of the project should contribute at the European and/or International level to:

- a) Credibility of the pathways to achieve the expected outcomes and impacts specified in the ECS SRIA 2021, and the likely scale and significance of the contributions to the project.
- b) Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

Quality and efficiency of the implementation: The following aspects will be taken into account:

- a) Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- b) Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

Scoring

The scores will be given with a resolution of one decimal.

Criteria	Range	Weight (**)	Threshold (*)
Excellence	0-5	1.0	3
Impact	0-5	1.0	3
Quality and efficiency of the implementation	0-5	0.7	3
Total	0-15		11

(*) threshold applies to unweighted score

(**) the weight is only used to establish the ranking of the proposals

Selection criteria

- Financial capacity: In line with the Financial Regulation and the Rules for Participation of Horizon Europe. At the full project proposal stage, coordinators will be invited to complete a self-assessment using an on-line tool.
- Operational capacity: As a distinct operation, carried out during the evaluation of the award criterion 'Quality and efficiency of the implementation', experts will indicate whether the participants meet the selection criterion related to operational capacity, to carry out the proposed work, based on the competence and experience of the individual participant(s).

Priority order for proposals with the same score

The following method will be applied. As part of the evaluation by independent experts, a panel review will recommend a ranked list for the proposals under evaluation, following the scoring systems indicated above. A ranked list will be drawn up for every indicative budget shown in the call conditions. If necessary, the panel will determine a priority order for proposals which have been awarded the same score within a ranked list. The following approach will be applied successively for every group of *ex-aequo* proposals requiring prioritisation, starting with the highest scored group, and continuing in descending order:

- Proposals that address aspects of the call that have not otherwise been covered by more highly ranked proposals will be considered to have the highest priority
- The proposals identified under 1) (if any) will themselves be prioritised per the scores they have been awarded for the criterion “Excellence”. When these scores are equal, priority will be based on scores for the criterion “Impact”.
- Further *ex-aequo* proposals are discussed by the panel of experts and scored on the merit of the proposal to fulfil the objectives of KDT JU considering elements such as the enhancement of the quality of the project portfolio through synergies between projects, balance between the type of partners, SME participation, and gender balance. These factors will be documented in the report of the Panel.

Indicative timetable for evaluation and grant agreement

Information on the outcome of the evaluation	Indicative date for the signing of grant agreements
Maximum 5 months from the final date for submission	Maximum 8 months from the final date for submission

Consortium agreement

In line with the Rules for Participation of Horizon Europe and the KDT JU Model Grant Agreement, participants are required to conclude a consortium agreement.

Reimbursement rate for establishing the EU contribution

Reimbursement rates as percentages of the eligible cost according to HE.

Type of beneficiary	EU Contribution as % of the Eligible Cost according to HE (*)
Large enterprise (for profit organization but not an SME)	25 %
SME (for profit SME)	35 %
University/Other (not for profit)	35 %

(*) beneficiaries may ask for a lower contribution

Call 2021-2-RIA. Focus topic 1: Processing solutions for AI at the edge addressing the design stack and middleware

Specific conditions	
<i>Expected EU contribution per project</i>	The KDT JU estimates that an EU contribution of EUR 5 million would allow these outcomes to be addressed appropriately ¹⁰ . Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative EU budget for the topic is EUR 20 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Technology Readiness Level</i>	4-5

This call relates to the first two general objectives of the KDT-JU: reinforce the Union's strategic autonomy in electronic components and systems to support future needs of vertical applications and promote the active involvement of SMEs.

The need to reinforce processors and semiconductor technology for data processing, communication & related data infrastructure as well as new applications of AI has been underlined on several occasions¹¹. Edge processing can only be achieved through interdisciplinary research & innovation that can overcome the challenge of finding the right equilibrium between edge computing resources and capabilities. This requires consideration of increased energy efficiency, lower energy consumption of both hardware and software algorithms, improved processing capabilities and AI HW/SW support at the (deep) edge, new devices, process technologies, architectures and computing paradigms (e.g. neuromorphic and bio-inspired computing) and open & distributed HW and SW platforms for edge computing.

Development of specific processors with the adapted embedded software for AI at the edge (edge-AI) is covered in the ECS-SRIA 2021 under Chapter 2.1 Artificial intelligence, edge computing and advanced control. In that chapter following major challenges (MC) are relevant MC-4: Ensuring European sustainability in AI, edge computing and advanced

¹⁰ Please not the general capping of the EU funding to EUR 12 mio fro RIA projects.

¹¹ https://ec.europa.eu/commission/commissioners/2019-2024/breton/announcements/inside-future-europes-plan-thrive-global-microchip-race_en

control and MC- 1 on Increasing the energy efficiency of computing systems by more efficient HW and/or SW algorithms.

To face this interdisciplinary challenge, this call covers the Edge AI technology stack and related middleware: from advanced semiconductor components to supporting SW frameworks/middleware and engineering tools, allowing the application developers to easily take advantage of all the features and functionalities of the new HW and associated SW. This shall ensure a quick market acceptance of projects results and is an essential part for their success. Example applications using the AI HW and SW middleware shall demonstrate the results of the developments.

The roadmaps detailing the developments indicate that a certain maturity will be achieved in the next 4 to 7 years. Accelerating those developments would improve the European position on edge-AI. To achieve this, it is foreseen that this topic will remain, in the next KDT calls, a focus topic if possible at higher TRL provided sufficient progress has been made.

Expected Outcomes:

Proposal results are expected to contribute to one or more of the following outcomes:

- Development of European processors/accelerators for secure embedded intelligence supporting inference and machine learning in autonomous intelligent objects and AIoT (Artificial Intelligence of Things) at the edge.
- Development of platforms and automated tools for HW/SW co-design of edge-AI based systems including non traditional computing paradigms (e.g. neuromorphic).
- Development of AI software algorithms and/or frameworks and tools for dealing with sparse computing resources for edge-AI based systems.
- Increased energy efficiency and improved processing capabilities for edge-AI.
- Support of virtualization concepts at firmware, operating system and middleware layer for vertical applications (e.g. automotive, industry, ...)
- Design for security and reliability to support applications in critical sectors like mobility, healthcare, industry, ...

Scope:

Proposals need to address:

- The design of innovative and energy-efficient processing solutions for AI on the edge and deep-edge, with a focus on new processor architectures and middleware.

- Tools allowing semi-automatic and automatic design space exploration, including variants of algorithms, computing paradigms, hardware performances, energy efficiency, etc.
- Scalable architecture, use of interposer and chiplets to build chips for various applications (for edge and for embedded HPC applications) with the same family of hardware building blocks with efficient interconnection network, e.g. using photonics.
- Development of hybrid architectures, integration and cooperation of neuromorphic or other non-conventional computing solutions within classical systems. Supporting design tool chains and OSs addressing multiple computing paradigms
- Middleware and engineering tools, to reach a trade-off between training cost, power consumption and execution time while supporting virtualization concepts.
- Advanced memory management
- Automated transfer-learning, meta-learning, and real-time learning at the edge
- Secure (i.e. trustworthy and explainable) edge-AI by design.
- Encouraging SMEs to participate in those developments, in particular paying attention to the needs of SMEs, involve SMEs in project execution, and develop solutions that can be taken up and/or exploited by SMEs

Of importance to this call are:

- All proposals are encouraged to allocate tasks to cohesion activities with the co-programmed partnership on AI, Data and Robotics and funded actions related to this partnership in view of contributing to the European AI lighthouse.
- Liaising to projects selected under the RIA-call HORIZON-CL4-2021-DIGITAL-EMERGING-01-01: Ultra-low-power, secure processors for edge computing action is encouraged.
- Where relevant, synergies with other European partnerships and Horizon Europe Clusters (Cluster 4 and Cluster 6 in particular) are encouraged, e.g. Photonics PPP, the European Processor Initiative.
- Proposals may include early chip and/or middleware and supporting engineering tools for embedded AI systems prototyping. Validation of prototypes and/or software in key use cases of systems for AI operating at the edge.

Reminding that of general importance to the KDT calls are:

- Re-use of results from previous ECSEL JU, H2020 or EUREKA-cluster projects is encouraged.
- Developing synergies with other relevant European, national or regional initiatives and/or funding programmes.

- Proposals should include a preliminary analysis/roadmap of bringing successfully to the market the proposed research (for this call either as IP blocks or as standalone chips and/or middleware and supporting development tools) in the form of exploitation plans.

In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

Same rules apply regarding admissibility, eligibility, evaluation criteria, scoring and threshold, etc. as in the general call, except for:

Evaluation criteria, scoring and threshold

Scoring

The scores will be given with a resolution of one decimal.

Criteria	Range	Weight (**)	Threshold (*)
Excellence	0-5	1.0	3
Impact	0-5	1.0	3
Quality and efficiency of the implementation	0-5	0.7	3
Total	0-15		11

(*) threshold applies to unweighted score

(**) the weight is only used to establish the ranking of the proposals

The Impact criterion is modified as follows:

- Credibility of the pathways to achieve the expected outcomes and impacts, and the likely scale and significance of the contributions to the project.
- Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

Reimbursement rate for establishing the EU contribution

Reimbursement rates as percentages on the eligible costs according to Horizon Europe.

Type of beneficiary	EU Contribution as % of the Eligible Cost according to HE (*)
Large Enterprise (for profit organization but not an SME)	25 %

SME (for profit SME)	35 %
University/Other (not for profit)	35 %

(*) beneficiaries may ask for a lower contribution

Call 2021-3-CSA- A Pan-European chip infrastructure for design innovation

This call relates to the second general objective of the KDT JU: establish Union scientific excellence and innovation leadership in emerging components and systems technologies, including in activities related to lower TRLs; and promote the active involvement of SMEs, which shall represent at least one third of the total number of participants in indirect actions and at least 20 % of public funding should go to them.

Specific conditions	
<i>Expected EU contribution per project</i>	The KDT JU estimates that an EU contribution of EUR 10 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative EU budget for the topic is EUR 10 million.
<i>Type of Action</i>	Coordination and Support Actions

Expected Outcomes

Proposal results are expected to contribute to the following outcomes:

- Establish a platform that nurtures the growth of a design ecosystem in Europe. The platform should support and stimulate design reuse, enable the exploitation of advanced technologies in different application domains, and provide a breeding ground for deep-tech startups;
- Ease of the access to training, customer support, IP, and leading-edge design tools.
- Support efficient fabrication (multi-project wafers (MPW) and small volume) of ASICs, photonics, MEMS, sensors, etc. and their integration at system level.
- Support technology offerings of research centres with lower TRL to be promoted over the platform
- Proposal for long-term operation of the platform to support Universities and European research centres

Scope

Semiconductors are at the centre of strong geostrategic interests, and at the core of the global technological race. A priority for Europe is to strengthen its design capacity and to lower the barriers to get access to advanced semiconductor technologies. Amongst others, this requires the nurturing and supply of people with the right digital skills, and the provision of routes to prototype and commercialisation. Not only large enterprises, but also startups and academic institutions play a key role and are crucial in the European semiconductor value chain.

Proposals need to lower the entry-barrier for academia, research institutes and very importantly for startups, and SMEs by offering affordable access to a portfolio of industrial-grade design tools, IP blocks, including open-source ones (e.g. RISC-V based), and prototyping technologies. Services offered must include initial advice, training, support, reduced entry costs, prototyping and a clear route to chip manufacture and product supply. Proposals must include a KPI on start-ups and SMEs that use the services provided by the platform.

Furthermore, proposals should include some of the following elements:

- Fostering collaboration and support in Europe by providing a design IP exchange system, where members can exchange IP blocks, including commercialisation of academic designs, considering national rules if relevant
- Supporting and stimulating the adoption of emerging technologies (e.g. neuromorphic, 3D integration, wafer-scale-packaging etc) by creating standardised platforms and make those widely accessible;
- Enabling heterogeneous system integration, such as the adoption of chiplets by a wide range of customers.
- Strengthening industry relevant skills by supporting up-skilling and re-skilling initiatives through provision of extended training activities.

Reminding that of general importance to the KDT calls are:

- Re-use of results from previous ECSEL JU, H2020 or EUREKA-cluster projects is encouraged.
- Developing synergies with other relevant European, national or regional initiatives and/or funding programmes.
- Encouraging SMEs to participate in those developments, in particular paying attention to the needs of SMEs, involve SMEs in project execution, and develop solutions that can be taken up and/or exploited by SMEs

In this topic the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

Specific Conditions

Type of action: Coordination and Support Action (CSA)

Mode: 1 stage call with submission of Full Project Proposal (FPP)

Publication date: 16 December 2021¹²

Deadline (FPP proposals): at 17:00:00 Brussels time on 27 April 2022

In this Call the integration of the gender dimension (sex and gender analysis) in research and innovation content is not a mandatory requirement.

Admissibility and Eligibility conditions:

Admissibility conditions: Refer to Annex 1, and regarding page limits:

- The page limit for the chapter on EXCELLENCE is 30 pages
- The page limit for the chapter on IMPACT is 30 pages
- The page limit for the chapter on IMPLEMENTATION is 30 pages.
- The application of those page limits (font size etc) is further described in the Guide for Applicants. The selected proposals maybe required to submit further information regarding the IMPLEMENTATION after selection.
- Proposals with more pages will be evaluated but the pages in excess of those maxima will not be considered for the evaluation.

Eligibility conditions: Refer to Annex 1

Evaluation criteria, scoring and threshold

The proposals will be evaluated along the following three evaluation criteria:

Excellence: The following aspects will be taken into account, to the extent that the proposed work corresponds to the relevant work programme topic description in the SRIA 2021:

- a) Clarity and pertinence of the project's objectives,
- b) Quality of the proposed coordination and/or support measures, including soundness of methodology

Impact:

- a) Credibility of the pathways to achieve the expected outcomes and impacts, and the likely scale and significance of the contributions to the project.
- b) Suitability and quality of the measures to maximise expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

¹² Provided all necessary decisions were adopted in time by the boards of KDT JU.

Quality and efficiency of the implementation: The following aspects will be taken into account:

- a) Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- b) Capacity and role of each participant, and the extent to which the consortium as a whole brings together the necessary expertise.

Scoring

The scores will be given with a resolution of one decimal.

Criteria	Range	Weight (**)	Threshold (*)
Excellence	0-5	1.0	3
Impact	0-5	1.0	3
Quality and efficiency of the implementation	0-5	1.0	3
Total	0-15		11

(*) threshold applies to unweighted score

(**) the weight is only used to establish the ranking of the proposals

Selection criteria

- Financial capacity: In line with the Financial Regulation and the Rules for Participation of Horizon Europe. At the full project proposal stage, coordinators will be invited to complete a self-assessment using an on-line tool.
- Operational capacity: As a distinct operation, carried out during the evaluation of the award criterion 'Quality and efficiency of the implementation', experts will indicate whether the participants meet the selection criterion related to operational capacity, to carry out the proposed work, based on the competence and experience of the individual participant(s).

Indicative timetable for evaluation and grant agreement

Information on the outcome of the evaluation	Indicative date for the signing of grant agreements
Maximum 5 months from the final date for submission	Maximum 8 months from the final date for submission

Consortium agreement

In line with the Rules for Participation and the KDT JU Model Grant Agreement, participants are required to conclude a consortium agreement.

Reimbursement rate for establishing the EU contribution

Reimbursement rates as percentages of the eligible cost according to HE.

Type of beneficiary	EU Contribution as % of the Eligible Cost according to HE
Large Enterprise (for profit organization but not an SME)	100 %
SME (for profit SME)	100 %
University/Other (not for profit)	100 %

Communication activities

In preparation of the KDT JU there is a need for:

- Development of a logo and a house style: In addition to basic graphical elements, a complete graphics standards reference for KDT JU is being developed, encompassing also rules for use, templates for a range of standard documents, and recommendations for language style and use of gender-neutral language referencing EU institutional guidelines;
- New-look website (same structure as ECSEL JU but with different visuals and adapted content);
- Ready to run for KDT JU Calls 2021.

The following activities are planned on KDT JU start:

- Press-release at launch,
- Online “Mini event” at the launch of KDT JU with a webcast featuring stakeholders’ statements,
- Social Media campaign to draw attention to KDT JU.

The online event will comprise statements from representatives of the main stakeholders in the new KDT Joint Undertaking. A public announcement about this event is foreseen, with mandatory registration (free of charge). A press-release will echo the statements made during this event.

3. Call management rules

The rules for evaluation and selection are regulated by KDT PAB 2021.02

Major challenges are described in the ECS SRIA 2021 (KDT GB 2021.03).

The General Annexes of the Horizon Europe Work Programme 2021 – 2022 shall apply for the actions covered by this Work Programme. Any specificity for KDT JU is highlighted in the Annexes.

As referred to in Article 12 of the SBA, selection decisions may deviate from the ranking list provided by the evaluation committee to ensure the overall consistency of the portfolio approach. Such decisions may be taken in case proposals have a clear similarity and/or overlap with highly ranked proposals. Such decisions may also be taken in case lower ranked proposals are expected to contribute more directly to policy objectives than higher ranked proposals. Policy objectives to be considered are those of the Participating States and policy objectives of the European Union, including but not limited to the Digital

Compass communication¹³ (COM(2021) 118, 9 March 2021). Proposers are also referred to the evaluation and selection procedures related to Calls for Proposals¹⁴.

As provided for by Article 134 of the Single Basic Act, Article 22.5 of the Horizon Europe Regulation is hereby not triggered for any of the KDT calls 2021; rules for eligibility to participate follow Horizon Europe rules. With reference to Recital 17 of the Single Basic Act, eligibility of participants in a proposal submitted to a Call for Proposals for any of the topics in this work programme will take into account any application of Art 22.5 of the Horizon Europe Regulation triggered for topics from other HE Work Programmes for proposals with similar scope.

Participants declared by their national authority in crisis according to the State-Aid rules as defined by EU regulation 651/2014 will not be eligible for EU funding.

4. Governance

Governance of the Joint Undertaking includes the following bodies:

The Governing Board has overall responsibility for the strategic orientation and the operations of the KDT Joint Undertaking and supervises the implementation of its activities. The Chair is Mr. Ralf Bornefeld.

The Executive Director is the chief executive responsible for the day-to-day management of the KDT Joint Undertaking in accordance with the decisions of the Governing Board. The executive director is Mr. Bert de Colvenaer.

The Public Authorities Board is competent for matters related to calls for proposals and allocation of public funding. Its Chair is Ms Doris Vierbauch.

The Private Members Board is responsible for drawing up the SRIA. Its Chair is Mr. Jean-Luc di Paola-Galloni.

¹³ <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX%3A52021DC0118>

¹⁴ KDT PAB 2021.02

5. ANNEXES

Annex 1: General Annexes for the KDT Calls 2021-1, 2021-2 and 2021-3

The “Horizon Europe 2021-2022 13.General Annexes (European Commission Decision C(2021)1940 of 31 March 2021)”¹⁵ apply with some exceptions specific for the KDT JU Calls 2021-1 to 2021-3.

A – Admissibility. The page limits as mentioned under the different call descriptions in the KDT JU Work Programme 2021 are applicable as well as in the Guide for Applicants regarding the format.

B – Eligibility. Where eligibility is limited to certain technology readiness levels (TRLs), the table below provides guidance for assessing the TRLs. The table emphasizes the differences between the different levels as well as the difference between hardware and software related actions.

	Definition in HE WP	Hardware description	Software description	Exit criteria
1	Basic principles observed and reported.	Scientific knowledge generated underpinning hardware technology concepts/applications.	Scientific knowledge generated underpinning basic properties of software architecture and mathematical formulation.	Peer reviewed publication of research underlying the proposed concept/application.
2	Technology concept formulated	Invention begins, practical application is identified but is speculative, no experimental proof or detailed analysis is available to support the conjecture.	Practical application is identified but is speculative, no experimental proof or detailed analysis is available to support the conjecture. Basic properties of algorithms, representations and concepts defined. Basic principles coded. Experiments performed with synthetic data.	Documented description of the application/concept that addresses feasibility and benefit.
3	Experimental proof of concept	Analytical studies place the technology in an appropriate context and laboratory demonstrations, modelling and simulation validate analytical prediction.	Development of limited functionality to validate critical properties and predictions using non-integrated software components., modelling and simulation	Documented analytical/experimental results validating predictions of key parameters.
4	Technology validated in a lab	A low fidelity system/component breadboard is built and operated to demonstrate basic functionality and critical test environments, and associated performance predictions are	Key, functionally critical, software components are integrated, and functionally validated, to establish interoperability and begin architecture development. Relevant Environments defined	Documented test performance demonstrating agreement with analytical predictions. Documented definition of relevant environment.

¹⁵ Refer to https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-13-general-annexes_horizon-2021-2022_en.pdf

		defined relative to the final operating environment.	and performance in this environment predicted.	
5	Technology validated in relevant environment. (industrially relevant environment in the case of key enabling technologies)	A medium fidelity system is built and operated to demonstrate overall performance in a simulated operational environment with realistic support elements that demonstrates overall performance in critical areas. Performance predictions are made for subsequent development phases.	End-to-end software elements implemented and interfaced with existing systems/simulations conforming to target environment. End-to-end software system, tested in relevant environment, meeting predicted performance. Operational environment performance predicted. Prototype implementations developed.	Documented test performance demonstrating agreement with analytical predictions. Documented definition of scaling requirements.
6	Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)	A high fidelity system/component prototype that adequately addresses all critical scaling issues is built and operated in a relevant environment to demonstrate operations under critical environmental conditions.	Prototype implementations of the software demonstrated on full-scale realistic problems. Partially integrate with existing hardware/software systems. Limited documentation available. Engineering feasibility fully demonstrated.	Documented test performance demonstrating agreement with analytical predictions.
7	System prototype demonstration in an operational environment.	A high fidelity engineering unit that adequately addresses all critical scaling issues is built and operated in a relevant environment to demonstrate performance in the actual operational environment and platform.	Prototype software exists having all key functionality available for demonstration and test. Well integrated with operational hardware/software systems demonstrating operational feasibility. Most software bugs removed. Limited documentation available.	Documented test performance demonstrating agreement with analytical predictions.
8	System complete and qualified	The final product in its final configuration is successfully demonstrated through test and analysis for its intended operational environment and platform	All software has been thoroughly debugged and fully integrated with all operational hardware and software systems. All user documentation, training documentation, and maintenance documentation completed. All functionality successfully demonstrated in simulated operational scenarios. Verification and Validation (V&V) completed.	Documented test performance verifying analytical predictions.
9	Actual system proven in an operational environment (competitive manufacturing in the case of key enabling technologies, or in space)			

D – Award criteria

Scores and weighting factors are indicated in the calls/topics descriptions.

F - Procedure. Evaluation procedure and ranking.

- The call specific annexes contain the rules applicable to the KDT JU call evaluations. The rules for evaluation and selection of proposals, as adopted by the KDT JU PAB (Decision KDT PAB 2021.02), include the rules on conflicts of interest. This document is available in the calls pages in the Funding and tenders portal.

G – Legal and financial set-up of the grant agreement.

The call/topic descriptions contain the provisions and funding rates applicable to the KDT calls.

Annex 2: ENTRUSTING FOR THE KDT JU CALLS 2021

According to the SBA Participating States can:

- Entrust the KDT JU with the implementation of their financial contribution to the beneficiaries; or
- Not entrust the KDT JU with the implementation of their financial contribution to the beneficiaries.

For KDT Calls 2021, all participating states **will not entrust the KDT JU with their financial contribution.**

Annex 3: COUNTRY SPECIFIC ELIGIBILITY RULES

The conditions and rules expressed in the next Participating State sections apply only to the participants of that Participating State in particular as to their eligibility for national funding or as to the attribution of national funding.

Austria

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
AUSTRIA	Almansa	Ana	+43 (0)5 7755-5029	ana.almansa@ffg.at
AUSTRIA	Vierbauch	Doris	+43 (0)5 7755-5024	doris.vierbauch@ffg.at

National Funding Agency for Austria: [FFG](https://www.ffg.at)

**The full version of the national eligibility criteria can be found at:
www.ffg.at/kdt/as2021**

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

Legal entities, partnerships and sole traders that are not part of the Austrian federal administration are eligible to receive funding. The following are eligible for funding:

- Companies of any legal form
- Institutions of research and knowledge dissemination
 - Universities¹⁶
 - Universities of applied sciences
 - Non-university research institutions
 - Technology transfer institutions, innovation agents and other research-oriented organisations such as associations with a relevant purpose
- Other non-commercial institutions
 - Local authorities¹⁷ and autonomous bodies
 - Non-profit making organisations such as NPOs¹⁸

2) Legal, administrative and financial conditions

The national application for participation of Austrian partners in KDT projects has to be submitted electronically via eCall: <https://ecall.ffg.at> before the deadline of the project submission. For further details on the electronic application process for Austrian participants in KDT projects please see the full version of the national eligibility criteria on the [FFG website for the KDT Calls 2021](https://www.ffg.at/kdt/as2021).

¹⁶ The smallest possible unit of a university is an institute of the university or a organisation comparable to a UOG 2002/\$20 organisation unit. It is a precondition that the participating organisation unit (institute or comparable unit) is authorised with corresponding mandate according to UOG 2002/\$ 27. Units below (for example working groups) can not act as project partners.

¹⁷ Activities of local authorities falling within their statutory mandate are not eligible for funding.

¹⁸ "Non-profit making organisations" do not distribute profits to their owners, members or other natural persons or legal entities in accordance with their legal status or articles of association.

FFG experts will check the financial viability (credit rating and liquidity) of the participating enterprises. It is not possible to provide funding to undertakings in difficulty¹⁹. Austrian enterprises have to provide the following documents:

- Annual statement of accounts (balance sheet, profit and loss account) from the past 2 financial years
- [Declaration of SME Status](#) for associations and sole traders

The company size is to be determined according to the SME definition as specified by EU competition law: [information on SME definition](#).

3) Consortium configuration

The ratio of the **personnel resources** between Austrian companies and Austrian research organisations has to be 1.5 to 1 or higher within each project. Further details can be found in the full version of the Austrian eligibility criteria, which is available in the [FFG web page of the KDT Calls 2021](#).

4) Other conditions

All Topics of Call 2021-1-IA and of Call 2021-2-RIA are eligible for national funding, including:

- Call 2021-1-IA: General according to SRIA 2021
- Call 2021-1-IA-Focus Topic: *Development of open-source RISC-V building blocks*
- Call 2021-2 RIA: General according to SRIA 2021
- Call 2021-2-RIA-Focus Topic: Processing solutions for AI at the edge addressing the design stack and middleware

The third priority topic (Call 2021-3-CSA- A Pan-European chip infrastructure for design innovation) is funded by the European Commission only, therefore not eligible for national funding.

Austria intends to reach a good balance between hardware oriented projects and software oriented projects.

The participation (total requested national budget) of each single Austrian institution has to be balanced in relation to the total national commitment. Project participations of

¹⁹ Undertakings in difficulty as defined in the General block exemption Regulation (EU) N°651/2014 of 17 June 2014

Austrian partners are eligible for national funding only if they comprise mainly R&D activities.

Eligibility of the costs and funding

1) Eligibility of costs

The eligibility of costs is in accordance with the national rules on eligible costs. For details on the eligibility of costs see the Cost Guidelines Version 2.1. For details please see the full version of the national eligibility criteria on the [FFG web page of the KDT Calls 2021](#).

2) Funding rates

	Percentage of the national subsidy to the beneficiaries ²⁰			
	Large Enterprises, Groups and Associations of Enterprises	Medium Enterprises ²¹	Small Enterprises ²¹	Public Research Institutes and Universities
Experimental development (call 2021-1, IA	up to 20 %	up to 20 %	up to 30 %	up to 30 %
Experimental development (call 2021-1, IA Focus topic)	up to 15%	up to 15 %	up to 25 %	up to 30 %
Industrial Research (call 2021-2, RIA and RIA Focus Topic)	up to 25 %	up to 30%	up to 40 %	up to 35 %

Additional Information to be provided at submission and other conditions

- **Registration at the eCall System of the FFG** at <https://ecall.ffg.at/> – completion of all relevant forms.
- Upload of relevant documents in the eCall: balance sheets, ...

²⁰ calculated on national eligible costs

²¹ With regard to the size of companies, the current definitions of SMEs given in the EU competition law are applicable. (Definition of small and medium-sized enterprises and of independent businesses in accordance with recommendation 2003/361/EC of the Commission dated 6 May 2003, (ABl. L 124 of 20.5.2003, pp. 36-41)
http://ec.europa.eu/enterprise/policies/sme/files/sme_definition/sme_user_guide_de.pdf

Belgium

National contact person for KDT JU programme

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Flanders	DEPREZ	Francis	+32 (0) 2 432 4301	francis.deprez@vlaio.be
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Brussels-Capital Region	Maas	Stijn	+32 (0) 2 600 5067	smaas@innoviris.brussels
Wallonia	PEETERBROECK	Sophie	+32 81 33 45 43	sophie.peeterbroeck@spw.wallonie.be
Wallonia	DATH	Catherine	+32 81 33 45 49	catherine.dath@spw.wallonie.be

Funding authority websites: Flanders: www.vlaio.be
 Brussels: www.innoviris.brussels
 Wallonia : www.recherche.wallonie.be

Additional for KDT (Flanders):

- www.vlaio.be KDT specific pages
- www.vlaio.be/nl/subsidies-financiering/subsidies-voor-ooi-een-internationaal-consortium/networks KDT specific pages

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

For Flanders:

The participant must be a company established in Belgium, with a sustainable economic activity in Flanders, based upon a sound business model.

Flemish Strategic Research Centres (SOC) can be independent legitimate participants.

Research centres and universities can only be legitimate participants in projects compliant to the Flemish O&O-subsidy conditions (Research Partner)

For Brussels:

Participants in KDT projects wishing to receive funding from Innoviris must be companies, universities or research organisations (in accordance with the definitions provided for by the General Block exemption Regulation for State Aid and the Brussels legislation regulating the action of Innoviris) established on the territory of the Brussels-Capital Region and performing RDI activities within the project.

Please note that no individual partner alone is allowed to support more than 70% of the project's cost.

For Wallonia:

Participants in KDT projects must be companies, universities/Colleges or accredited research centres established in the Walloon Region and performing RDI activities within the project.

2) Legal, administrative and financial conditions

For Flanders:

The participant can have no other public funding for the same activities.

In case of a multinational company, the application needs to be done by the Belgian legal entity or subsidiary.

For the independent project participation of a research centre or university, the legitimate status of Strategic Research Centre (SOC) is mandatory. A specific agreement with VLAIO is compulsory. Flemish governmental funding outside “Fonds voor Innoveren en Ondernemen” applies.

For enterprises “State Aid for Rescuing and Restructuring Firms in Difficulty” is applicable.

For Brussels:

For Brussels enterprises wishing to benefit from Innoviris funding, the financing conditions are as follows.

- develop all or some of its R&D activities within the territory covered by the Brussels-Capital Region
- present an innovative RDI project likely to have a favourable impact on employment and/or sustainable development of the Brussels-Capital Region
- show one's ability to finance one's share in the project
- the company is not in difficulty, in accordance with the European legislation
- have fulfilled its obligations in the context of previous support initiatives allocated by the Region.

No other public funding (except the European contribution provided by the JU) can be received by the beneficiaries for the activities performed within the project. Any other funding must be declared to Innoviris.

For Wallonia:

The Walloon decree on RDI support (25/06/2008) is the Walloon legal basis to determine the funding of the participants. Participants must be based in Wallonia and the Walloon company(ies) must have a business unit in Wallonia.

The companies have to present an innovative RDI project with a favourable impact on the Walloon economy and/or in terms of employment in alignment with the Walloon S3, as well on sustainable development in Wallonia.

The participants cannot benefit from any other public funding for the same activities.

The participants have fulfilled their obligations in the context of previous support allocated by the Region.

The companies in difficulty, in accordance with the European legislation, cannot not be funded.

3) Consortium configuration

For Flanders:

Project application is done by either an enterprise with a legal entity in Belgium or a legitimate Strategic Research Centre.

Projects need to be primarily executed to the benefit of the applying entities.

Applications compliant to the status of Strategic Research Centre need to be done independently.

For Brussels:

Participants in KDT projects wishing to receive funding from Innoviris must be a company or a research organisation.

For Wallonia:

The Walloon partners of the consortium must include at least one company and the research budget of the Walloon partner company(ies) must correspond to at least 40% of the total budget of all Walloon partners.

4) Other conditions

For Flanders:

Enterprises need to prove adequate (financial) means to execute the project and a potential to use the results.

The project should yield socio-economic effects which can be quantified by activities or investments after the completion of the project, by exploitation in Flanders based entities,

in accordance with the ruling detailed in the document (except for project applications by Strategic Research Centres). Conditions are compliant to the impact conditions of O&O, detailed on:

www.vlaio.be/nl/subsidies-financiering/onderzoeksproject/voorwaarden-om-aanmerking-te-komen-voor-de-subsidie

www.vlaio.be/nl/subsidies-financiering/ontwikkelingsproject/wie-komt-aanmerking-en-onder-welke-voorwaarden

Project qualification ‘research’ or ‘development’ will follow KDT call rational (IA, RIA or additional calls).

In case of potential military applications (including dual use), funding can be restricted.

For Brussels:

Exploitation and valorisation conditions:

Brussels-based participants must demonstrate their capability to carry out the tasks assigned to them in the project, exploit the results of the latter and the project's likelihood to have a positive impact on the Brussels-Capital Region from a social, environmental and the regional ecosystem perspective 's (economy, employment, and/or sustainable development, inequalities, working conditions, well-being, ...).

In case of potential military applications (including dual use), funding can be restricted.

For Wallonia:

The participants must demonstrate their capability to carry out the tasks assigned to them in the project, exploit the results of the latter and have positive impacts on Wallonia from a socio-economic and sustainable development perspective.

Projects must be targeted at civilian technologies, products, processes and services only.

Eligibility of the costs and funding

1) Eligibility of costs

For Flanders

Eligibility of costs is in accordance with the ruling of the O&O bedrijfssteun of Flanders, detailed in the documents available on:

<https://www.vlaio.be/nl/subsidies-financiering/onderzoeksproject/welk-bedrag-kan-je-krijgen-de-subsidie-onderzoeksproject>

www.vlaio.be/nl/subsidies-financiering/ontwikkelingsproject/financiele-steun-voor-een-ontwikkelingsproject

Eligible cost calculation will be done on the costs formulated in the KDT application. The cost model applicable is the KDT eligible cost system (Horizon Europe)

In case of stand-alone Strategic Research Centre projects, KDT eligible cost system (Horizon Europe) is applicable for both KDT and national funding

For Brussels

For KDT projects, the Brussels-Capital Region will align on the JU and will therefore not apply additional rules, such as the regional rules applicable for individual RDI projects, on the eligibility of costs. The eligible costs will therefore be those retained by the JU for the European contributions in accordance with the Horizon Europe Rules for Participation.

For Wallonia:

The eligibility of costs is in accordance with the guidelines issued by the Public Service of Wallonia available on:

[Guide-des-dépenses-admissibles_aides.pdf](#)

2) Funding rates

For Flanders

Type of Organisation Type of activity	Percentage of the national subsidy to the beneficiaries (1)			
	Large Enterprises, Groups and Associations of Enterprises	Medium Enterprises	Small Enterprises	Public Research Institutes and Universities (2) (3)
Industrial/Applied Research projects	65%-JU	70%-JU	70%-JU	= JU (1:1 ratio)
Experimental development projects	40%-JU	50%-JU	60%-JU	= JU (1:1 ratio)

Notes:

1. These percentages are maxima and given under the constraints that the project proposal fulfils the KDT eligibility criteria and that no participant in the KDT project holds more than 70% of the total (international) KDT project budget.

2. The funding of stand-alone Strategic Research Centre contributions is determined by specific project related agreement with IWT. These projects have no specific funding limit. The eligible costs for these projects may be set equal to the KDT eligible costs.
3. The funding of public research institutes and universities in projects initiated by enterprises in Belgium, is determined by the general principles of O&O-bedrijfsprojecten as published on the websites

[www.vlaio.be/nl/subsidies-financiering/onderzoeksproject/wat-houdt-de-subsidie-
onderzoeksproject](http://www.vlaio.be/nl/subsidies-financiering/onderzoeksproject/wat-houdt-de-subsidie-onderzoeksproject)

[www.vlaio.be/nl/subsidies-financiering/ontwikkelingsproject/wat-is-een-
ontwikkelingsproject](http://www.vlaio.be/nl/subsidies-financiering/ontwikkelingsproject/wat-is-een-ontwikkelingsproject)

The funding level of the participating (initiating) enterprise applies.

Except for stand-alone Strategic Research Centre projects, funding is limited to € 3M per project. Total funding for not stand-alone Strategic Research Projects may be limited to € 4M. Funding to enterprises may be limited if combined R&D funding (national and international) to an industrial participants exceeds VLAIO applicable ruling.

For Brussels:

Type of Organisation Type of activity	Percentage of the national subsidy to the beneficiaries (1)			
	Large Enterprises, Groups and Associations of Enterprises	Medium Enterprises	Small Enterprises	Public Research Institutes and Universities
Industrial/Applied Research projects	65%-JU%	75%-JU%	80%-JU%	100%-JU%
Experimental development projects	40%-JU%	50%-JU%	60%-JU%	100%-JU%

Notes:

These percentages are maxima and given under the constraints that the project proposal fulfils the KDT eligibility criteria and that no participant in the KDT project holds more than 70% of the total (international) KDT project budget.

Project funding for Brussels may be limited to € 0,5M.

For Wallonia:

Type of Organisation Type of activity	Percentage of the regional subsidy to the beneficiaries				
	Large Enterprises, Groups and Associations of Enterprises	Medium Enterprises	Small Enterprises	Universities	Accredited Research Centers
Industrial/Applied Research projects	60%-JU%	70%-JU%	80%-JU%	100%-JU%	75%-JU%
Experimental development projects	40%-JU%	50%-JU%	60%-JU%	100%-JU%	75%-JU%

Notes:

1. These percentages are **maxima** and given under the constraints that the project proposal fulfills the KDT eligibility criteria and that no participant in the KDT project holds more than 70% of the total (international) KDT project budget.
2. The proposed research activities will be qualified 'industrial research' or 'experimental development' according to the above-mentioned Walloon decree. The funding of Experimental Development projects might be carried out by means of recoverable advances ([Taux de financement des projets internationaux_2021.pdf](#)).

Additional Information to be provided at submission and other conditions***For Flanders:***

Additional information is mandatory as of the FPP-phase. Application according the KDT application form www.vlaio.be/nl/media/739 is mandatory (endorsing the application compulsory by KDT FPP closing date). European application format is requested. Starting the application procedure (without endorsement) is recommended as of the KDT PO phase.

For Brussels

The submission of a Part C containing additional information is compulsory for all Brussels partners. The Part C template is available on the INNOVIRIS website <https://innoviris.brussels/> (get-funded/ Collaboration/ECSEL).

For Wallonia:

The submission of a Part C containing additional information is compulsory for all Walloon partners. The Part C template is available on the website (www.recherche.wallonie.be).

Bulgaria (BG)

No information available.

Croatia (HR)

No information available.

Cyprus (CY)

No information available.

Czech Republic

National contact persons for the KDT JU programme

Country	Name and surname	National funding authority	E-mail address
Czech Republic	Mr. Michal Vávra (Lead Delegate)	Ministry of Education, Youth and Sports	michal.vavra@msmt.cz

The National Funding Authority (NFA) of the Czech Republic for the KDT programme is the **Ministry of Education, Youth and Sports** (hereinafter referred to as the “MEYS”), Department for Research and Development – Unit for European Research Area. Principal legal regulations and documents on public funding of research, development and innovation in the Czech Republic are available on the websites www.msmt.cz/vyzkum-a-vyvoj and www.vyzkum.cz.

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

Public universities, public research institutes, private research organisations and/or other legal entities that can be classified as **“research and knowledge-dissemination organisations”** (hereinafter referred to as the “research organisation”) in accordance with the [Commission Regulation \(EU\) No 651/2014 of 17 June 2014](#) declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Chapter I, Article 2, Paragraph 83).

“Enterprises” – Small, medium and/or large-sized enterprises as defined by the [Commission Regulation \(EU\) No 651/2014 of 17 June 2014](#) declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Chapter I, Article 2, Paragraphs 2 and 24), listed in Business Register of the Czech Republic and performing research, development and innovation in the Czech Republic.

2) Legal, administrative and financial conditions

Public funding of research, development and innovation in the Czech Republic is provided pursuant to the **Act No. 130/2002 Coll. on the Support of Research, Experimental Development and Innovation from Public Funds** and on the Amendment to Some Related Acts (hereinafter referred to as the “Act on the Support of Research, Experimental Development and Innovation”).

3) Consortium configuration

The Czech fraction of a KDT project consortium must be configured from at least one enterprise and at least one research organisation, both these entities fulfilling the

requirements stipulated in the clause 1 “Type or nature of participants”, thus complying with the Public-Private-Partnership principle.

4) Other conditions

It is obligatory that a Czech participant involved in a KDT project consortium proves its compliance with the eligibility criteria and fulfilment of the conditions stipulated by § 18 of the Act on the Support of Research, Experimental Development and Innovation by the means of a **Statutory Declaration**. The required procedures are described and the Statutory Declaration template is available on the website <http://www.msmt.cz/vyzkum-a-vyvoj-2/vyzva-k-predkladani-navrhu-projektu-ecsel-v-roce-2021>.

Furthermore, applicants that seriously breached their obligations towards the MEYS, acting as the NFA, stemming from the applicable legislation or the Grant Agreement issued by the MEYS during validity of the KDT programme or any of its predecessors, shall be considered ineligible for the national funding.

Eligibility of the costs and funding

1) Eligibility of costs

Eligible costs for a Czech participant involved in a KDT project consortium are defined by:

Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013.

Regulation (EU, Euratom) 2018/1046 of the European Parliament and of the Council of 18 July 2018 on the financial rules applicable to the general budget of the Union, amending Regulations (EU) No 1296/2013, (EU) No 1301/2013, (EU) No 1303/2013, (EU) No 1304/2013, (EU) No 1309/2013, (EU) No 1316/2013, (EU) No 223/2014, (EU) No 283/2014, and Decision No 541/2014/EU and repealing Regulation (EU, Euratom) No 966/2012.

The **maximum indirect costs** are 25 % (flat rate) of the direct costs without the sub-contracting.

2) Funding rates

The MEYS consider the Research and Innovation Actions (RIA) being industrial research projects and the Innovation Actions (IA) being experimental development projects. Given these circumstances, the maximum intensity of the MEYS aid will be derived from the Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring

certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Chapter III, Section 4, Article 25, Paragraph 5).

The aid intensity for industrial research and experimental development will not be increased by the MEYS although the Czech participants in an ECSEL project consortium meet the conditions stipulated by the [Commission Regulation \(EU\) No 651/2014 of 17 June 2014](#) declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Chapter III, Section 4, Article 25, Paragraph 6). The aid intensities stipulated in the table below are definitive.

Funding rates	Large enterprises	Small and medium sized enterprises	Research organisations*
Research and Innovation Actions (RIA) projects = Industrial Research	50 % including EU contribution	70 % including EU contribution	100 % including EU contribution
Innovation Actions (IA) projects = Experimental Development	40% including EU contribution	50 % including EU contribution	100 % including EU contribution

* **The aid intensity for research and development activities carried out by the research organisation might be at the level of 100 % (EU and the Czech national contribution included)** only if the research organisation entirely complies with the requirements stipulated by the Article 2.1.1 “Public funding of non-economic activities” of [Framework for State Aid for Research and Development and Innovation \(2014/C 198/03\)](#) and proves it by the means of a **Statutory Declaration** submitted to the MEYS using the form available on website <http://www.msmt.cz/vyzkum-a-vyvoj-2/vyzva-k-predkladani-navrhu-projektu-ecsel-v-roce-2021>.

If a legal entity does not comply with all the requirements stipulated for the research organisation, it will be considered as an enterprise (small, medium or large) and the aid intensity will be then adjusted appropriately by the MEYS.

Additional Information to be provided at submission and other conditions

All the information concerning additional requirements stipulated by the MEYS for the KDT programme are available on website <http://www.msmt.cz/vyzkum-a-vyvoj-2/vyzva-k-predkladani-navrhu-projektu-ecsel-v-roce-2021>.

Denmark

National contact person for KDT JU programme

Country	Last Name	First name	Telephone	E-mail
Denmark	Citirikkaya	Cagdas	+45 6190 5013	Cagdas.citirikkaya@innofond.dk
	Vittrup	Jens Peter	+45 6190 5023	Jens.peter.vittrup@innofond.dk
	Lindberg	Børge	+45 6190 5012	Boerge.lindberg@innofond.dk

Legal requirements for the eligibility of a partner or a project

1. Type or nature of participants (project partners)

- Commercial enterprises registered in Denmark (The Central Business Register - CVR).
- Research organisations.
- Higher education institutions (HEI), Public research institutes.
- Any other type of Danish organization such as hospitals, municipalities etc. (See IFDs Guidelines for International Projects 2022: <https://innovationsfonden.dk/sites/default/files/2018-10/general-terms-and-conditions-for-international-projects-approved-after-1-feb-2018.pdf>)

2. Legal, administrative and financial conditions

- General eligibility criteria and conditions for receiving project funding from the Innovation Fund Denmark (IFD) will apply (i.e. the beneficiary must be a registered legal entity, have credible capacity to execute the project activities in Denmark, demonstrate financial viability, and provide transparency as to funding requested or received from other sources). See IFDs Guidelines for International Projects 2022 – soon to be published.
- Companies must be established with a considerable business activity in Denmark within the scope of the KDT JU.
- All Danish project partners must possess relevant research & innovation capabilities.

3) Consortium configuration

- At least one Danish company must be involved as a partner in the project, and at least 50 % of the efforts (total eligible costs) of Danish partners in the project must be from Danish business partners. National funding priority will be given to projects which based on the results of the project can generate most knowledge based growth and employment in Denmark.
- The industrial relevance of the participation of a research organisation must be justified by declarations from the Danish business partner(s) in the project or from

some other enterprise(s) that would be eligible according to the criteria 1) and 2) above.

4) Other conditions

- Companies (business partners in the project) must in the application provide specific information on the possible industrial and commercial impact of the project, and justify that they have the necessary means to exploit the project results.
- Research organisations and other non-commercial partners must in the application specify national industrial impact in terms of exploitation opportunities for Danish businesses.

Eligibility of the costs and funding

1) Eligibility of costs

Horizon Europe rules and guidelines on eligible costs will apply.

2) Funding rates

The maximum funding rates for the national share of the funding provided by the IFD will be as listed in the table below. In addition, the EU co-funding can be provided according to the KDT JU co-funding rates:

	IFD funding rates for ECSEL projects Max IFD funding per DK partner: €300.000, Max for all DK partners €500.000					
	Large industry	Medium Enterprises (50-249 FTE)	Small Enterprises (1-49 FTE)	Approved industrial clusters	Research organisations (GTS) and	Universities, hospitals & public institutions
Experimental Research (IA)	20 %	20 %	20 %	20%	25 %	55 %
Industrial Research (RIA)	40 %	40%	45%	40 %	25 %	55 %

Other costs (overhead). Share of funding		
Universities	Hospitals	Approved industrial clusters
44%	3,1%	20 %

IFD funding to Danish partners in KDT JU follows the standard maximal funding for international projects. However, **in addition** the Danish participants will receive KDT JU funding from the call secretariat according to the KDT JU funding criteria.

IFD standard funding rates is adjusted for KDT JU co-funding rates. The total co-funding rates (IFD+EU) will as a consequence follow IFDs standard funding rates.

Additional Information to be provided at submission and other conditions

The total Danish funding budget for the above KDT JU Call 2021-1 and Call 2021-2 is 2 mill. €²².

1. There is no pre-allocated distribution of the Danish funding budget between Call 2021-1 and Call 2021-2, nor to specific topics of Call-2021-2.
2. Danish applicants should consider 0,3 mill. € as a maximum amount of national funding if one Danish partner participate in the application and up to 0,5 mio. € for all Danish participants if more than one Danish partner participate in the project. In addition to the national funding EU co-funding can be received according to KDT JU co-funding rules.
3. National funding will be subject to conditions in current state aid rules (Commission Regulation (EU) No 651/2014). If other public funding, besides the EU funding, will be granted for the project, the listed maximum rates for national funding will be reduced if required to ensure that aid intensity limits in the state aid rules are respected. Beneficiaries must submit declarations regarding company size and financial situation.
4. Information providing the justifications required according to items 3) Consortium configuration and 4) Other conditions in the above eligibility criteria must be provided as a separate attachment (Part C) at submission
5. After the call deadline, each Danish participant will automatically receive a national e-grant file number and be asked to upload the full application. The KDT JU application and budget annexes must be uploaded on e-grant no later than 14 days after the e-grant invitation has been send out to the applicants.

Estonia

Does not participate to the calls described in this document.

²² Subject to final approval by the BoD of IFD Denmark and the annual budget law.

Finland

National contact person for KDT JU programme

Country	Name	First	Phone	email
Finland	Ahola	Kimmo	+358 50 5577 756	kimmo.ahola@businessfinland.fi
	Leino	Kari	+358 50 5577 698	kari.leino@businessfinland.fi

Finland's national public funding authority is Innovation Funding Agency Business Finland. Business Finland funding principles can be found at:

www.businessfinland.fi/en (English)

www.businessfinland.fi (Finnish)

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

- Companies (enterprises)
- Industry associations
- Universities and polytechnics
- Public research institutes and similar research organizations

2) Legal, administrative and financial conditions

- A company has considerable industrial or R&D&I activities in Finland
- A company has a clear financial record and has the financial capability to cover its own expenses during the project (e.g. the company must show positive equity at decision taking)

3) Consortium configuration

- A public research institute, university or a polytechnic shall be accompanied in the project by at least two eligible companies in Finland
- Research and Innovation Actions (RIA) projects: The project volume (costs) of public research institutes, universities and polytechnics from Finland combined shall not exceed 50 % of the total volume (costs) of Finnish participants based on national (Business Finland) funding rules
- Innovation Action (IA) projects: The project volume (costs) of public research institutes, universities and polytechnics from Finland combined shall not exceed 30 % of the total volume (costs) of Finnish participants based on national (Business Finland) funding rules

4) Other conditions

- The project participation must aim for significant business and export growth as well as have sufficient positive impact on the Finnish economy or society.
- Priority is given to the topics that are not covered by already funded projects.

Eligibility of the costs and funding

1) Eligibility of costs

- Eligibility of the costs is in accordance with the national (Business Finland) funding rules.

2) National public funding

Type of activity	Large enterprise	SME	Public Research Institutes and Universities
Research and Innovation action	20 % grant	35 % grant	38 % grant
Innovation Action	20 % grant or Max. 50 % loan	35 % grant or Max. 50 % loan	38 % grant

Additional Information to be provided at submission and other conditions

- Every participant in Finland must submit a separate Business Finland funding application within 14 days of call closure date.

France

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
France	MADIGOUT	Geoffrey	+33 1 53 18 36 17	geoffrey.madigout@finances.gouv.fr
	RITOU	Arnaud	+33 1 53 18 36 16	arnaud.ritou@finances.gouv.fr

Website reference:

<https://www.entreprises.gouv.fr/fr/numerique/enjeux/nano-2022>

Legal requirements for the eligibility of a partner or a project

The items published in French in the following text are the official national eligibility criteria for funding. The items published in English are a translation. The text in French takes precedence over the text in English.

The indicative commitment previously indicated in this work programme is not a budget to allocate to French applicants to KDT calls, but an historical-based estimation of the ability of French partners to ECSEL calls to obtain national funding through mechanisms described below.

Consequently, the French applicants of an KDT 2021 project proposal must, to be eligible, have been selected for this project to a national funding:

- through an existing national program such as Nano 2022 or its successor in the context of the upcoming IPCEI for electronic, in case its implementation allows it, if they are beneficiaries of it, and under the conditions of these programs. In the case of Nano2022, it is reminded that only the already identified team leaders are allowed to bid in the framework of this program.
- through a national or regional call, with respect to the specific conditions of this call.

Applicants to a funding through KDT have to respect all the criterias listed in the present document.

Partners must contact the national correspondent before the Full Project Proposal submission. The aim of this contact is to direct the requestor to the most relevant financing mechanism, and for the Nano2022 team leaders, to check the conformity of the project with the strategic lines of the program.

The following criteria are valid only for the applicants selected to the plan Nano2022 and are without prejudice to the application of legal rules and regulations concerning the allocation of public funding by the French State. For partners who have submitted an application for funding under a national or regional call for projects, they must refer to the terms of reference of this call.

1) Type or nature of participants

- Private and public companies of all sizes
- Universities
- Research Institutes

2) Legal, administrative and financial conditions

The work to be done by the partners must neither have already benefited from public funding (excluding generic fiscal aid) nor be redundant with similar projects already funded by French authorities.

The financial situation of each private partner must be validated (financial structure, cash flow, operating accounts) and considered compatible (activity volume, workforce, financial capability) with the amount and the content of the eligible costs as well as with the amount of the demanded aid and of the already granted public aid.

3) Other conditions

The applicants must contribute to achieving one or several significant technological breakthroughs with the objective of designing or improving products, services or processes, and must set-up a capability to make these products or processes. These ones must have a sufficient potential impact on their activity in the European Union and in particular in France, in terms of employment, competitiveness, value creation and growth at short or medium-term.

The tasks assigned to applicants must be well specified and should consist in « experimental development » or « industrial research » as defined in the R&D&I framework. In accordance with the R&D&I framework, the aid to each company must have an incentive effect on its R&D&I activities.

Eligibility of the costs and funding

1) Eligibility of costs

The French eligible costs will be based on the amount obtained using the financial data sheets, which will have to be filled by each French partner.

2) Funding rates

The reference rates for the French public funding are the following :

Type of partner	Calls RIA (Research and Innovation Actions) & IA (Innovation Actions)
Industry	15%
SME	20%
RTO	35%
Univ, non profit	60%

These rates will be applied nominally for projects funded under the Nano2022 framework. For projects whose national public funding originate from other programs or national/regional calls, these rates might be adapted according to the conditions of these financing mechanisms, who could also take into account the existence of a European co-funding.

Additional Information to be provided at submission and other conditions

Only for the applicants eligible to the plan Nano2022 and in parallel to the documents sent to the KDT JU, the French leader of each submitted project will have to send to the French public authorities a file called “part C” , **for each French partner in the project.**

The application submitted must **contain all elements which will allow French authorities to assess and justify the eligibility of the aid** asked by the applicants. In particular, the application must include, besides the documents required for application to the Joint Undertaking call and all documents listed on the reference website, **information specifying for each partner of the project the potential economic impact in the European Union in terms of innovation, employment, competitiveness, value creation and economic activity, as well as the positioning of the applicants on the targeted markets and the timeframe of this impact.**

Exigences légales pour l'éligibilité d'un partenaire ou d'un projet.

The items published in French in the following text are the official national eligibility criteria for funding. The items published in English are a translation. The text in French takes precedence over the text in English.

La contribution indicative inscrite dans ce programme de travail n'est pas un budget à allouer aux candidats français à des appels à projets KDT, mais une estimation basée sur

les aides obtenues par les candidats français à des appels à projet ECSEL à travers les mécanismes de financements décrits ci-dessous.

Les porteurs français d'une proposition de projet pour KDT 2021 doivent, pour être éligibles, avoir été retenus pour ce projet pour un financement national :

- au titre d'un programme national existant tel que Nano2022 ou son successeur dans le cadre du prochain IPCEI pour l'électronique, si sa mise en œuvre le permet, s'ils en sont bénéficiaires et dans les conditions prévues par ces programmes. Dans le cas de Nano2022, il est rappelé que seuls les chefs de file identifiés dans le programme sont habilités à déposer des dossiers au titre de ce programme ;
- au titre d'un appel à projets national ou régional, en respectant les conditions spécifiques à cet appel.

Les partenaires doivent impérativement contacter le correspondant national avant le dépôt de la « Full Project Proposal ». L'objectif de ce contact est d'orienter le demandeur vers le guichet le plus adapté, et pour les chefs de file Nano2022 de déterminer la conformité du projet avec les axes stratégiques du programme.

Les critères suivants ne s'appliquent qu'aux porteurs de projets retenus dans le cadre au plan Nano2022 et ne préjugent pas de l'application des règles légales et réglementaires en vigueur concernant l'attribution de subventions par l'État français. Pour les partenaires ayant déposé une demande de financement au titre d'un appel à projets national ou régional, ils doivent se référer au cahier des charges de l'appel à projets en question.

1) Type ou nature des participants

- Entreprises privées ou publiques de toutes tailles
- Universités
- Instituts de recherche

2) Conditions légales, administratives et financières

Les travaux ne doivent pas déjà avoir fait l'objet d'un soutien public (hors mesures fiscales génériques) ni être en redondance avec des travaux similaires financés par les autorités françaises.

La situation financière de chaque partenaire privé doit être validée (structure financière, flux de trésorerie, compte d'exploitation) et jugée compatible (volume d'activité, moyens humains, moyens financiers) avec le montant et le contenu de l'assiette des dépenses ainsi qu'avec le montant de l'aide sollicitée et des aides publiques déjà accordées par ailleurs.

3) Autres conditions

Les porteurs de projets doivent contribuer à lever un ou plusieurs verrous technologiques significatifs en vue de concevoir ou d'améliorer des produits, services ou procédés, ainsi

que mettre en place les moyens de réalisation de ces produits et procédés. Ceux-ci doivent présenter pour eux des perspectives suffisantes de retombées sur le territoire de l'Union européenne, et notamment en France, en termes d'emplois, de compétitivité, de création de valeur et d'activité économique à court ou moyen terme.

Les travaux réalisés par les porteurs doivent être bien spécifiés et pouvoir être considérés comme « développement expérimental » ou « recherche industrielle » au sens de l'encadrement des aides à la RDI. Conformément à l'encadrement des aides à la RDI, l'aide à chaque entreprise doit avoir un effet d'incitation sur ses activités de RDI.

Eligibility of the costs and funding

1) Coûts éligibles

Les coûts éligibles français seront basés sur le montant obtenu en remplissant les annexes financières des autorités françaises pour chaque partenaire français.

2) Taux de référence pour l'aide

Les taux de référence pour l'aide nationale française sont les suivants :

Type of partner	Calls RIA (Research and Innovation Actions) & IA (Innovation Actions)
Industry	15%
SME	20%
RTO	35%
Univ, non profit	60%

Ces taux seront appliqués en l'état pour les projets financés au titre du programme Nano2022. Pour les projets dont le financement national serait obtenu au titre d'autres programmes ou guichets nationaux / régionaux, les taux sont susceptibles de varier selon les conditions propres aux dispositifs dont les financements seront issus, et à la prise en compte par ces dispositifs de l'existence d'un cofinancement européen.

Additional Information to be provided at submission and other conditions

Seulement pour les porteurs éligibles au plan Nano2022 et en complément du dossier de soumission du projet, transmis à l'entreprise commune, le responsable français de chaque projet doit adresser aux autorités françaises un dossier appelé « part C » pour chaque partenaire du projet.

Le dossier soumis doit **présenter les éléments permettant aux autorités françaises**

d'apprécier et de justifier l'admissibilité de l'aide demandée par le porteur et ses partenaires. En particulier, le dossier doit comprendre, outre les documents requis au titre de l'appel à projets de l'entreprise commune et les documents spécifiés sur le site internet de référence, **une fiche précisant, pour chaque partenaire du projet, les perspectives d'innovation, de retombées économiques sur le territoire de l'union européenne, en termes d'emploi, de compétitivité, de création de valeur et d'activité économique, ainsi que le positionnement du porteur sur les marchés visés et l'horizon temporel de ces retombées.**

Germany

National contact people for the KDT JU programme

Country	Name	First name	Tel	E-mail
Germany	General information on funding under Horizon Europe			
	Schmidt	Uwe-Michael	+49 228 3821-2233	uwe-michael.schmidt@dlr.de

Germany	Specific information on national funding applications for KDT			
	Kaltschew	Julia	+49 30 310078 151	Julia.Kaltschew@vdivde-it.de
	Rittner	Johannes	+49 30 310078 230	Johannes.Rittner@vdivde-it.de

NOTE: The national call for proposals for German federal funding for KDT participants is available via the URL given below. It contains additional information on contact points for *Länder* funding.

Applicable documents

- The German Federal Government's Framework programme for Research and Innovation 2021-2024 „Mikroelektronik. Vertrauenswürdig und nachhaltig. Für Deutschland und Europa.“, English translation: “Microelectronics. Trustworthy and sustainable. For Germany und Europe.”; available from www.elektronikforschung.de/rahmenprogramm
- Strategic framework „Die Hightech-Strategie 2025 – Köpfe.Kompetenzen.Innovationen“: <https://www.hightech-strategie.de/hightech/de/hightech-strategie-2025/hightech-strategie-2025>
English translation: “The High-Tech Strategy 2025”: <https://www.bmbf.de/bmbf/en/research/hightech-and-innovation/high-tech-strategy-2025/high-tech-strategy-2025.html>
- Federal funding will be awarded by the Bundesministerium für Bildung und Forschung (BMBF) according to a national KDT call accessible via <http://www.elektronikforschung.de/foerderung/bekanntmachungen/kdt>
- Certain *Länder* may provide regional co-funding for project work carried out there. Information will be linked from the above-mentioned BMBF site.

Criteria and rules for the eligibility of a partner or a project

1) Type or nature of participants

- Commercial companies in Germany
- State and non-state institutions of higher education and non-university research

establishments in projects with commercial companies in Germany

2) Legal, administrative and financial conditions

A contribution of German partners within the Work Plan 2021 is nationally eligible for funding by the BMBF if the contribution of the national partners focuses on research in electronics and smart systems as specified in the national KDT call (see above).

Partners from certain *Länder* will typically receive combined funding from the BMBF and the respective *Land* based on administrative agreements between these two parties.

- It is required that project proposals contribute significantly to “Die Hightech-Strategie 2025 - Köpfe.Kompetenzen.Innovationen”. They should address at least one of the strategic research focuses and/or application focal points given in the above-mentioned framework programme.
- The work planned by the partners must neither have already benefited from public funding nor be redundant with similar projects that are already being funded or that are under consideration in another programme.
- R&D&I projects shall relate to societally relevant questions. An essential ambition of funding is to strengthen the position of project partners and companies located in Germany which aim to exploit research results in Germany and Europe, as well as to accelerate technology transfer from the pre-competitive area into practical applications. Projects should illustrate the added value of R&D&I results on the basis of an appropriate application, e.g. a demonstrator.
- Funding will be allocated to R&D&I projects which promise a lasting benefit for Germany and Europe in terms of safeguarding and creating employment, maintaining competitiveness and increasing added value. If the funding request for BMBF exceeds the available funding, projects with a greater national and European added value and contributions to the strategic objectives of the above-mentioned national programmes are a greater priority for BMBF funding, potentially leading to different national funding priorities than the ranking for EU funding.
- Reimbursement rates requested in national grant applications should correspond to the TRL of the planned work and the type of applicant. Each national grant application will be assessed individually to determine the maximum total reimbursement rate as well as the nationally eligible costs/expenditures.
- To be eligible for national funding, the overall effort of any project with participants from Germany should be at least 50 person years. Additionally, German participation in this project should be at least 10% of the overall effort. Moreover, each German partner should contribute substantially to the effort of the German consortium.
- The Project Outline (PO) and Full Project Proposal (FPP) submitted to the KDT JU shall include a fully completed “National Grant” table. The “National Grant” table shall include the budget (including national funding request) established according to the rules for cost eligibility and amounts applicable in Germany for purely national funding. Where

a single legal entity (“organisation” in Part A of the KDT application form) requests funding for activities to be carried out at one or several organisational units (“departments”) that have a high degree of autonomy and/or are located in a different *Land* from the organisation, the budget for each such department shall be listed separately in the “National Grant” table. Please refer to

<https://www.elektronikforschung.de/foerderung/bekanntmachungen/kdt> where a template for the “National Grant” table is available. **The eligibility of German project partners cannot be evaluated without the “National Grant” table.**

- National grant applications shall not be handed in before they are requested by the national funding authority. In case the FPP is selected to be funded nationally, the national funding authority will contact each partner individually in order to request a national grant application (for details please see the national call that is available via <https://www.elektronikforschung.de/foerderung/bekanntmachungen/kdt>).

3) Consortium configuration

- As KDT is an industry-driven programme each consortium has to reflect an appropriate balance between industrial companies, RTOs and academia: the ratio of efforts (in person months) between companies and research institutions from Germany in any given project should be 2:1 or higher.
- Germany aims at a high participation of SMEs and supports the Horizon Europe goal that a minimum of 20 % of the total public funding should be awarded to SMEs.

4) Other conditions

TRL 2 – 4: application-oriented projects (RIA)

Funding may be awarded for high-risk pre-competitive industry-driven research and development projects of civil nature and civil use which focus on cross-border technologies in an application-oriented approach, meet a sufficiently high level of innovation and could not be accomplished without public funding.

TRL 5 – 8: production-related projects (IA)

Funding may be awarded for high-risk pre-competitive industry-driven research and development projects of civil nature and civil use related to production which focus on experimental development, meet a sufficiently high level of innovation and could not be accomplished without public funding.

The following projects are not eligible for BMBF funding:

- Projects in entertainment and gaming
- Projects that do not have an exclusive focus on civil applications and civil exploitation

- Projects of pure basic research

Eligibility of the costs and funding

1) Eligibility of costs

- The eligibility of costs is regulated in the BMBF's standard terms and conditions for grants on expenditure or cost basis and the administrative regulations under sections 23 and 44 of the Federal Budget Code (BHO). Rules for *Länder* that might provide funding are subject to negotiation between BMBF and the respective *Land*.

2) Funding and funding rates

- Financial BMBF support is awarded in the form of grants to participants through project funding as non-repayable grants.
- Project grants will be awarded in accordance with the BMBF's standard terms and conditions for grants on expenditure or cost basis and the administrative regulations under sections 23 and 44 of the Federal Budget Code (BHO).
- The BMBF's "General Conditions for the Allocation of Benefits for Research and Development Projects to Commercial Companies on a Costs Basis 2017" (NKBF 2017) and the „General Conditions for the Allocation of Benefits on an Expenditure Basis“ (NABF) respectively form part of any award of grants. Rules for *Länder* that might provide funding are subject to negotiation between BMBF and the respective *Land*.
- Universities and other higher education institutions may request a "Projektpauschale" which will be granted on the national funding part managed by the BMBF.
- The national funding aims at mirroring the funding which a participant actually receives from the Joint Undertaking in absolute amounts (EUR), matching up to 1:1. Furthermore, the total public funding (EU + BMBF + any other public funding) will not exceed the level that usually applies for purely national funding, in line with EU state aid rules, national funding policies, budgetary considerations, and the project structure. The national funding may therefore be below a 1:1 ratio per partner.

Additional Information to be provided at submission and other conditions

- Applicants from Germany need to use the electronic application system "easy-Online" for formal national applications upon request by the national funding authority. In addition, they must submit each grant application by mail including a legally binding signature and a short description for all cost positions as well as an exploitation plan of the planned project in German language.
- Guidelines, information for applicants and the terms and conditions for the award of grants are available at "Formularschrank BMBF":
https://foerderportal.bund.de/easy/easy_index.php?auswahl=easy_formulare&formularsc

[hrank=bmbf](#)

Partners applying for funding from *Länder* need to submit the appropriate form in parallel with the BMBF grant application (available via

<https://www.elektronikforschung.de/foerderung/bekanntmachungen/kdt>).

- Applicants shall take care to ensure a consistent presentation of the project costs in the national and the European grant application, taking into account the respective criteria for the eligibility of costs.
- If additional information is requested, it will be specified in the national funding authority's request to submit a formal application.

There is no legal entitlement to the award of a grant. BMBF will take a decision after due assessment of the circumstances and within the framework of the budget funds available.

Greece

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
Greece	GONGOLIDIS	Vasileios	+302131300072	bgogol@gsrt.gr
Greece	KARAGKOUNI	Fotini	+302131300094	f.karagkouni@gsrt.gr

National Funding Agency for Greece: General Secretariat for Research and Innovation (GSRI), Ministry for Development and Investments (www.gsrt.gr)

The following conditions are provisional and without prejudice to the application of legal rules (legally binding documents), currently under preparation, concerning the terms and procedures for the management of the action at national level.

A. Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

GSRI potentially supports all private and public legal entities legally operating in Greece (not natural persons) namely:

- Research and knowledge-dissemination organizations (e.g. Higher-education Institutions or Research Centres/Institutes)
- Undertakings (a private and/or public sector unit, regardless of its legal status or size, engaged in economic activity)
- Other entities that will be considered as Research and knowledge-dissemination organizations, if respective requirements are met, or undertakings

Besides natural persons the following categories of undertakings are also not eligible:

- An “undertaking in difficulty” (according to Reg. EU 651/2014, art.2).
- An undertaking which is subject to an outstanding recovery order following a previous Commission decision declaring an aid illegal and incompatible with the internal market.

2) Legal, administrative and financial conditions

Eligible activities

- All funded activities should contribute to the aims and objectives of the National Recovery and Resilience Plan - Greece 2.0 (<https://greece20.gov.gr/to-plires-sxedio/>). It is mandatory; otherwise the proposal will be rejected.
- In case of participants falling under category (b) the main part of the project should fall within the categories of industrial research or experimental development or feasibility studies (according to the provisions of art 25 of Reg. EU 651/2014). For SMEs funding for innovation activities (art. 28 of Reg. EU 651/2014) may also be provided.

3) Consortium configuration: no restrictions

4) Other conditions

-It is mandatory for Greek applicants to submit on-line, in Greek, a short proposal description, regarding the work undertaken by Greek partners and the documents that are necessary for performing the eligibility check within 20 working days after the first and the second stage (if applicable) submission deadline.

All applications should be accompanied by all elements and relevant documents that allow the Greek authorities to assess the eligibility criteria and in particular those with regard to article 2 of GBER Regulation, 651/2014 for undertakings in difficulty and the size of undertakings/enterprises.

In addition all Greek applicants should provide additional information on the contribution of the project to the national RRF plan objectives and the impact to the Greek economy/competitiveness and society, skills development and employment in particular for young and/or highly qualified people. Furthermore Companies (business partner in the project) must provide specific information on the possible industrial and commercial impact of the project to the country and in the Europe and justify that they have the necessary means to exploit the project results.

More detailed information on proposal Submission and national rules for the signing of the grant agreement and monitoring of project implementation are currently under preparation and will be published at a later stage at the GSRI website.

B. Eligibility of the costs and funding

1) Double funding

The project submitted for funding must neither have already benefited from public funding nor be redundant or overlap with projects or part of projects already funded.

2) Co-funding source

National Contribution from RRF / National Recovery and Resilience Plan - Greece 2.0

3) Funding rates

For Research and Knowledge-dissemination organizations, or other entities treated as such, the funding rate may reach a maximum of 100% of the eligible costs for non-economic activities, less the contribution of the JU.

Maximum aid intensity for undertakings is calculated according to paragraphs 5,6,7 of article 25 and art. 28 of Reg. EU 651/2014.

Table 1. Aid intensity

Type of enterprise/ Type of Activity	<i>Aid intensity -TBD</i>		
	<i>Large Enterprises</i>	<i>Medium Enterprises</i>	<i>Small and too small Enterprises</i>
R&D Activities (art.25 Reg. EU 651/2014)			
Industrial/applied research	up to 50% - JU%	up to 60% - JU%	up to 70% - JU%
Industrial/applied research given that conditions i) or ii) are met	up to 65% - JU%	up to 75% - JU%	up to 80% - JU%
Experimental development	up to 25% - JU%	up to 35% - JU%	up to 45% - JU%
Experimental development given that conditions i) or ii) are met	up to 40% - JU%	up to 50% - JU%	up to 60% - JU%
Feasibility Studies	up to 50% - JU%	up to 60% - JU%	up to 70% - JU%
Innovation Activities (art.28 of Reg. EU 651/2014)			
Activities defined in art. 28, REG. (EU) 651/2014	0%	50% - JU%	50% - JU%

Conditions for increasing the maximum aid intensity for research and development activities (Reg. (EU) No 651/2014):

The aid intensities for industrial research and experimental development may be increased by 15 percentage points and up to a maximum aid intensity of 80% of the eligible costs if one of the following conditions is fulfilled:

(i) the project involves effective collaboration:

— between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or

— between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results;

(ii) the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

Cumulation: In case of undertakings aid with identifiable eligible costs may be cumulated with:

(a) any other State aid, as long as those measures concern different identifiable eligible costs,

(b) any other State aid, in relation to the same eligible costs, partly or fully overlapping, only if such cumulation does not result in exceeding the highest aid intensity or aid amount as defined above.

4) VAT eligibility

Only non-reclaimable VAT is eligible

Hungary

National contact person

Country	Last Name	First name	Telephone	E-mail
Hungary	Divinyi	Agnes	+36 1 896-3754	agnes.divinyi@nkfi.gov.hu

National Funding Authority: National Research, Development and Innovation Office (1077 Budapest, Kéthy Anna tér 1.). website: www.nkfi.gov.hu

Legal requirements for the eligibility of a partner or a project

Type of participants

The following types of organisations are eligible for funding:

- Business enterprises with legal entity;
- Non-profit organisations with legal entity;
- Public bodies or their institutes with legal entity

Legal, administrative and financial conditions

In order to conclude the national grant agreement the Hungarian applicants have to comply with the regulations of Act CXCV of 2011 on Public Finance, Government Decree No. 368/2011 on the implementation of Act on Public Finance, Government Decree No. 380/2014 on the rules of operation and use of National Research, Development and Innovation Fund.

Applicants are expected to contribute their own financial resources to the project costs. This amount depends on the project activities and the applicant's organization form. The own financial resources shall be determined by prevailing law.

Consortium configuration

There is no special national requirement.

Eligibility of costs and funding

Eligibility of costs

Personnel costs, travel costs and related subsistence allowances, subcontracting, cost of other goods and services (e.g. consumables and supplies), equipment costs (depreciation) and immaterial expenses (depreciation), indirect costs.

Ineligible costs in particular: deductible VAT, currency exchange losses, penalties and fines, debt and debt service charges, interest owed, excessive or reckless expenditure, costs incurred during suspension of the implementation of the action etc.

Funding rates

Funding rates are based on Article 25 (aid for research and development projects) of Commission Regulation (EU) No 651/2014 of 17 June 2014 on declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

Type of Organisation	Percentage of maximum subsidy (EU contribution and national funding together) to the beneficiaries (calculated on the basis of the national eligible costs)			
	Large Enterprises	Medium enterprises	Small Enterprises	Public Research Institutes, Universities, non-profit organisations
Fundamental/Basic research	100%	100%	100%	100%
Industrial/Applied Research	up to 65%	up to 75%	up to 80%	100%
Experimental development	up to 40%	up to 50%	up to 60%	100%

The aid intensity in the case of industrial research is 50% and in case of experimental development is 25%, however these rates may be increased by 20 percentage points for small enterprises and by 10 percentage points for medium-sized enterprises.

Funding intensity per member may be increased by a further 15 percentage points up to a maximum of 80% (this means the whole public funding, i.e. Hungarian national funding + EC funding) if the project is implemented through effective collaboration between undertakings among which at least one is an SME, or is carried out in at least two Member States, or in a Member State and in a Contracting Party of the EEA Agreement, and no single undertaking bears more than 70 % of the eligible costs, or between an undertaking and one or more research and knowledge-dissemination organisations, where the latter bear at least 10 % of the eligible costs and have the right to publish their own research results or the results of the project are widely disseminated through conferences, publication, open access repositories, or free or open source software.

Additional Information to be provided at submission and other conditions

Please note that Hungarian project partners shall submit a proposal to the National Funding Authority for national financing if the project has been selected and approved for funding through the international evaluation and selection process.

Iceland

No information available.

Ireland

National contact person for KDT- JU programme

Country	Name	First name	Tel	E-mail
Ireland	O'Reilly	Stephen	+353 21 4800217	stephen.oreilly@enterprise-ireland.com

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

Companies that are eligible to receive R&D funding from one of the following agencies will be considered for funding; Enterprise Ireland, IDA Ireland or Údarás na Gaeltachta.

Irish third level research performing organisations will also be considered for national funding.

It is important to note that a successful application to KDT does not guarantee funding by a national agency. Participants from Ireland are strongly advised to discuss applications with their national agency contact prior to submission to KDT.

2) Legal, administrative and financial conditions

The relevant national funding agency should be satisfied that a company seeking national funding has the potential to derive a benefit, proportionate to the national funding being sought, through the exploitation of the results of the proposed project or otherwise. Companies applying for National R&D support will need to be EBITDA positive for 9 consecutive months prior to any approval. Companies that are classified as 'High Potential Start-Up' (HPSU) are not normally eligible.

All participants are advised to contact the relevant national funding agency before committing to participate in any proposal.

Higher Education Institutions will be eligible only if there is also at least one Irish based company that meets the national eligibility criteria in the consortium, and the national funding agencies are satisfied that there will be a benefit from the participation of the Higher Education Institution, proportionate to the funding being sought, for an Irish based company or companies that the agencies are satisfied to support.

3) Consortium configuration

Projects should be introduced by companies and primarily executed to the benefit of these entities.

Eligibility of the costs and funding

1) Eligibility of costs

All costs should be discussed in advance with the relevant funding agency contact

2) Funding rates

All Grant funding to companies is provided on a scale, depending on company size and can reach a max of 50% of eligible expenditure for Enterprise Ireland and Údarás na Gaeltachta clients. Funding available to IDA Ireland clients can vary and exact levels should be confirmed with the company contact.

Funding to 3rd level institutions is provided as a grant of 100% eligible expenditure less JU contribution up to the value of €250,000 (excluding overhead)

Funds for companies are claimed on a retrospective basis.

Additional Information to be provided at submission and other conditions

Only for the Full Project Proposal (not for the Project Outline):

Please note that each Irish participant must create a PDF file indicating how they meet the national eligibility criteria for funding as indicated in the Irish section of the Eligibility Criteria document published in the Call. You must upload this in the KDT JU Proposal Submission system as Part C of the **Full Project Proposal** (one file for each participant).

Note that Irish companies must clearly state in the proposal the following points:

1. From which of the three Irish agencies (Enterprise Ireland, IDA Ireland or Udaras na Gaeltachta) it is eligible to receive national R&D funding
2. Explain how it has the potential to derive a benefit, proportionate to the national funding being sought, through the exploitation of the results of the proposed project or otherwise.

Israel

Israel Innovation Authority (InnovationAuth)

Malha Technology Park,
Derech Agudat Sport Hapoel 2, Jerusalem, 9695102, Israel

National contact person for KDT JU programme – Calls 2021

Country	Name	First name	Tel.	E-mail
Israel	Seker	Danny	+972-3-5118121	Dan@iserd.org.il
Israel	Loutaty	Rachel	+972-3-5118152	Rachel.l@iserd.org.il

<http://www.iserd.org.il/ecsel>

Funding Criteria and Regulations

Eligibility criteria:

The application and eligibility criteria are subject to the “**Procedure for Financing Israeli Partners by the Israel Innovation Authority under ECSEL**” (the “Procedure”) which is available online at <https://www.innovationisrael.org.il/rules/4750>

If the evaluation procedure will be in *two stages*:

- Each applicant **needs to provide** the InnovationAuth a **preliminary proposal** (The participant part in the proposal) and a **KDT 2021 participant document** in a format that will be inform at the InnovationAuth site, by the deadline of stage 1 of this call.
- Only applicants that passed InnovationAuth eligibility committee and KDT stage 1 technical evaluation check will be permitted to pass to stage 2 of the call.
- Each applicant, that passed the second round of the Technical evaluation, will **need to provide** the InnovationAuth (by the stage 2 deadline that appears in the formal KDT call) a **copy of the full proposal** that was sent to KDT and will need to sign the final “**KDT 2021 participant document**” prior to the final approval by InnovationAuth.

If the evaluation procedure will be in *one stage*:

- Each applicant, will need to provide the InnovationAuth (by the deadline that appears in the formal KDT call) a **copy of the full proposal** that was sent to KDT and will need to sign the final “**KDT 2021 participant document**” prior to the final approval by InnovationAuth.
- Only applicants that passed InnovationAuth eligibility committee will be permitted to pass to the technical evaluation phase

1) Type or nature of participants

The following legal entities are eligible for funding:

- Industrial entities registered in Israel, with internal R&D capabilities, and that register their IP in Israel
- Israeli universities may take part as sub-contractor of an Israeli Industrial entity

2) Administrative and financial conditions

The KDT rules apply for the Israeli participants.

3) Consortium configuration

The KDT rules apply

4) Other conditions

Financial viability and business soundness is verified by means of an internal check - companies that are in danger of insolvency cannot be funded

Cost Eligibility and funding rates

1) Eligibility of the costs

The KDT rules apply

2) Maximum fund

The maximum overall contribution for Israeli participant (EC contribution and InnovationAuth contribution) will not exceed 50% of the Total approved cost for this participant.

Italy

Italy is participating to the present calls with funds coming from the following funding organizations:

- 1) Ministry of Universities and Research (MUR) which is committing 3.4 million euro as grants.
- 2) Ministry for Economic Development (MISE) which is committing 10 million euro as grants coming from National Recovery and Resilience Plan (PNRR).

The specific eligibility criteria and funding rules for each funding organization are described the following paragraphs.

Ministry for Universities and Research (MUR): National Funds National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
Italy (MUR)	Covello	Aldo	+39 069772 6465	aldo.covello@miur.it

Website: <http://www.ricercainternazionale.miur.it/era/european-partnership-2021-27/key-digital-technologies.aspx>

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

According to art. 60 of the Decree-Law n. 83/2012 and art. 5 of its implementing Ministerial decree 593/2016, the following entities are eligible, providing that they have stable organization in Italy: enterprises, universities, research institutions, research organizations in accordance with EU Reg. n. 651/2014 of the European Commission - June 17, 2014.

2) Legal, administrative and financial conditions

The participant must not be defaulting with regard to other funding received by the Ministry.

The participant must not have requested/got any other funding for the same project, apart from the KDT funding.

The participant must respect the Italian law "D.Lgs. n 159 del 6/09/2011 e successive modificazioni ed integrazioni".

The participant must not be subject to bankruptcy proceedings as of art. 5, comma 4, letter b) of DM 593/2016 or must not be a company in difficulty according to the definition under number 18) of article 2 "Definitions" of Regulation (EU) no. 651/2014.

The participant must be in compliance with the obligations laid down in the contributory and social security regulations (DURC).

The judicial and pending records of the legal representative of the participant are negative

For any private entity, the following financial criteria, calculated using the data reported in the last approved balance sheet, must be fulfilled

a) $CN > (CP - I)/2$

Where:

CN = net assets (Capitale netto)

CP = sum of the costs of all the projects for which public funding has been requested by the participant during the year

I = sum of the contributions received, approved or requested for the same projects

b) $OF/F < 8\%$

Where:

OF = financial charges (Oneri finanziari)

F = turnover (Fatturato)

3) Consortium configuration

The Italian consortium must include at least one Italian company, independently from the Ministry which is funding it. Other types of participants are allowed, provided that the financial participation of companies is higher than 50% of the total cost of the Italian consortium. The project shall be executed primarily to the benefit of the company/es

4) Other conditions

Companies must have the financial means to execute the project and a potential to use the results.

The participant should foresee, after the end of the project, the exploitation of the results of the project so to guarantee the return of the investment.

The participants shall demonstrate the subsistence of the incentivisation effect as of art. 6 of GBER.

Budget available and calls supported

MUR committed a budget of 3.4 million euro as grant. The maximum funding which can be requested to MUR by the Italian participants in a project is 600.000 euro, independently from the number of Italian partners

MUR supports the calls 2021-1-IA, 2021-1-IA Focus Topic 1, 2021-2-RIA and 2021-2-RIA Focus Topic 1.

Cost Eligibility and funding rates

1) Eligibility of costs

All costs incurred during the lifetime of a project under the following categories are eligible: personnel, equipment, subcontracting, consumables, and overheads. Overheads are calculated as a fixed percentage of the personnel cost. They include also coordination dissemination and travel expenses and in no cases can be larger than 50% of the personnel costs.

2) Funding rates

MUR will fund the Italian participants using the following funding rates:

	2021-2-RIA 2021-1-IA Focus Topic 1 2021-2-RIA Focus Topic 1	2021-1-IA
Type of partner	Grant	Grant
Large enterprise	To be communicated later	To be communicated later
Medium Enterprise	To be communicated later	To be communicated later
Small Enterprise	To be communicated later	To be communicated later
Universities, research centers and research organizations	To be communicated later	To be communicated later

On request of applicants a pre-payment may be done, equal to:

- 80% of the total contribution for public entities;
- 50% of the total contribution for private entities.

The remaining part of the contribute will be paid in instalments after each reporting period

Additional Information to be provided to MIUR and other conditions

All Italian participants must submit a national application through the dedicated web platform <https://banditransnazionali-miur.cineca.it>. These documents must be

submitted to MUR by the same deadline of the KDT call. Any participant who does not send its national application by this deadline, will be considered ineligible.

Ministry of Economic Development (MISE)
National contact person for ECSEL JU programme

Country	Name	First name	Tel	E-mail
Italy (MISE)	Rosario	Gargiulo	+39 0654444269	rosario.gargiulo@mise.gov.it

Website reference:

<https://www.sviluppoeconomico.gov.it/index.php/it/incentivi/impresa/fondo-per-la-crescita-sostenibile>

The partners of a KDT project proposal submitted for funding in the 2021 calls have to comply with all the criteria mentioned in the present document in order to be eligible for funding by the national authorities.

Legal requirements for the eligibility of a partner or a project

The Ministry of Economy and Finance Decree, August 06, 2021 allocated financial resources for the implementation of the interventions of National Recovery and Resilience Plan (PNRR); Mission M4-Component C2; Id I2.2- Partnership Horizon Europe

The projects will be financed by respecting what is established in the Regulation (EU) GBER n.651/2014 and Regulation (EU) 2021/1237 of the Commission amending Regulation (EU) No 651/2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty.

The projects financed by the Ministry of Economic Development (MISE) shall comply with the acts related to the specific measure (Ministerial Decree, July 01, 2020, Ministerial Decree to be signed specifically on KDT calls, and following DGTCSE-DGIAI Directorial Decrees).

The selection procedure for the awarding shall include the commitment that the climate contribution of the investment as per the methodology in Annex VI of the Regulation (EU) 2021/241 shall account for at least 60% of the total cost of the investment supported by the RRF as well as the commitment that the digital contribution of the investment as per the methodology in Annex VII of the Regulation (EU) 2021/241 shall account for at least 40% of the total cost of the investment supported by the RRF.

Applicants will be selected taking into account their capability to be environmentally sustainable in line with Regulation (EU) 2020/852 of the European Parliament and of the Council and Delegated Act C(2021) 2800, June 04, 2021 describing the general criteria so that every single economic activity does not cause significant harm (**DNSH-Do Not Significant Harm**) by contributing to the objectives of mitigation, adaptation and reduction of environmental impacts and risks.

The Ministry of Economic Development (MISE) will refer also to the Annex 2 of Commission Notice (2021/C 58/01) “Technical guidance on the application of do not significant harm under the Recovery and Resilience Facility Regulation” which includes the evidence of evaluation purposes of DNSH.

The Ministry of Economic Development (MISE) will exclude from funding any activity included in the Annex V, point B of the Regulation (EU) 2021/523 of the European Parliament and of the Council establishing the InvestEU programme and amending the Regulation (EU) 2015/1017.

At least 40% of the financial resources will go to beneficiaries from Southern Italy

1) Type or nature of participants

The following entities are eligible:

- Enterprises
- Universities, research centers and research organizations - only in collaboration with enterprises with which to set up a Consortium or a Network of Companies. —

2) Legal, administrative and financial conditions

The participant must not be defaulting with regard to other funding received by the Ministry.

The participant must not have requested/got any other funding for the same project, apart from the KDT funding. The participant must respect the Italian law "D.Lgs. n 159 del 6/09/2011" and subsequent changes and additions.

The participant must be in compliance with the obligations laid down in the contributory and social security regulations (DURC).

The judicial and pending records of the legal representative of the participant are negative

For any private entity, MISE, also through the Body managing the aid, will assess the financial and economic sustainability of the project, calculating some economic and financial indicators through the analysis of the data contained in the last two approved balance sheet.

3) Consortium configuration

The Italian consortium must include at least one Italian company. Other types of participants are allowed, provided that the financial participation of companies is higher than 50% of the total cost of the Italian consortium. The project shall be executed primarily to the benefit of the company/es. The Ministry will apply the Virtual Common Pot by financing national applicants

4) Other conditions

Companies must have the financial means to execute the project and a potential to use the results.

The participant should foresee, after the end of the project, the exploitation of the results of the project so to guarantee the return of the investment

Budget available and calls supported

MISE committed a budget of 10 million euro.

As guideline, MISE supports the calls with the following amounts:

2021-1-IA (4 million euro); 2021-1-IA Focus Topic (2 million euro); 2021-2-RIA (2,5 million euro) and 2021-2-RIA Focus Topic 1 (1,5 million euro)

Eligibility of the costs and funding

1) Eligibility of costs

All costs incurred during the lifetime of a project under the following categories are eligible: personnel, equipment, subcontracting, consumables, and overheads. Overheads are calculated as a fixed percentage 25% of eligible costs of the project, as established by art. 20 of the delegated regulation (EU) n 480/2014 and by art. 29 of the regulation (EU) n. 1290/2013. They include also communication, dissemination and travel expenses

2) Funding rates

MISE will fund the Italian participants using the following funding rates:

	2021-2-RIA 2021-1-IA Focus Topic 1 2021-2-RIA Focus Topic 1	2021-1-IA
Type of partner	Grant	Grant
Large enterprise	25%	20%
Medium Enterprise	35%	30%
Small Enterprise	35%	30%

Universities, research centers and research organizations	35%	35%
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Each project will be funded by respecting the threshold of Euro 800.000,00

Additional Information to be provided at submission and other conditions

All Italian participants must submit a national application through the dedicated web platform <https://fondocrescitasostenibile.mcc.it> . These documents must be submitted to MISE by the same deadline of the KDT call. Any participant who does not send its national application by this deadline, will be considered ineligible.

Latvia

National contact person for KDT JU program

Country	Name	First name	Tel	E-mail
LV	Sika	Lauma	xxx	Lauma.Sika@mfa.gov.lv

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

Following legal persons (as defined under the Latvian law) are eligible for funding, except natural persons:

- enterprises, companies and/or industry associations, when they form part of consortia with R&D institutions;
- R&D institutions - research institutes, universities, higher education establishments, their institutes and research centres etc.

2) Legal, administrative and financial conditions

The funding of RTD activities is provided pursuant in accordance with the Regulation of the Council of Ministers of the Republic of Latvia No 259 on the procedure for providing support for participation in international cooperation programs for research and technology (adopted on 26 May 2015). This includes amendments, which include a reference to the Regulation (EU) 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination, and repealing Regulations (EU) No 1290/2013 and (EU) No 1291/2013 (Text with EEA relevance) (OJ L 170, 12.5.2021), Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe and repealing Regulations (EC) No 219/2007, (EU) No 557/2014, (EU) No 558/2014, (EU) No 559/2014, (EU) No 560/2014, (EU) No 561/2014 and (EU) No 642/2014 (OJ L 427, 30.11.2021) and European Partnerships under Horizon Europe.

R&D institution (research institutes, universities, higher education establishments, research centres etc.) must be listed in the Registry of Research Institutions operated by the Ministry of Education and Science of the Republic of Latvia.

Private entities must be registered in the Registry of Enterprises of the Republic of Latvia and provide most of its R&D&I activities in the Republic of Latvia.

The principle of forbidding double funding will be applied when granting National funding.

3) Consortium configuration

Enterprises, companies and/or industry associations participate in the projects, when they form part of consortia with Latvian R&D institutions.

If there is no Latvian enterprise involved as a partner in the project, the industrial relevance of the involvement of a R&D institution must be justified by declaration from the Latvian Information and Communications Technology Association (LIKTA) or from the Latvian Electrical Engineering and Electronics Industry Association (LEtERA) confirming the relevance of the project outcomes to the national economy, which are included as a part C of the full project proposal.

If there is no research organisation involved as a partner in the project, Enterprises and industry associations must provide declaration on the possible industrial impact and justify that they have the necessary means to exploit the project results which is included as a part C of the full project proposal.

Eligibility of the costs and funding

1) Eligibility of costs

1. Direct costs:
 - 1.1. Personnel costs – R&D related personnel costs should reach 80% of person/months,
 - 1.2. Other direct costs such as consumables, equipment (only depreciation costs), materials and etc.,
 - 1.3. Subcontracts (up to 25% of total participant's direct costs),
 - 1.4. Travels costs (up to € 18,000 per participant per project),
 - 1.5. Project management costs,
2. Indirect costs (can reach a maximum of 25% of the total direct costs).

2) Funding rates*

Type of activity	Large Enterprises	Small and Medium Enterprises	Public Research Institutes and Universities
Research and Innovation action	up to 50%	up to 60% **	up to 100% ***
Innovation action	up to 35%	up to 50% **	up to 100% ***

* total public funding including National and EU contribution;

** may be increased by 20%, if it is approved by National Funding Authority prior the proposal submission to KDT Call;

*** the aid intensity for research and development activities carried out by Public Research Institutes and Universities might be at the level of 100% only if the organisation entirely complies with the requirements set by the Commission Regulation (EU) No 651/2014 of 17 June 2014.

KDT ED 2022.12

National funding for eligible Latvian partners is up to € 100 000 per partner, per year, per project.

Additional Information to be provided at submission and other conditions

The national funding committed for the KDT Call 2021 is EUR 600 000 primarily to the Research and Innovation Actions..

Lithuania

No information available.

Luxembourg

Country	Name	First Name	Tel	E-mail
Luxembourg	Crean	Gabriel	00352 247 74147	Gabriel.crean@eco.etat.lu

Funding authority websites:

The full version of the national eligibility criteria can be found at :

<https://guichet.public.lu/en/entreprises/financement-aides/aides-recherche-developpement/rdi/aides-rdi.html>

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

The participant must be a company established in Luxembourg, with a sustainable economic activity in Luxembourg, based upon a sound business model.

2) Legal, administrative and financial conditions

The participant can have no other public funding for the same activities apart from the ECSEL funding.

The funding for R&D activities is provided in accordance with:

- the Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty,
- the modified Law of 17 May 2017 relating to the promotion of Research, Development and Innovation activities.

Luxembourg partners are requested to contact Luxinnovation before the deadline of the project outline submission and before the deadline of the Full Project Proposal submission respectively.

Luxinnovation will check the financial viability of the participating enterprises. It is not possible to provide funding to undertakings in difficulty. Luxembourg enterprises have to provide the following documents:

- Annual statement of accounts (balance sheet, profit and loss account) from the past 2 financial years
- Organisational chart of the group's structure (if applicable), specifying existing links, the percentage of participating interests and the company name, address, distribution of the share capital, workforce, turnover and total balance sheet (data for the last accounting year ended) for each undertaking. The company size is to be determined according to the SME definition as specified by EU competition law.

3) Other conditions:

- Participants need to prove adequate (financial) means to execute the project and a potential to use the results.
- Participant should develop all or some of its R&D activities within the territory of Grand Duché de Luxembourg
- The project should yield socio-economic effects, which can be quantified by activities or investments by the Luxembourg participants after the completion of the project.

Eligibility of the costs and funding

1. Eligibility of costs

All costs directly related to the R&D projects are eligible:

- payroll expenses: researchers, technicians and other support staff employed for the project or programme;
- expenses for instruments and equipment, if and for as long as they are being used for the project or programme. If such instruments and equipment are not used for their full life within the framework of the project or programme, only the depreciation costs corresponding to the duration of the project or programme, calculated in accordance with the generally accepted accounting principles, shall be deemed admissible, proratised of their use on the project.
- expenses for contract research or research services, the purchase of knowledge and patents or licences from external sources under conditions of full competition as well as costs of consultancy and equivalent services used exclusively for the project or programme;
- additional overheads and other operating expenses (in particular, cost of materials, office supplies and similar products) incurred directly as a result of the project or programme.

2. Funding rates

	Percentage of the national subsidy to the beneficiaries ²³		
	Large enterprises	Medium enterprises	Small Enterprises
Industrial Research (Research and Innovation action)	Up to : 50+15 (max 65 %)	Up to : 50+10+15 (max 75 %)	Up to : 50+20+15 (max 80 %)
Experimental Development (Innovation action)	Up to : 25+15 (max 40 %)	Up to : 25+10+15 (max 50 %)	Up to : 25+20+15 (max 60 %)

In case the EU funding rates and/or conditions are modified the national funding rates may be amended.

Additional information to be provided at submission and other conditions

Every participant in Luxembourg should submit a separate funding application to the ministry of the Economy within 14 days of KDT call closure date. The application is to be submitted using the **online assistant available on MyGuichet.lu**:

<https://guichet.public.lu/en/entreprises/financement-aides/aides-recherche-developpement/rdi/aides-rdi.html>

Malta

No information available.

²³ These percentages are maxima and given under the constraints that the project proposal fulfils the KDT eligibility criteria and that no participant in the KDT project holds more than 70% of the total (international) KDT project budget.

Netherlands

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
Netherlands	van der Bijl	Bob	+31 6 21839477	robert-jaap.vanderbijl@rvo.nl

Background documents and other information can be downloaded from the website of Netherlands Enterprise Agency: www.rvo.nl/subsidies-regelingen/jti-kdt. The Dutch text on this web-site takes precedence over the English text below.

Legal requirements for the eligibility of a partner or a project

1) Admission conditions

The Netherlands will support the Dutch partners in projects selected by the KDT Joint Undertaking when:

- the project concerns industrial research, experimental development or a combination of these;
- in the project one or more Dutch partners are involved which include minimal one industrial partner. In the case of only one Dutch partner it has to be an SME;
- the industrial partners of the Dutch consortium provide the major contribution to the Dutch part of the project in such a way that the major part of the public funding (KDT + NL) involved goes to the industrial partners of the Dutch consortium;
- the objectives of the Dutch part of the project fit within the Innovation Contract High Tech Systems and Materials (HTSM) and its underlying Roadmaps (<https://www.hollandhightech.nl/technologies>);
- the project complies with the “Algemene wet bestuursrecht” and the “Kaderwet EZK-en LNV-subsidies”.

Dutch partners in a proposal must include in the Full Project Proposal (FPP) sent to the Joint Undertaking the following information:

- Authorisation form;

Explanation of the contribution to the objectives of the Innovation Contract High Tech Systems and Materials (HTSM) and its underlying Roadmaps (www.hollandhightech.nl/technologies)

- Model overview of the costs.

Note that in case that there are several Dutch partners in the proposal, the Dutch partner coordinating them (the so-called "Dutch coordinator") will be in charge of submitting the above information on their behalf. The information and forms will be submitted as Part C

of the FPP in a ZIP file through the KDT Proposal Submission system, as indicated in the Guide for Applicants in the section for The Netherlands. There will be only one ZIP file for all Dutch participants in a given proposal.

The required forms can be downloaded from the website of Netherlands Enterprise Agency: <https://www.rvo.nl/subsidies-regelingen/aanvragen-jti-kdt>

2) Rejection conditions

An application for support of the share of Dutch participants of a project is rejected when:

- the partner that submits the application on behalf of all Dutch partners (the "Dutch coordinator") is not an enterprise;
- it is not credible that the Dutch partners can finance their share in the project;
- it is credible that the project without subsidy would have been finished without substantial delays;
- there is insufficient trust that Dutch partners have the necessary capacities to fulfil the project as submitted;
- the project has insufficient positive effects on the Dutch economy;
- the Dutch part of the project contributes insufficiently to the objectives of the Innovation Contract High Tech Systems and Materials (HTSM) and its underlying Roadmaps (<https://www.hollandhightech.nl/technologies>).

Eligibility of the costs and funding

1) Eligibility of costs

- The **eligible costs for subsidy** are in compliance with the R&D&I State Aid Rules, the “Algemene wet bestuursrecht” and the “Kaderwet EZK- en LNV-subsidies”.
- The Dutch subsidy percentages are indicated below in the section Funding Rates.
- In case another Dutch administrative body has already granted a subsidy for the eligible costs of the Dutch part of an KDT project or part of such project, the contribution by the Ministry of Economic Affairs and Climate Policy will be granted so that the total amount of subsidy will not exceed the before-mentioned Dutch subsidy percentages.
- In case that a contribution has been already granted for the eligible costs for subsidy to the Dutch part of an KDT project or part of it on the basis of a subsidy scheme of the Ministry of Economic Affairs and Climate Policy, no additional subsidy will be granted by the Ministry of Economic Affairs and Climate Policy for the already subsidized part.
- Per individual Dutch partner the subsidy percentages will be applied according to the activities. The project eligible costs per partner will be defined and the corresponding percentages will be applied.
- Per KDT project in which a Dutch consortium takes part a total national maximum of € 5.000.000 funding for the Dutch consortium will be initially applied.
- The Dutch budget for the KDT Calls 2021 is in total € 25.000.000 (subject to

parliamentary approval). € 5.000.000 of this total amount of € 25.000.000 comes from the AiNed National Growth Fund Investment Programme for 2021 – 2027 (see AiNed programme | Nederlandse AI Coalitie (nlaic.com) . From the total budget of € 25 mln, € 5 mln can only be used for the support of the AI R&D activities of Dutch participants in KDT projects.

- RVO (Netherlands Enterprise Agency) will be in charge of the project administration of all projects of the KDT Calls.

2) Funding rates

Large Enterprises, Groups and Associations of Enterprises	Small and Medium Enterprises	Public Research Institutes and Universities
20%	30%	25%

Rates apply to the Calls 2021-1 IA General, Call 2021-2 RIA General, Call 2021-2 RIA Focus Topic 1, Call 2021-1-IA-Focus Topic 1.

In case the EU funding rates and/or conditions are modified the national funding rates may be amended.

Norway

National contact person for KDT JU programme

Country	Last Name	First name	Tel	E-mail
Norway	Waqar	Ahmed	(+47) 47297558	wah@rcn.no
Norway	Ivonne	Herrera	(+47) 90680634	ivh@rcn.no
Norway	Agnes	Aune	(+47) 90625938	aa@rcn.no

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants (project partners)

- Norwegian companies: Commercial enterprises registered in Norway (The Register of Business Enterprises).
- Research organisations, recognized as such by the Research Council of Norway²⁴: Universities, Higher education institutions (HEI), Public research institutes.

2) Legal, administrative and financial conditions

- General eligibility criteria and conditions for receiving project funding from the Research Council of Norway will apply (i.e., the beneficiary must be a registered legal entity, have credible capacity to execute the project activities, demonstrate financial viability, and provide transparency as to funding requested or received from other sources).
- Companies must be established with a considerable business activity in Norway within the scope of the KDT project.
- All project partners must possess relevant research & technology development capabilities.

3) Consortium configuration

- At least one Norwegian company must be involved as a partner in the project, and at least 50 % of the efforts (eligible costs) of Norwegian partners in the project must be from business partners. In case of equal score, national funding priority will be given to a project with business partners that are new to KDT.
- The industrial relevance of the participation of a research organisation must be justified by declarations from the Norwegian business partner(s) in the project or

²⁴ <https://www.forskningssradet.no/en/apply-for-funding/who-can-apply-for-funding/research-organisations/approved-research-organisations/>

from some other enterprise(s) that would be eligible according to the criteria 1) and 2) above.

4) Other conditions

- Companies (business partners in the project) must provide specific information on the possible industrial and commercial impact of the project, and justify that they have the necessary means to exploit the project results.
- Research organisations must specify national industrial impact in terms of exploitation opportunities for Norwegian businesses.

Eligibility of the costs and funding

1) Eligibility of costs

Horizon Europe rules and guidelines on eligible costs will apply.

2) Funding rates

The maximum funding rates for the national funding provided by the Research Council of Norway will be as listed in the table below

Action	Large enterprises	SMEs	Research organisations
Call 2021-1 IA	25 %	35 %	65 %
Call 2021-2 RIA	25 %	35 %	65 %
Call 2021-2-RIA-Focus Topic 1	25 %	35 %	65 %
Call 2021-2-RIA-Focus Topic 2	25 %	35 %	65 %
Call 2021-3-CSA	0 %	0 %	0 %

Additional Information to be provided at submission and other conditions

1. The total Norwegian funding budget for the above KDT Calls is 2,0 mill. €.
2. There is no pre-allocated distribution of the Norwegian funding budget between the Calls. Norwegian applicants should consider 0,9 mill. € as a maximum amount of national funding for one single project, and that more than one Norwegian partner should be involved to reach this level of national funding. In addition to the national funding EU co-funding can be received according to KDT JU co-funding rules.
3. National funding will be subject to conditions in current state aid rules (Commission Regulation (EU) No 651/2014). If other public funding, besides the EU funding, will be granted for the project, the listed maximum rates for national funding will be reduced if required to ensure that aid intensity limits in the state aid rules are respected.

Beneficiaries must submit declarations regarding company size and financial situation.

See more details at: <https://www.forskningsradet.no/en/apply-for-funding/funding-from-the-research-council/Conditions-for-awarding-state-aid/>

4. Information providing the justifications required according to items 3) Consortium Configuration and 4) Other Conditions in the above " Legal requirements for the eligibility of a partner or a project" criteria must be provided as a separate attachment (Part C) at submission.
5. Information necessary to confirm whether eligibility criteria mentioned in item 2) above are fulfilled shall be submitted to the Research Council of Norway on request, before a National Grant Agreement can be established.

Poland

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
Poland	Wajs	Andrzej	t: +48 22 39 07 499 m: +48 516 958 527	andrzej.wajs@ncbr.gov.pl

The national authority is : [NCBR.gov.pl](https://ncbr.gov.pl)

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

Following entities are eligible to apply:

- Research organizations;
- Micro, Small, Medium and Large Enterprises

Organization must be registered in Poland.

2) Legal, administrative and financial conditions

All proposals must be aligned with National regulations, inter alia:

- Act of 30 April 2010 on the National Centre for Research and Development (Journal of Laws item 1861, 2020);
- Act of 20 July 2018 on the Law of Higher Education and Science, (Journal of Laws item 478, 2021);
- Regulation of the Minister of Science and Higher Education of 17 September 2010 on the detailed mode of performance of tasks of the National Centre for Research and Development (Journal of Laws No 178 item 1200);
- Regulation of the Minister of Science and Higher Education of 19 August 2020 on granting state aid through the National Centre for Research and Development (Journal of Laws item 1456, 2020).

3) Consortium configuration

None

4) Other conditions

None

Eligibility of the costs and funding

1) Eligibility of costs

A detailed information (in Polish) will be available for applicants at

<https://www.gov.pl/web/ncbr/platforma-konkursowa#/ncbr?sort=announcementDate,desc¤tPage=0&limit=10>

when the call is published. Below are some key aspects:

1. Personnel costs (W) - researchers, technicians and other supporting staff to the extent employed on the research project;
2. Costs of subcontracting (E) - i.e. costs based on agreements with third parties to perform a portion of the project without a direct supervision of the project participant and without a

relationship of subordination the subcontracting can be obtained from consortium partner only in justified case, this need will be verified by a national experts panel; Costs of subcontracting cannot exceed 70% of all eligible costs of the project.

3. Other costs (Op):

Costs of instruments, equipment and intangible assets (such as patents, certificates etc.) to the extent and for the period used for the research project; if they are not used for their full life for the research project, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice, shall be considered eligible;

Purchase of land and real estate to the extent and for the period used for the research project; if such instruments and equipment are not used for their full life for the research project, only the depreciation costs corresponding to the life of the research project, as calculated on the basis of good accounting practice, shall be considered eligible; Other costs including costs of support services, materials, supplies and similar products incurred directly as a result of the research activity, travel costs (costs of delegations, costs of participation in conferences), costs of maintaining a separate bank account, costs of promoting the project.

4. Overheads (O) - incurred indirectly as a result of the research project; Overheads must be calculated according to the formula: $O = (W + Op) \times 25\%$ ²⁵

2) Funding rates

Funding quota of Polish participants can be up to 100% for research organisations. In the case of enterprises, funding quota will be decided on a case-by-case basis depending on the size of the company, type of research/development, risk associated with the research activities and commercial perspective of exploitation. Organization must be registered in Poland.

	Large Enterprises	Medium Enterprises	Micro/Small Enterprises	Research Organizations
Fundamental/Basic Research	0%	0%	0%	0%
Industrial/Applied Research	Up to 50+15 (max 65 %)	Up to 50+10+15 (max 75 %)	Up to 50+20+15 (max 80 %)	Up to 100 %
Experimental development	Up to 25+15 (max 40 %)	Up to 25+10+15 (max 50 %)	Up to 25+20+15 (max 60 %)	Up to 100 %

National phase of application procedure

After international evaluation has been completed and the ranking list established, Polish participants from consortia recommended for funding will be invited to submit the National Application Form (NAF). All eligible entities invited to submit the NAF are obliged to use the rate of exchange of the European Central Bank of the day of call opening (i.e. 16 December 2021).

²⁵ percentage 25% estimated by the Applicant himself (the same percentage for every task in the project)

The Director of the National Centre for Research and Development subsequently issues a funding decision and signs national grant agreements with Polish participants providing that they have signed KDT JU grant agreements first.

Portugal

National contact person for KDT JU programme

Country	Name	First name	Tel	E-mail
Portugal	Coelho	Filipa	00 351 213924450	filipa.coelho@fct.pt
	Isidro	Anabela	00 351 213911552	anabela.isidro@fct.pt

With the below exceptions all the National co-funding will be framed by the [Horizon Europe Regulation](#).

Legal requirements for the eligibility of a partner or a project

All proposals with national applicants must include at least one Portuguese company (large company or SME). **Consortia that only have non-entrepreneurial entities of the national research and innovation system (ENESII – “*entidades não-empresariais do sistema nacional de I&I*”) will not be considered eligible for Portuguese co-funding.**

Portuguese commitment to the KDT 2021 calls will be **2 000 000 €, from state budget**, regardless of the type of action – RIA (research and innovation actions) or IA (innovation actions).

The total national co-funding of each national beneficiary involved in each project cannot exceed 250 000€. National entities will be required to provide a declaration stating that there are no outstanding payments to the national fiscal and social security system.

Funding rates

Maximum co-funding rates for national applicants are described in the table below. In the case of eventual restrictions imposed by EU regulations on state aid or/and any changes to the co-funding rates of the JU for a particular type of action or specific call, FCT reserves the right to revise the national co-funding rates in accordance.

Funding rates KDT call 2021						
	ENESII		SMEs		Large companies	
	JU	FCT	JU	FCT	JU	FCT
IA*	35%	65%	30%	25%	20%	30%
RIA	35%	65%	35%	30%	25%	25%

* - Focus Topic 1 (IA) Development of open-source RISC-V building blocks, will be co-funded both by the JU and by FCT as a RIA, given the range of Technology Readiness Levels that it aims to cover.

Additional Information to be provided at submission and other conditions

National participants in selected proposals will have to sign a national grant agreement (“*Termo de Aceitação*”) with FCT to receive national co-funding. The national grant

agreement must be signed by the participants and returned within 30 days counting from the date of notification of the results of the selection of proposals of the respective call.

Romania

No information available.

Slovak Republic

National contact person for KDT JU programme

Country	Last Name	First name	Telephone	E-mail
Slovakia	Kontrík	Martin	+421 2 59374574	martin.kontrik@minedu.sk

Legal requirements for the eligibility of a partner or a project

Type or nature of participants

Large Enterprise, SME, University, Research institutes registered in the Slovak Republic are eligible.

Legal, administrative and financial conditions

The national co-funding of KDT JU projects is provided according to:

- The Act No 172/2005 Coll. On the Organization of State Research and Development Support and Supplementation of Certain Acts
- Community Framework for State Aid for Research and Development and Innovation (2006/C323/01)
- Eligible to ask for national co-funding is an R&D organization from every sector according to §7 of Act No 172/2005 Coll. And legal entity to §2 art. 2 of the Slovak Code of Commerce.

Consortium configuration

Slovak partners are allowed to participate in project alone or in cluster.

Eligibility of the costs and funding

The eligible cost are: all personal costs, material costs, services, travel expenses, equipment amortization costs, indirect costs related to project solution within a period of project duration.

Funding rates

Type of beneficiary	Max. total funding (EU Contribution + National) as % of the Eligible Cost*
Large Enterprise (for profit, non SME)	50% for Research & Innovation Action 40% for Innovation Action
SME (for profit SME)	70% for Research & Innovation Action 60% for Innovation Action
University & Research Organization (non for profit)	100%

* if not otherwise specified

Additional Information to be provided at submission and other conditions

The proposed projects should be within the scope of the national RIS3 initiative.

Slovenia

No information available.

Spain

Two funding organizations will grant Spanish applicants to the KDT 2021 calls:

1. The Ministry of Economic Affairs and Digital Transformation (MINAETD) will support enterprises and other private agents.
2. The Agencia Estatal de Investigación (AEI, State Research Agency) depending on the Ministry of Science and Innovation (MCIN) will support research centers, universities and non-profit private research entities.

Each Spanish participant in a KDT Consortium needs to request the national funding from the corresponding funding entity at a later stage, in case the project is approved.

It is strongly recommended that all the possible applicants inform national contact person at the beginning of the proposal preparation.

National contact persons for KDT JU Programme

Country	Name	Tel	E-mail
SPAIN	Juan Miguel Ibáñez de Aldecoa Quintana David de Francisco Marcos		id.tic@economia.gob.es
	Beatriz Gómez Miguel	+34916037238	beatriz.gomez@aei.gob.es
	Enrique Pelayo	+34 915815566	enrique.pelayo@cdti.es

Shared conditions between the MINAETD and AEI

It will be mandatory to fulfill all European current legal requirements for applying for public grants:

- Marco Comunitario sobre Ayudas Estatales de Investigación y Desarrollo e Innovación (DOUE 2014/C198/01).
- Joint Undertakings under Horizon Europe (Single Basic Act)
- Convocatorias de propuestas referentes al Programa KDT 2021.

Moreover, with respect to any aspect not covered by the KDT and European regulation, it will be mandatory to fulfill other Spanish current applicable legal requirements ruled in the following legal texts:

- Ley 38/2003, de 17 de noviembre, General de Subvenciones.
- Real Decreto 887/2006, de 21 de julio, por el que se aprueba el Reglamento de la Ley 38/2003, de 17 de noviembre, General de Subvenciones.
- Leyes anuales de Presupuestos Generales del Estado.
- Ley 47/2003, de 26 de noviembre, General Presupuestaria.

- Ley 39/2015, de 1 de octubre, del Procedimiento Administrativo Común de las Administraciones Públicas.
- Ley 40/2015, de 1 de octubre, de Régimen Jurídico del Sector Público.
- Ley 9/2017, de 30 de octubre, de Contratos del Sector Público.

The Spanish legal texts can be found on <http://www.boe.es>

Requirements of the Ministry of Economic Affairs and Digital Transformation (MINAETD)

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

The Ministry of Economic Affairs and Digital Transformation (MINAETD) is the national authority which funds in KDT calls from the following participants:

- Spanish enterprises (SME, LE, GE²⁶)
- Private Technology Centers (TC, RD 2093/2008 29th December)
- Private Universities

According to the Spanish Regulation, enterprises and Technology Centers (RD 2093/2008 29th December) should follow the rules and procedures for loans and grants.

2) Legal and administrative conditions

Every national participant should be established in Spain, satisfy the Art. 13 of Ley 38/2003, de 17 de noviembre, General de Subvenciones (LGS) and not be in bankruptcy or not have requested the declaration of bankruptcy.

For that reason, every national participant should sign a Statement of Compliance, as well as authorize the access and consultation of data related to tax obligations, Social Security payments, fiscal residence and Full Statement of National Insurance contributions of the workers imputed to the project and/or the verification of any other data provide during the granting and monitoring of the aid. This document will be available at the website of the Secretariat of State for Digitalization and Artificial Intelligence and should be sent along with the Part C.

In case the participant does not authorize the consultation, the participant must submit the corresponding documentation.

²⁶ Group of Enterprises

Spanish participants should be included in the Registry for R&D entities (RESA). Ministerial Order ITC/570/2006. Otherwise, they should submit the financial statements for the years 2019 and 2020:

- The participating entities must have presented in the Mercantile Registry or equivalent register the closed accounts for the years 2019 and 2020.
- They must also present, along with the rest of the documentation, a copy of the financial statements of 2020, signed by the administrators of the entity, audited if legally required, and with the financial statements of "Balance Sheet", "Profit and Loss Account" and "Explanatory Memory", at least, according to Art. 254 of Real Decreto Legislativo 1/2010, de 2 de julio, por el que se aprueba el texto refundido de la Ley de Sociedades de Capital.
- If the submitted accounts do not provide the minimum financial statements indicated in the previous paragraph, a request for assistance may be filed, the risk report of the Risk Information Center of the Bank of Spain (CIRBE) and / or the 303 VAT return model for the four quarters of 2018. Likewise, in the case of not being able to access the accounts presented to the Mercantile Registry, the applicant may be required to make a copy of these accounts.

For the PO phase, the following documentation must be submitted to the JU KDT:

- Part C
- Responsible declarations, as well as authorization for the consultation of data.
- Templates for the aforementioned documents will be available at the website of the Secretariat of State for Digitalization and Artificial Intelligence.

For the FPP phase, the following documentation must be submitted to the JU KDT:

- Part C.
- Responsible declarations, as well as authorization for the consultation of data.
- Templates for the aforementioned documents will be available at the website of the Secretariat of State for Digitalization and Artificial Intelligence.
- Financial Statements for the years 2019 and 2020.

After the signing of the Grant Agreement MINAETD will contact every beneficiary to assist in the completion of all the forms and documents requested by the Spanish Public Authorities, to sign the National Grant Agreement document.

Payment of the national contribution will be done in accordance with national rules in force.

The payment will be carried out after the establishment of the National Grant Agreement. This option will require collaterals up to 100% of the amount of national fund, according to a solvency assessment (see Additional information).

Collaterals must be in the form of guarantees provided by credit institutions or mutual guarantee societies.

Proposals could be rejected when:

- It is not considered credible by the Spanish Public Authorities that partners could adequately fund their share in the project.
- It is not credible by the Spanish Public Authorities that the project could be completed on time.
- Spanish partners do not provide enough proof of their technical or financial capacities needed to fulfil the project as submitted.
- The effect or positive impact on the local economy is considered insufficient by the relevant authorities.

Eligibility of the costs and funding

1) Consortium configuration

To be eligible, a project must account for a minimum Spanish participation:

- Minimum share of the Spanish consortium 5% in terms of eligible costs.

Participants should set up a national sub-consortium with the following rules:

- a) All members must prove knowledge and expertise in their relative project matters.
- b) At least Fifty (50)% of the Spanish participation (budget) must come from enterprises.
- c) The participating entities must have been legally established before 31/12/2019.
- d) There must be at least one SME in the Spanish consortium.
- e) Each participant will send its own form C and must comply with the stated conditions to be a beneficiary.
- f) Budget of each Spanish participant: minimum 200.000 € of eligible costs.

2) Solvency and Financial Conditions

- MINAETD will check if the participants are eligible making sure they are not in crisis as defined by EU regulation 651/2014.
- Each Spanish participant must be solvent and have the necessary financial capacity to carry out the project, and the Spanish Public Authorities will assess it positively. MINAETD will perform a financial analysis and will define for each participant a

solvency-rating factor. Depending on that factor, the level of the necessary collaterals shall be established (See table below).

- MINAETD could require collaterals up to 100% the amount of national funding.

3) Funding rates

Maximum percentage of costs covered by KDT grants

As a percentage of the eligible costs

FOR THE CALL KDT 2021

	Maximum percentage of costs covered by National Funding Authorities (%)		
	Industry, LE,	SME	Private RTO and Private Universities
RIA (EPS) Research and Innovation Action	25	35	35
IA (EPS) Innovation Action	20	30 small 20 medium	35

In any case total funding won't be higher than the maximum aid intensity determined by the Annex II table of the Communication from the Commission Framework for State aid for research and development and innovation (2014/C 198/01). Figures under the 'Industrial research' category will be applied for RIA calls and figures under the 'Experimental development' category will be applied for IA calls.

Amount of required collateral by MINAETD

Financial qualification	Collateral required
AAA	0%
AA	0%
A	15 %
BBB	45 %
BB	70 %
B	80 %
CC	100 %
CC	100 %
C	No funding
D	

Additional Information to be provided at submission and other conditions

The MINAETD will specifically encourage projects:

- Coordinated by a Spanish entity.
- Where there are SMEs working in the core of the project.
- Where there are entities that have never participated in previous ECSEL or KDT calls.

Requirements of the Agencia Estatal de Investigación (AEI)

Legal requirements for the eligibility of a partner or a project

1) Type or nature of participants

The AEI, (<http://www.aei.gob.es/>) is the national authority which funds non-profit public R&D organizations such as:

- Public Research Centres
- Public Universities
- Other non-profit R&D organizations in which R&D activities are implicitly defined as the main objective.

The AEI encourages Spanish research centres and universities to participate in close collaboration with the Spanish industrial partners carrying out relevant parts of the KDT projects.

2) Legal and administrative conditions

KDT JU call 2021 will be managed by the [*Subdivisión de Programas Científico-Técnicos Transversales, Fortalecimiento y Excelencia.*](#)

Applicants requesting national funds from AEI shall comply with the following regulations on grants:

- General Subsidies Law ([Ley 38/2003](#))
- Science Law ([Ley 14/2011](#))
- AEI Statutes ([Real Decreto 1067/2015](#))
- Basis Order and National PCI calls ([PCI2021](#))

The projects granted by the AEI must be aligned with the main objectives described in the [National Plan for Scientific and Technical Research and Innovation 2021-2023](#).

The projects granted under this call are encouraged to comply with the DNSH criteria (do not significant harm) and state it so in the proposal (see article 6.3 [RC PCI2021](#)).

The instrument for funding the Spanish groups will be the call Proyectos de Colaboración Internacional, (PCI), which is expected to be launched in 2022. As a reference, applicants are advised to read the call [PCI2021](#) .

The participation on this program means the acceptance and compliance with all the conditions stated on this document.

Any publication or dissemination activity resulting from the granted projects must acknowledge AEI funding even after the end of the project, according to [RC PCI2021](#))

3) Consortium configuration

Spanish non-profit research organizations funded by AEI must participate in consortia with at **least one Spanish profit organization partner**, which will be funded by the MINAETD.

Spanish Principal Investigators must demonstrate experience as investigators in projects funded by the Plan Estatal I+D+i 2013-2016, the Plan Estatal I+D+i 2017-2020, ERC Grants, European Framework Programmes or other relevant national or international programmes.

Incompatibilities (read carefully):

- Principal Investigators can only apply for funding in one proposal in KDT 2021 calls RIA and IA all together. The limit is NOT one proposal per subprogram (RIA or IA), but one proposal in both RIA and IA. If one PI submits two or more proposals he/she will be declared ineligible in all but one.
- Principal Investigators will not be eligible for funding in more than one proposal in a PCI call of the same year or consecutive years. This should be taken into account when participating in other ERA-NETS or international programmes funded through the PCI call.
- Principal Investigators must remain unchanged between the proposal to this transnational call and the PCI2022 call. Only force majeure reasons will be accepted to change a principal investigator (see point one of incompatibilities).
- To this end, and to avoid any issue, the Principal Investigator must be clearly identifiable in the KDT documents and must comply with these rules. Otherwise, he/she will be declared ineligible for funding by the AEI.

Eligibility of tasks, the costs and funding

AEI will only fund those tasks in the work packages indubitably related to research and technology development and innovation, not considering as such mere communication or dissemination activities for the consortium and similar activities, which will not be eligible for funding.

AEI grants follow the rules of marginal costs, with a maximum request of 350.000 € (including direct + indirect costs) per participant or 40% of the total costs of the Spanish part of the project (whichever amount is lower).

Eligible costs are:

- Personnel costs for temporary contracts (fellowships are not eligible).

- Current costs, small scientific equipment, disposable materials, travelling expenses and other costs that can be justified as necessary to carry out the proposed activities.
- Indirect costs (overheads) maximum 15 %.

If the Spanish participant is the KDT project coordinator, the maximum request can be up to 500.000€ (including direct + indirect costs).

Centers formed by different Spanish legal entities will be considered as a unique entity, and thus the maximum funding should not exceed the limits per proposal established above (for example mixed centers).

Double funding (overlapping with other EU or National funding) will be avoided and projects or parts of projects already funded will be not granted.

The final funding will take into account the transnational evaluation of the collaborative proposal, the scientific quality of the Spanish group, the benefit of the international collaboration, the participation of the industrial sector, and the financial resources available.

Sweden

National contact person for KDT JU

Country	Name	First name	Tel	E-mail
Sweden	Saavedra Granholm	Adela	+46 8 473 31 50	adela.saavedragranholm@vinnova.se
Sweden	Gustafsson	Lars	+46 8 473 32 12	lars.gustafsson@vinnova.se

Detailed information for Swedish applicants in KDT JU is available at:

[*Key Digital Technologies JU*](#)

Legal requirements for the eligibility of a partner or a project

Type or nature of participants

Calls are open for public and private companies of all sizes as well as for universities and research institutes in Sweden.

Funding conditions

The costs of all partners specified in the project budget and in the reporting to Vinnova shall harmonize with costs in accordance with the Grant Agreement with KTD JU and the costs reported to KDT JU, respectively.

Only legal entities are eligible for funding, natural persons will not be funded.

Consortium configuration

The total eligible costs of participating Swedish companies must amount to at least 50% of the aggregated eligible costs of all Swedish participants in the project consortium.

Legal, administrative and financial conditions

Participating companies must have fulfilled fiscal obligations and must be able to cover their own expenses for the duration of the project.

- Participating companies must be registered as a limited company in Sweden (Aktiebolag).
- Participating companies must have a permanent establishment in Sweden.
- Project activities must be conducted at sites that belong to a participating company. Project costs must belong to the participating company.
- Participating companies must be registered for employer's contribution.
- Participating companies must have submitted at least two annual reports to the Swedish Companies Registration Office (Bolagsverket)

- The company's most recent annual report/ financial statement should show that net sales or equity correspond to at least 50% of the public funding applied for from Vinnova and KDT JU.

Swedish SMEs must also show that they:

- Have an annual net turnover of at least 1 million SEK according to the latest annual report
- Have a minimum of three full time employees

Other conditions

Vinnova's task is to promote sustainable growth and to strengthen Swedish innovation capacity. Our mission is to enable innovation that makes a difference to the planet and to Sweden's economy and prosperity. All projects that Vinnova funds within KDT JU must show that they contribute to this mission. Vinnova stimulates innovation that is sustainable for our environment, for our society and for our economy.

A Swedish consortium must submit one joint national application to Vinnova. Participating companies are required to provide a credible description of the project's impact on the company's technological knowledge, economic growth and future assets in Sweden. Participating universities or research institutes are required to provide a credible description of the project's impact on the university's or research institute's scientific and technological knowledge base and positive impact on Swedish society in general. It is important that each partner clearly describes their role in the project, their goals with the project, how they will benefit from the project and added value from international collaboration.

The Swedish consortium needs to specify in the national application to which goals of Agenda 2030 the project contributes to and how the Swedish consortium contributes to the integration of gender equality aspects in the project.

A template for the national application is available at Vinnova's website.

Eligible costs and funding rates

Vinnova's terms and conditions

(Eligible costs) in Vinnova's terms and conditions for funding is replaced by the eligible costs and the calculations of these specified in the Grant Agreement with the KDT JU.

Funding rates

In the table below the national funding rates for Swedish participants in KDT JU is presented. The funding rates must be within the limits given by [State Aid Rules](#). Please be aware that EU contribution doesn't count as state aid.

	Large Enterprises	Small and Medium Enterprises	Universities and Research Institutes	Project Coordinator: Universities and Research Institutes
RIA - Research and Innovation Action	25%	35%	50%	65%
IA - Innovation Action	20%	30%	50%	65%
Focus Topics	25%	35%	50%	65%

Additional information and other conditions

- Maximum Vinnova contribution to one project is limited to 2 000 000 €.
- Vinnova use the exchange rate for Euro/SEK of the ECB on the date of KDT JU call FPP phase deadline.

Turkey

No information available.