EUROPEAN PARTNERSHIP

# DECISION CHIPS GB 2023.58

## Adopting the multiannual work programme for the years 2023-2027 and repealing decision GB 2023.51

THE GOVERNING BOARD OF THE CHIPS JOINT UNDERTAKING

Having regard to Council Regulation (EU) 2023/1782 of 25 July 2023 amending Council Regulation (EU) No 2021/2085 of 19 November 2021 establishing the Joint Undertakings under Horizon Europe (hereinafter "Single Basic Act") and in particular Articles 3(4), Article 5(2)(q), Article 17(2)(k) and Article 17(2)(b1) thereof;

Having regard to the Public Authorities Board's opinion on the work programmes for the years 2023 and 2024 in accordance with Article 19(4)(c) of the Single Basic Act (Decision PAB 2023.25 and 2023.26);

Having regard to GB decision 2023.51 amending the work programme 2023;

WHEREAS:

1) The Executive Director should prepare and, after having taken into account the opinion of the PAB, submit for adoption by the Governing Board the work programme and the corresponding expenditure estimates;

2) The Governing Board should adopt the work programme and corresponding expenditure estimates by the end of the year prior to its implementation;

3) Budgetary commitments of the Chips JU related to activities under the Chips for Europe Initiative should be divided into annual instalments. Decision GB 2023.51 on the amendment of the work programme 2023 did not foresee this possibility. Therefore, the current Decision should introduce a multiannual work programme for the period 2023-2027. The modification should be limited to introducing the annual instalments and should not affect the content of Decision GB 2023.51.

4) This modification should not change the effects of the adoption of the amendment of the work programme 2023 under GB Decision 2023.51 nor the launch of the Calls under Decision PAB 2023.25, in particular, the applicable publication date of such Calls, which should remain 1 December 2023.

5) Furthermore, the current Decision should also include information on the scope of the activities that will be performed in 2024 for both the initiative and the non-initiative parts of the work programme.

HAS ADOPTED THIS DECISION:

*Article 1*

The multiannual work programme for the period 2023-2027, as annexed to this decision, is hereby adopted.

Decision GB 2023.51 is repealed and replaced by this decision.

It shall be published on Chips Joint Undertaking's website.

*Article 2*

This Decision shall enter into force on the date of its adoption.

Done in Brussels, on

Ralf Bornefeld

Chair of the Governing Board

Annex: multiannual work programme for the years 2023-2027

## Contents

# 1. INTRODUCTION

The Multi-annual Work Programme 2023-2027 (WP2023-2027) of the Chips Joint Undertaking (Chips JU)[1], covers the activities of the Chips JU from 1 January 2023 to 31 December 2027.

The scope of the WP2023-2027 is to inform in a transparent manner about the Joint Undertaking's future activities in particular its intentions to support and fund actions in specific fields of research and innovation, in accordance with the legal provisions, in particular:

- Council Regulation (EU) 2021/2085 of 19 November 2021 establishing the KDT Joint Undertakings referred to as Single Basic Act (SBA), amended by Council Regulation (EU) 2023/1782 of 25 July 2023, referred to as Chips Regulation,
- 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,
- Regulation 2021/695 of the European Parliament and of the Council of 28 April 2021 establishing **Horizon Europe (HE)** – the Framework Programme for Research and Innovation, laying down its rules for participation and dissemination;
- Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the **Digital Europe Programme** (DEP).
- 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 Chips Joint Undertaking**, decision KDT GB 2021.02, Annex 12;
- The **Strategic Research and Innovation Agenda** (SRIA) 2023 issued by the Private Members Board (decision KDT GB 2023.34).

## 1.1 Objectives of the Chips JU

The joint undertakings have three general objectives, in accordance with Article 4 of the SBA:

- 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.

[1] Council Regulation (EU) 2023/1782 of 25 July 2023

The SBA also lists five 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 Chips JU has the following general objectives (SBA, Article 126):

1. 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;
2. 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, for all research and innovation activities, including those related to the Chips for Europe Initiative established by Regulation (EU) 2023/1781, 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
3. 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.
4. achieve large-scale technological capacity building and support related research and innovation activities throughout the Union's semiconductor value chain to enable development and deployment of cutting- edge semiconductor technologies, next-generation semiconductor technologies and cutting-edge quantum technologies and the innovation of established technologies that will reinforce advanced design, systems integration and chip production capabilities in the Union, thereby increasing the competitiveness of the Union; and contribute to the achievement of the green and digital transitions, in particular by reducing the climate impact of electronic systems, improving the sustainability of next- generation Chips and strengthening the circular economy processes, contribute to quality jobs within the semiconductor ecosystem and address security-by-design principles, which provide protection against cybersecurity threats.

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

1. support research and development for establishing design and production capabilities in Europe for strategic application areas;

2. launch a balanced portfolio of large and small projects supporting the fast transfer of technologies from the research to the industrial environment;
3. foster a dynamic Union-wide ecosystem based on digital value-chains with simplified access to newcomers;
4. support research and development for enhancing component technologies that guarantee security, trust and energy-efficiency for critical infrastructures and sectors in Europe;
5. foster mobilisation of national resources and ensure coordination of Union and national research and innovation programmes in the field of electronic components and systems;
6. 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.
7. build up advanced design capacities for integrated semiconductor technologies;
8. enhance existing and develop new advanced pilot lines across the Union to enable development and deployment of cutting-edge semiconductor technologies and next-generation semiconductor technologies;
9. build advanced technology and engineering capacities for accelerating the innovative development of cutting- edge quantum Chips and associated semiconductor technologies;
10. establish a network of competence centres across the Union by enhancing existing or creating new facilities.

Besides those objectives, the Chips JU also contributes to a larger effort envisioned in the following documents:

- Joint Declaration on Processor and Semiconductor Technologies[2] (7 Dec 2020);
- Digital Compass communication[3] (COM(2021) 118 9 March 2021); and
- European Chips Act[3] Regulation (EU) 2023/1781[4] of the European Parliament and of the Council of 13 September 2023 establishing a framework of measures for strengthening Europe's semiconductor ecosystem and amending the DEP Regulation.

## 1.2 Chips JU as part of Horizon Europe

Chips JU contributes to Cluster 4 of Horizon Europe.

Although Chips JU is not part of the Shared challenges and their causes as outlined in the work programme 2021-2022 of Horizon Europe, part 7 Digital, Industry and Space (European Commission Decision C(2021)7804 of 28 October 2021) requires collaboration and

[2] https://digital-strategy.ec.europa.eu/en/library/joint-declaration-processors-and-semiconductor-technologies

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

[4] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ%3AJOL_2023_229_R_0001

cooperation from Chips JU with the other partnerships in Horizon Europe and shall be an integral part of the work programme of Chips JU.

## 1.3 New approach for the work programme of the Chips 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 first and later Chips JU began to operate in a different environment as is noted in recital (78) of the SBA:

> *(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.*

And in recital 5 of the amended SBA:

> *(5) The Initiative aims to reinforce the competitiveness and resilience of the semiconductor technological and industrial base, whilst strengthening the innovation capacity of its semiconductor ecosystem across the Union, reducing dependence on a limited number of third-country companies and geographies, and strengthening its capacity to design and produce, package, reuse and recycle advanced semiconductors. The Initiative should support those aims by bridging the gap between the Union's advanced research and innovation capabilities and their sustainable industrial exploitation. The Initiative should promote capacity building to enable design, production and system integration in next-generation semiconductor technologies, and should enhance collaboration among key players across the Union, strengthening the Union's semiconductor supply and value chains, serving key industrial sectors and creating new markets.*

The urgency[5] 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 coordinated with activities of related JUs such as EuroHPC and discussed with Participating States and industry associations.

As to the Chips JU, it will contribute to the Chips for Europe Initiative ("Initiative"). This requires a revision of the structure of the Work Programme to distinguish between the Initiative and the non-Initiative actions:

- the non-Initiative part of the programme covers what was previously included in the Work Programme of the KDT JU,
- the Initiative part of the programme covers: the pilot lines, the design platform, the competence centers and the quantum chips technology.

## 1.4 Main objectives described in the SRIA

The ECS SRIA 2024 (Chips GB 2023.56) identifies 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.

5 https://digital-strategy.ec.europa.eu/en/policies/european-chips-act

# 2. MULTIANNUAL WORK PROGRAMME

## 2.1 Specific part Initiative

This section includes 1) capacity building activities for the operational objectives and 2) R&D&I activities.

### *2.1.1 Capacity building activities for the operational objectives*

This sub section includes actions under the Digital Europe programme.

### *2.2.2 R&D&I activities*

This sub section includes actions under the Horizon Europe programme.

Both capacity building and R&D&I activities are described in the following appendices:

- **Appendix 2 describes the 2023 actions**,
- **Appendix 4 describes the 2024 actions.** [6]

### *2.2.3 Multiannual budget of the activities*

The following table summarizes the total budget as annual commitments, per funding instrument:

| Mio EURO | 2023 | 2024 | 2025 | 2026 | 2027 | TOTAL |
|---|---|---|---|---|---|---|
| Horizon Europe | 339,659 | 406,510 | 302,831 | - | - | 1,049,000 |
| Digital Europe | 277,373 | 400,991 | 354,937 | 172,808 | 74,891 | 1,281,000 |

The following table summarizes the total indicative budget per action[7]:

6 Appendixes are available in separate documents.

7 Maximum amounts are mentioned in Appendixes 2 and 4

| **Mio EURO** | **Multi-annual Commitment (Mio EURO)** |
|---|---|
| DEP Chips calls for 2023: | |
| DIGITAL-Chips-2023-SG-CPL-1 | 40 |
| DIGITAL-Chips-2023-SG-CPL-2 | 10 |
| DIGITAL-Chips-2023-SG-CPL-3 | 21 |
| DIGITAL-Chips-2023-SG-CPL-4 | 10 |
| **TOTAL DEP SG Calls** | **81** |
| DEP Chips calls for 2023: | |
| CPL-1 | 200 |
| CPL-2 | 200 |
| CPL-3 | 200 |
| CPL-4 | 100 |
| **TOTAL DEP Procurements** | **700** |
| HE Chips calls for 2023 | |
| HORIZON-Chips-2023-RIA-CPL-1 | 460 |
| HORIZON-Chips-2023-RIA-CPL-2 | 210 |
| HORIZON-Chips-2023-RIA-CPL-3 | 149 |
| HORIZON-Chips-2023-RIA-CPL-4 | 70 |
| **TOTAL HE RIA Calls** | **889** |
| DEP Chips calls for 2024: | |
| DIGITAL-Chips-2024-SG-CPL-5 | 10 |
| DIGITAL-Chips-2024-SG-CCC-1 | 116 |
| DIGITAL-Chips-2024-SG-CDP-1 | 83 |
| **TOTAL DEP SG Calls** | **213** |
| DEP Chips calls for 2024: | |
| CPL-5 | 100 |
| CDP-1 | 187 |
| **TOTAL DEP Procurements** | **287** |
| HE Chips calls for 2024 | |
| HORIZON-Chips-2024-RIA-CPL-5 | 70 |
| HORIZON-Chips-2024-RIA-CDP-1 | 60 |
| HORIZON-Chips-2024-RIA-CQC-1 | 30 |
| **TOTAL HE RIA Calls** | **160** |

The EU budgets above will be matched by a commensurate amount of national contributions.

## 2.2 Specific part non-initiative

This section is dedicated to research and innovation activities not covered under the initiative part. The non-initiative activities are not financed with multiannual instalments.

It includes actions under Horizon Europe.

Activities are described in the following appendices:

- **Appendix 1 describes the 2023 actions**,
- **Appendix 3 describes the 2024 actions.** [8]

[8] Appendixes are available in separate documents.

# 3. SUPPORT TO OPERATIONS

## 3.1 Communication activities

The following summarises the key elements of the Communications' Policy and Strategy for the Chips JU, secures an alignment between the multiannual and the annual plan and gives an indicative guide to the allocation of resources.

Internal Communications are to be regarded as part of the general management of the Office.

The concrete external communication objectives are to:

1. **Increase the visibility and strengthen the credibility of the Chips JU** as the leading European strategic initiative for focused, coordinated and competitive research and innovation activities relevant to the whole Electronic Components and Systems (ECS) value chain.
2. **Demonstrate the added value of the Chips JU** programme in addressing societal and industrial challenges and needs, both technologically and economically.
3. **Create a strong identification with the Chips JU programme** and strengthen the cohesion of the Chips JU community.
4. **Increase the public and political awareness** of ECS technologies and their applications recognising that ECS capability is a key enabler for securing global leadership, technology digital autonomy across many fields, enabling creation of growth, jobs and additional economic opportunities at all levels within the EU.
5. **Facilitate access to support mechanisms** at European, national and regional level which are complementary to those offered by the Chips JU, including new and additional financial resources.
6. **Expand the outreach of the Chips JU** to new public and private audiences and potential partners with the objective of building bridges to other JUs, PPPs, clusters and national programmes.
7. **Attract appropriate and dedicated political support** to maintain an adequate and effective European regulatory framework for ECS technologies.
8. **Ensure that Chips JU beneficiaries' needs are well known,** and the communication policies of all Chips JU members are aligned, wherever possible.
9. **Channel the information** from the operational group in charge of the projects about the programme successes.
10. **Establish a calendar of actions/events** in alignment with the Chips JU stakeholders.

These objectives can be addressed by delivering easy-to-understand technical information about:

- ECS technologies,
- Chips JU programme,

- funded projects and their added value induced by the public funding as well as their impact on competitiveness, growth and quality of daily life.

The following tables* describe the potential audiences for external communication activities, the associated topics of interest and suggested media for communication.

| | *Potential audiences* | *Possible communication topics* | *Possible communication media* |
|---|---|---|---|

| | | | |
|---|---|---|---|
| A. Peer groups and Chips JU (potential) stakeholders | - Active and potential participants in JU projects and initiatives;<br>- Industrial associations, European Commission and Participating States;<br>- Organisations with a specific interest in the activities and results of the JU programme<br>- RD&I actors not (yet) participating in JU activities, specifically SMEs<br>- Other funding instruments or organisations (e.g. EUREKA, other JUs, PPPs, etc.)<br>- National/regional organisations;<br>- JU Mirror Groups (e.g. " Austria, Italy", etc.). | - Themes to be addressed in future calls;<br>- Brokerage opportunities for active and potential project participants;<br>- How to create or engage in a project consortium; dos and don'ts when drafting a proposal;<br>- Creating support for the JU at relevant levels through dedicated events;<br>- Publication of results;<br>- Alignment of messages and coordinated actions between JU public and private stakeholders to underline the JU profile and strengthen important communication moments. Examples: joint press releases on call launches and funding decisions or sharing messages at national events. | - Website;<br>- Social media (X, LinkedIn and YouTube channels);<br>- Publications;<br>- Workshops, seminars, forum sessions, brokerage events;<br>- Events at national level;<br>- Press releases;<br>- Public appearances of JU stakeholders. |

| | | | |
|---|---|---|---|
| B. Decision makers relevant to the Chips JU on European, national and regional level | - EU Institutions;<br>- National Parliaments;<br>- Other policy makers and dedicated bodies (e.g. regional authorities etc.); | - Demonstration of results of projects and their societal relevance in terms of new solutions to problems or economic benefits etc.;<br>- The justification of the public funding of the project should be specifically highlighted;<br>- Underlining the unique nature (including its tripartite element) of the JU concept and the (pan-European) synergies it creates on various policy fields;<br>- The combination of European and national priorities and interests and JU's capability to mobilise and combine substantial European, national and regional funds; | - Website;<br>- Factsheets, Position documents;<br>- Support to dissemination of project results by the consortium partners;<br>- Participation of the JU Office and its stakeholders at relevant events organised at EU and national level. |

| | *Potential audiences* | *Possible communication topics* | *Possible communication media* |
|---|---|---|---|
| C. Interested public and specific audiences not related to Chips JU | - Sister JUs and other programmes focused on application areas covered by the JU;<br>- Civil society organisations.<br>- NGO's;<br>- Students;<br>- Other interested groups. | Key application areas: mobility, society, energy, health, security and the solutions that key digital technologies (KDT) can offer;<br>- Interaction with relevant organisations on societal issues and possible technology solutions e.g. in the areas of health, automotive, energy, IoT, environment etc.;<br>- Opportunities for cooperation and for joint initiatives.<br>- Key application areas: mobility, society, energy, health, security and the solutions that KDT can offer; | - Website;<br>- Social media (X, LinkedIn and YouTube channels);<br>- Daily newspapers; technical Press, "Brussels-EC-press";<br>- Television, notably programmes that address science and technology for a broader audience;<br>- Dedicated information packages e.g. for schools. |

* The reference descriptions in the above table might be updated to reflect further outcomes of any Governance Bodies recommendation on communication. However, it is expected that the major audiences identified will remain unchanged.

In 2024 the following activities are proposed:

**Chips JU Events 2024:**

**A. Major Chips JU branded events for communication and dissemination**

1. A specific Chips JU Call Information Day about participation in the JU Calls for 2024 and all related application aspects. This may be coupled with a special information session for coordinators of running or new JU projects (see "Coordinators' Day" below).
2. Speaking slot at the consortium-building activities ("Brokerage Event") organised by the JU Private Members (Industry Associations), where general information about JU activities, and specific information about upcoming calls can be disseminated.
3. Chips JU advisory Stakeholder Forum. This mandatory event (ex-Art. 140 of the SBA) of the Private Members Board (PMB), is open to all public and private stakeholders having an interest in the field of key digital technologies to inform them about and collect feedback on the draft Strategic Research and Innovation Agenda for a given year. The JU Office provides support, if requested, along with the 3 Industry Associations, the European Commission, and potentially other stakeholders.

**B. Chips JU events on specific topics**

1. Coordinator's Day. This is to provide updates, training and general information of specific use to project coordinators.
2. Chips JU Programme Dissemination Support, such as workshops, seminars, or similar events, is to be foreseen. To that end, the JU may offer, as a service with specified budget, the (co-)organisation of such events, that should extend beyond the boundaries of a specific project, thereby ensuring fair treatment.
3. PAB/NFA events to clarify administrative arrangements through tutorials, workshops, etc.

**C. Specific events for communication with EU Institutions (Parliament, Council, EC) and national States representatives**

1. Breakfast Sessions with MEPs / PermRep /DGs of the EC (in addition to DG CNECT).
2. Presence and active participation in working-group meetings of the various committees (e.g. CoR, EESC, etc.).
3. Participation in exhibition / promotion events at the relevant EU institutions (for example in conjunction with other JUs sharing common interest).
4. Events gathering JU PAB/GB representatives as well as National delegates from the Permanent Representations of the countries participating in the JU.
5. Dedicated meetings with high-level and focused discussion with relevant political representatives in some commonly selected national states capitals.

**D. Support to Community-building and road-mapping facilitation**

1. Support of other events organised by 3As (or Members of an Industry Association), if requested.
2. Support by direct participation in relevant events organised by the European Commission.
3. Support by direct participation in relevant events set up by National and/or Regional authorities to promote JU participation in their area. (Chips JU may pro-actively request such meetings ad-hoc, with specific National/Regional or other relevant authorities).

## PUBLICATIONS

### Media Agencies Services

To increase the public and political awareness of Electronic Components and Systems (ECS) technologies and their applications as well as to achieve wide support of European society, a specialised assistance is considered of paramount importance to carry out effective communication activities. Therefore, execution of parts of the Chips JU Communications and Events and related actions (e.g. articles) may be implemented by media agencies services via creative tools and solutions.

### Flyers/Brochures:

Chips JU will publish informative brochures / flyers on relevant topics for general promotion of the programme. Specific instruments of this type that are relevant for participants in the programme will be developed. These instruments shall be foreseen for primarily digital distribution but could also be eco-friendly printable, if needed. Other eco-friendly promotional materials ("Merchandising") will be prepared, as supporting tools for events.

Chips JU will also support the funded projects, if required, in their dissemination activities required by the Dissemination and Exploitation Strategy of Horizon Europe by providing basic materials such as exhibition poster and project summary information, professionally edited and produced. This Chips JU support may assure clear and concise communication to a broad public also.

### Website and social media:

Chips JU will regularly share relevant information (from its internal functioning to the launch of calls for proposals) on its public website and social media channels.

The website contains attractive features that facilitate the dissemination of such information.

Specific emphasis will be dedicated to social media (YouTube, X and LinkedIn), in order to launch advertisement campaigns on key topics, such as JU structure, funded projects, scheduled events, etc.

### Press releases

In addition to press releases independently published by its members, Chips JU can foresee other press releases, distributed by using its own means, covering, but not limited to, the following key events:

- Chips JU Call launches.
- Outcomes of initiatives of the JU Members and their constituencies.
- Key decisions of European Institutions.
- Outcome of the Chips JU Calls (funding decisions previous year).

**Promotional Video and Advertising Campaign**

To create a strong brand recognition, raise awareness and interest in the Chips JU programme, as well as to communicate key messages to target audiences, promotional videos and advertising campaigns might be foreseen.

## 3.2 Procurement and contracts

Procurement and contracts are managed in accordance with the provisions of the Financial Rules adopted by the Governing Board (Decision GB 2021.02 Annex 12).

To reach its objectives and adequately support its operations and infrastructures, the JU allocates funds to procure the necessary services and supplies.

To make tender and contract management as effective and cost-efficient as possible, the JU concludes Service Level Agreements (SLAs) with relevant Commission Services as well as its private members and makes use of inter-institutional framework contracts (FWC).

Also, the Office has started implementing **Back Office Arrangements** with other Joint Undertakings from end of 2022. The first arrangement concerns the accounting function that has ceased to be provided by DG Budget. The official Accounting Officer of the EU-Rail JU is appointed as the Accounting Officer for the CHIPS JU as from 1st December 2022.

Arrangements in the fields of Human Resources, Procurement and ICT services are in preparation, service level agreements are/will be signed to this effect with other Joint Undertakings.

In 2024, Chips JU foresees to run several procurement procedures for administrative and/or communication purposes mainly for very low and low value contracts. Procurements in the context of operational activities, in particular Pilot Line calls and Design Platform, are also foreseen. Those will be much more substantial and be executed as Joint Procurement procedures.

## 3.3 IT and logistics

At present, eight Joint Undertakings are sharing the housing location in the building "White Atrium", Brussels Belgium.

The arrangements for the facilities are subject to a common contract for both the office space and the IT management of equipment, maintenance and help desk.

The eight Joint Undertakings are participating in the Common Back Office, the SLA for IT between the JUs (in the frame of the BOA) in which common tasks such as IT security policy, Business Continuity and Disaster Recovery Plans (BCP+DRP) have been allocated.

The Chips IT will be focusing on, the following roadmap:

**1. Cybersecurity Enhancements**

Objective: Strengthen the cybersecurity posture of the organization. Whilst a CBO activity, its importance to the organisation, requires special attention.

Initiatives:

Enhance implemented advanced endpoint security solution.

Conduct regular vulnerability assessments and penetration testing.

Enhance employee cybersecurity training and awareness programs.

Review and update security policies and incident response plans.

Monitor and mitigate emerging cybersecurity threats.

**2. Digital Transformation Initiatives**

Objective: Drive innovation and digital transformation, utilizing the available tools to drive the organisation forward.

Initiatives:

Identify and invest in emerging technologies (Microsoft Power Platform, automation, AI, etc.) for business optimization.

Implement automation solutions to streamline processes and reduce manual efforts.

Update and modernise customer-centric digital platforms or applications. Reaching out to users about expanding capabilities of the Portal and IKOP Application.

### 3. IT Governance and Compliance

Objective: Ensure adherence to regulatory standards and IT governance, focusing on the needs of Chips JU and advanced technology we are using.

Initiatives:

Review and update IT policies and procedures to align with industry best practices, implement Data Loss Prevention.

Ensure compliance and monitor updates of data protection regulations (e.g., GDPR, DPIA, etc).

Conduct regular audits to verify compliance and security, on external applications.

## 3.4 JU Executive Team – HR matters

The number of staff employed by Chips JU in 2024 will reach 42 statutory staff.

Recruitment procedure have started early 2023 to follow the staff establishment of the Chips JU, namely 6 new posts in 2023 and 6 new posts in 2024.

## 3.5 Administrative Budget and Finance

The administrative budget of Chips JU will be **7,761,486.00 €** for 2024.

Funding sources for the budget of Chips JU are at present:

- The EU budget for the operational costs and 70% of the running costs,
- The Private Members for the remaining 30% of the running costs.

The part of the running costs on the total budget is kept at a very low level which is to be considered as an indicator for efficiency. More specifically, the part of **administrative costs** in the total budget will be as follows:

- with regard to Commitment Appropriations: **0.79%**
- with regard to Payment Appropriations: **1.44%**

## 3.6 Data protection and conflicts of interest

**Data protection**

The EUI-GDPR N°2018/1725, implemented by Chips JU in internal set of documents, is regularly updated to include recent developments. Mostly, these are internal privacy policies that are concerned, as published on the CHIPS JU website.

The role of the Data Protection Officer (DPO) is exercised by the Legal Officer of CHIPS JU, assisted by an assistant legal officer.

**Conflicts of interest**

The Governing Board has adopted comprehensive rules on the prevention and management of conflicts of interest (KDT GB 2021.02 Annex 4). It addresses all actors involved in the Joint Undertaking activities, including staff, PAB and GB members, experts involved in projects reviews and evaluations, participants in procurement and recruitment committees.

# 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 Chips Joint Undertaking and supervises the implementation of its activities.

  The Chair of the Governing Board is Mr Ralf Bornefeld.

- The **Executive Director** is the chief executive responsible for the day-to-day management of the Chips Joint Undertaking in accordance with the decisions of the Governing Board. Since 16th October 2023, Prof. Jari Kinaret is the Executive Director.

- The **Public Authorities Board** is competent for matters related to calls for proposals and allocation of public funding.

  The Chair is Mr Kari Leino.

- The **Private Members Board** is responsible for drawing up the SRIA.

  The Chair is Mr Jean-Luc di Paola-Galloni.

# 5. INTERNAL CONTROL FRAMEWORK

## 5.1Financial procedures

**Legacy projects (ECSEL)**

The financial procedure for projects under H2020 depends on the H2020 IT tools developed by the European Commission. These IT tools encompass the full cycle of the process, including work-flows, check-lists, etc.

**Chips projects**

The financial procedure for projects under Horizon Europe depends on the IT tools developed by the European Commission. These IT tools encompass the full cycle of the process, including work-flows, check-lists, etc.

Projects under Digital Europe Programme shall be managed in accordance with Regulation (EU) 2021/694 of the European Parliament and of the Council and Regulation (EU) 2023/1781 of the European Parliament and of the Council.

## 5.2Ex-ante and ex-post controls

The internal control processes and methods have been subject, from the first days of existence of CHIPS JU, to a decision of the Governing Board (KDT GB 2021.02 Annex 11) adopting the Internal Control Framework of the JU.

With regard to financial matters, ex-ante and ex-post controls are organised in accordance with the Financial Rules of the CHIPS JU (KDT GB 2021.02 Annex 12, in particular Articles 21 and 22).

## 5.3Audits

Audits are organised both on an internal and external basis:

**Internal audits** are operated by the internal auditor of the JU (the Internal Audit Service of the European Commission) and by the staff member appointed by the Governing Board for

performing the internal audit capability, in accordance with the provisions of Chapter 5 of the Financial Rules of the Chips JU.[9]

**External audits** are operated by an independent external auditor and by the European Court of Auditors in accordance with the provisions of Chapter 9 of the Financial Rules of the Chips JU. The European Court of Auditors reports to the European Parliament and the Council, responsible for the discharge procedure.

**Ex-post audits of beneficiaries** are also operated by or on behalf of the CHIPS JU, with methods which are adapted to the specificities of the programmes:

**Legacy projects (ECSEL)**

Under the regime of H2020, the JU has defined the needs and methods for the ex-post audits, in close cooperation with the CIC of the European Commission, in view of a coordinated approach of audits of beneficiaries. A common audit plan for all EU services involved in the H2020 programme is implemented by the CIC, acting on behalf of the CHIPS JU.

**Chips projects**

Under the regime of Horizon Europe, the JU will establish the needs and methods for the ex-post audits in accordance with Article 53 of the Regulation (EU) 2021/695 of the European Parliament and of the Council, in close cooperation with the CIC as implemented under H2020.

Under the regime of Digital Europe Programme, the JU will establish the needs and methods for the ex-post audits in accordance with Article 27 of the Regulation (EU) 2021/694 of the European Parliament and of the Council, in close cooperation with DG CNECT and HaDEA.

[9] Decision KDT GB 2021.02 Annex 12

## 6. APPENDICES DESCRIBING THE ACTIVITIES

Appendix 1 2023 non-initiative

Appendix 2 2023 initiative

Appendix 3 2024 non-initiative

Appendix 4 2024 initiative

All Appendices are separate documents.

## 7. GENERAL ANNEXES

Annex 1 - General Annexes for Chips calls 2024

Annex 2 - Management of contributions from the participating states

Annex 3 - Key Performance Indicators

# Annex 1: General Annexes for the Chips calls 2024

The "Horizon Europe 2021-2022 13.General Annexes (European Commission Decision C(2021)1940 of 31 March 2021)"[10] apply with some exceptions specific to certain calls

**A – Admissibility.** The page limits as mentioned under the different call descriptions in the Chips JU Work Programme 2023 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/experi-mental 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 defined relative to the final operating environment. | Key, functionally critical, software components are integrated, and functionally validated, to establish interoperability and begin architecture development. Relevant Environments defined and performance in this environment predicted. | Documented test performance demonstrating agreement with analytical predictions. Documented definition of relevant environment. |
| **5** | Technology validated in relevant | A medium fidelity system is built and operated to demonstrate overall | End-to-end software elements implemented and interfaced with existing | Documented test performance demonstrating agreement |

[10] 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

| | | | | |
|---|---|---|---|---|
| | environment. (industrially relevant environment in the case of key enabling technologies) | 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. | 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. | 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 specific annexes

**F - Procedure. Evaluation procedure and ranking.**

The call specific annexes contain the rules applicable to the Chips JU call evaluations. The rules for evaluation and selection of proposals, as adopted by the GB (GB 2022.28), 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 calls.

## Annex 2: Management of contributions from the participating states

In accordance with Article 12 SBA, Participating States shall conclude an administrative agreement with the joint undertaking laying down the coordination mechanism for the payment of and reporting on contributions to applicants.

Two administrative agreements are possible:

- Article 12(2): coordination with no entrustment,
- Article 12(3): entrustment of the joint undertaking by the participating state with the payment if its contribution to its beneficiaries.

For **Chips Calls 2024**, all participating states **have signed an administrative agreement based on Article 12(2).**