

Frequently Asked Questions

Execution of a potential IPCEI on Next Generation Cloud Infrastructure and Services (IPCEI-CIS)

IPCEI-CIS web page: <https://www.bmwi.de/Redaktion/EN/Artikel/Industry/ipcei-cis.html>

Scope of potential IPCEI-CIS

What is an “Important Projects of Common European Interest” (IPCEI)”?	<p>IPCEI procedures allow for public-sector funding to be granted at national level for certain projects that make an important contribution to the growth and competitiveness of the European industrial sector and to the strategic objectives of the European Union. Under this framework EU Member States are able to set-up important projects of common European interest, that are based on notified and authorized state aid and which include major contributions to growth, employment and competitiveness of the European industry and economy. An IPCEI must contribute to the strategic objectives of the European Union (EU) and must be conducted by at least two EU Member States. It must include co-financing from the beneficiaries including private companies and disseminate positive spill-over effects across the whole EU. It must also pursue ambitious targets for Research, Development and Innovation (R&D&I), which explicitly exceed current state-of-the-art technologies of the corresponding sector and First Industrial Deployment (FID).</p> <p>For the IPCEI to qualify as compliant with EU competition rules -in particular the state aid rules- and important market or systemic failures needs to be demonstrated. The criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of Important Projects of Common European Interest are described in the 2014 Communication from the Commission (2014/C 188/02).</p>
What is the aim of the potential IPCEI-CIS?	<p>The overall objective of the potential IPCEI on Next-Generation Cloud Infrastructure and Services (PCEI-CIS) is to lay the ground for the competitiveness of European society and economy in the future. It shall facilitate the creation of the next generation cloud edge infrastructure and services to unfold the increasing value of the data. The potential IPCEI will not be possible without the commitment of the industry and rely heavily on the active engagement of private participation in accordance with state aid regulation.</p>
What is the expected ratio between industry and R&D institutions?	<p>The IPCEI will require relevant R&D parts in the consortia participating in the project. The integrated project should comprise industrial R&D parts as well as initial roll-out of the technologies developed in the IPCEI. The specific ratio between R&D and industrial and R&D institutions will depend on national selection of project proposals and the further EU Match Making process.</p>
What are the main areas of investment (Value Chain)?	<p>The potential IPCEI-CIS shall develop and first industrially deploy the key interdependent building blocks and the associated transverse requirements (sustainability, cybersecurity) along the strategic value chain of the Distributed Multi Provider Cloud-Edge Continuum. The identified key building blocks comprise (1) Infrastructure such as components and services for real-time and security-critical data transfer and operations as well as evaluation of compatible soft- and</p>

	<p>hardware components (2) Interconnections to improve network transparency and interoperability (3) Foundation Services to establish a common highly automated Operation System, for orchestration e.g. load balancing, latency and resource optimization (4) Platforms and Smart Processing Services for app and data management and processing in the cloud-edge continuum (5) Initial Roll-out and deployment of innovative use cases at first industrial deployment stage</p>
<p>Are projects expected to address the entire value chain of the potential IPCEI-CIS?</p>	<p>Projects can be specialized on single areas of the value chain. However, they need to be aligned with other projects to form one integrated project.</p>
<p>What's the expected scope of the IPCEI-CIS projects in terms of Technology Readiness Level (TRL)?</p>	<p>Projects participating in the IPCEI-CIS should aim at reaching at its end first industrial deployment of the developed technologies (i.e. TRL 8). Basic research activities (i.e. lower TRLs) are not expected.</p> <p>Technology Readiness Level (TRL) scale:</p> <ul style="list-style-type: none"> TRL 1 – basic principles observed TRL 2 – technology concept formulated TRL 3 – experimental proof of concept TRL 4 – technology validated in lab TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies) TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies) TRL 7 – system prototype demonstration in operational environment TRL 8 – system complete and qualified TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Prerequisites for Participation (National Selection Process)

<p>What are the prerequisites for private stakeholders and research intuitions to participate?</p>	<p>Each participating Member State will host national Call for Project Proposals (CPP) and/or Expressions of Interest (EOI). In order to receive notification all Companies participating in the IPCEI have to fully comply with all conditions described in the Communication from the Commission on the Criteria for the analysis of the compatibility with the internal market of State aid to promote the execution of important projects of common European interest.</p> <p>In case funding of a project proposal might not be possible under the IPCEI framework other national or European funds might be available for them.</p>
<p>Are Member States going to follow a similar schedule when launching their respective, national Call for Project Proposals or Call for Expression of Interest?</p>	<p>To synchronize national project selection across the participating EU Member States CPP/EOI will follow similar timeframe and closing. However, due to national legal requirements, the launch of national CPP/EOI may vary from country to country. All calls are expected to be closed by summer 2021.</p>
<p>How can SME's participate in the IPCEI-CIS?</p>	<p>One key target of the IPCEI-CIS is to digitize small and medium enterprises (SME) in Europe. The participation of SME as part of project consortia is appreciated. Requirements for the participation of SME might depend on national Call for Project Proposals.</p>
<p>Is it possible to submit the project proposal in several countries?</p>	<p>As IPCEI are state aid instrument each participating EU Member State is responsible for the selection of project proposals. Projects proposals should refer to the country where they are submitted. Companies operating in different EU Member States may participate in different national IPCEI-CIS Call for Project Proposals.</p>
<p>Can a company be part of more than one project with different consortia?</p>	<p>A company can be involved in different consortia in the sense that different kinds of solutions are developed.</p>
<p>What are the prerequisites for consortia to participate in the Call for Project Proposals?</p>	<p>The IPCEI is a state aid instrument and rules of participation are defined by each participating Member States according to national laws. National selected projects will be coordinated in a European Match-Making process. In this process a common Chapeau Text will be elaborated. Companies will have to fill a specific template as part of their application incl. information on funding gap and planned public funding.</p>
<p>How is the IPCEI going to deal with Non-European providers?</p>	<p>One key target the IPCEI is to increase digital leadership of the EU. Therefore, the IPCEI will focus on the protection of European data from extraterritorial interference and include fully compliance with GDPR regulation.</p>

Notification Process (EU-Match Making Process)

How are the projects selected going to be consolidated to one integrated project?	After the selection of the participants on national level a common Chapeau Text will be elaborated together with all participating companies. In the next step a matchmaking process will start to establish and enhance collaboration between the participating industrials. Also, a governance structure will be created to ensure the integration of the various sub-projects along the value chain defined in the IPCEI-CIS. The overall objective will be that all actors effectively contribute to the overall objectives of the integrated project.
How will participating companies prove the existence of market failure?	<p>EU Member States are currently working on exposing the market failures in the cloud and edge market that the IPCEI-CIS will contribute to tackle. During the pre-notification process also each participating projects will have to prove specific market failure and calculate its specific funding gap.</p> <p>In order to qualify for support under the IPCEI Communication, a project must, in particular: (i) contribute to strategic EU objectives; (ii) involve several Member States; (iii) involve private financing by the beneficiaries, (iv) generate positive spillover effects across the EU, and (v) be highly ambitious in terms of research and innovation, i.e. it has to go beyond what is widely regarded as the “state of the art” in the sector concerned. A specific template will be provided to guide the project application and the calculation of the funding gap.</p>

Funding

Is there an estimated ratio of infrastructure investment (DC, Cloud, Edge, Interconnection) and software and coordination overhead?	There is no main investment. Both infrastructure and software are part of the potential IPCEI. Main goal is to have an integrated project that contains contributions to every part of the IPCEI value chain. The selection of projects will be influenced by that.
What will be the amount of state aid for the IPCEI-CIS?	The specific amount of state aid for the IPCEI-CIS has not yet been decided. The concrete amount will depend on concrete funding gap of the projects participating in the IPCEI.
What is the expected budget per project?	The concrete amount of public funding per project will depend on national budgets for the implementation of the project.
What is the ratio between private co-investment and public funding?	The amount of state aid grant will depend on each participating project and the specific funding gap.

Duration of the IPCEI-CIS project

<p>What are the milestones during the implementation phase of the potential IPCEI?</p>	<p>The milestones during implementation phase might depend from each participating EU Member State and might vary from country to country.</p> <p>It is expected that the implementation phase of the potential IPCEI-CIS will start in 2022 with set up of a governance structure and the launch of R&D&I projects. Preliminary results of these R&D&I projects will be used to support the scoping and preparation of use cases to be piloted. With R&D&I projects developing further first pilots of the use cases will be carried out. When R&D&I projects reach final results, a large-scale piloting can be done across the EU. After that the testing and production stage of the First Industrial Deployment can take place based on large scale piloting results from projects of infrastructure/platforms/services.</p>
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Roll-Out / First Industrial Deployment

Are the technologies and products developed by the potential IPCEI-CIS limited to be offered in the internal European market only?	The potential IPCEI must include committed actions for concrete positive spillovers on the internal market by each beneficiary; concrete, identifiable benefits must be spread beyond the participating companies, Member States and sectors. However, participating companies are free to market the results of the project also in Non-European countries.
Are the potential technologies and products developed under this funding instrument expected to be released as open source?	The approach in every IPCEI is case specific (e.g. integration, spillover). It will be under assessment if parts of technologies and products developed in the potential IPCEI will require the release under Open Source license.
Will the IPCEI-CIS support investments on infrastructure?	Co-investments on infrastructure between public and private players will be pushed by IPCEI-CIS, for the development and first deployment of cloud and edge nodes, addressing the specific needs of the EU Member States. These investments will cover the whole cloud-edge value chain, with a focus on increasing the capacity (density of nodes) and efficiency and sustainability of the cloud and edge facilities. This is aligned with the ambition of the European Commission to deploy 10,000 climate-neutral highly secure edge nodes by 2030, guaranteeing equal access to data services with low latency (few milliseconds) wherever users are located.