



Feedback on quality issues identified in the Project Portfolios and Funding Gap Calculations – IPCEI Hydrogen Technology

Commissioned by the Netherlands Enterprise Agency

Topic	Common issue	Consequence	How to resolve
Be brief and neutral	The Project Portfolios (“PPs”) are generally too long. All PPs entail information, which is presented repeatedly in several sections. PPs should be streamlined and shortened. A lot of space in the PP is wasted on marketing-type presentations.	Lengthens reading time, makes it difficult to find key facts, leads to requests for clarification	Please remove marketing and sales-type presentations of the company and project. Be brief and to the point on substance using neutral language.
Proofread before submission	Many PPs appear to have been drafted by various authors leading to repetitions, contradictions and inconsistencies in particular with the Funding Gap Calculations (FGC).	Creates confusion, leads to additional questions.	Proofread the PP and FGC before submission. Ensure consistency of the figures and information provided in the PP and FGC.
Explain abbreviations and avoid corporate jargon	Overly use of abbreviations and corporate jargon in the PPs	Creates confusion	Avoid abbreviations, if possible. Add an explanation of all abbreviations to the PP. Avoid corporate jargon.
Do not explain the macroeconomic context	PPs often include lengthy general statements about macroeconomic context, such as the hydrogen market to be developed at EU level, the hydrogen IPCEI in general, general economic considerations, and repetition of general policies like the Green Deal, the Paris Agreement, etc.	Lengthens reading time, makes it difficult to find key facts	The PP should not repeat or copy statements from the chapeau document or general high-level policy documents. The PP should solely focus on the envisaged project and what the concrete project contributes to the hydrogen IPCEI of which it is an integrated part.

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Avoid using verbal building blocks	Repeated use of pre-fabricated building blocks.	Might not be appropriate for the project, leads to additional questions.	Avoid copying pre-fabricated paragraphs into PPs.
Add a GANTT chart	Lack of a GANTT chart or schematic of the project.	Makes it more difficult to determine how the different phases of the project interact, also with preceding projects	Include a GANTT and schematic of the project showing how the phases/tasks interact (timings/partners etc.). This will help to clarify boundaries (e.g. between RDI and FID phases)
Clarify timing	Some projects have included start dates, which are already now in the past	Makes it unclear whether this work is ongoing existing work, or planned work under the project, creates confusions, requires further questions	Project timelines and explanations should make clear what is present and future work to be carried out under the project.

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Effective Collaborations	<p>Practically all PPs lack a comprehensive and detailed explanation, definition and justification of the envisaged cross-border partnerships with other projects in the same IPCEI. It is not clear how the planned collaborations fit into the overall IPCEI (as Direct or Indirect partners). Sometimes direct partners in other TF are also missing and the cross-border aspect is not always fulfilled. Direct partners are often companies from the same Member State, there are rarely direct partners from more than one different Member State.</p>	<p>Makes whole project questionable. Unable to verify eligibility of project, requiring additional information to be provided</p>	<p>Each project must demonstrate effective collaborations across borders with other projects of the same IPCEI. Effective collaborations are defined in point 27 of the Framework for State aid for research and development and innovation.</p> <p>Clearly tabulate Direct and Indirect partners and their roles for your company's envisaged project. Highlight where these are cross-border collaborations. Clear description of the content of the collaboration for each partnership, demonstrating (i) why each collaboration is necessary for your envisaged project, (ii) complementarity of the projects and (iii) necessity of the collaborations for the whole IPCEI. In addition, it must be explained, which partner bears which risks and finances which part and how the results of the collaboration are shared. Buyer-seller-relationships or contract research cannot be not considered to be effective collaboration.</p>

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Specific contribution of each project to the IPCEI	No clear explanation of how each project specifically contributes to the achievement of the objectives of each TF. Often, general text / building blocks appears to be taken directly from the Chapeau to explain the individual project's significant added value to the achievement of the IPCEI objectives and complementarity with other projects within the IPCEI.	Leads to doubts about the project's eligibility	Demonstrate and justify how your company's project specifically contributes to the objectives of the TF and the entire IPCEI. Avoid to merely copy general text from the Chapeau document or high-level policy documents.
Links to previous RDI	Projects do not show how previous RDI is linked to the envisaged IPCEI project.	Leads to requests for clarification	Describe all relevant previous RDI projects, which have prepared for or a linked to the submitted IPCEI project. Exclude any possible overlap in funding of previous RDI projects with the IPCEI project.
Mixing RDI and FID phases	Attempts to artificially lengthen periods of aid eligibility by introducing cascading "phases"	Leads to requests for clarification and delays	Avoid parallel RDI and FID phases and cascading overlaps. Clearly structure the project.
Technical description of the envisaged innovation project	Description of the innovation entails extensive textbook-like descriptions of (for instance) electrolysers without sufficient indication of why this particular one is novel.	Lengthens reading time, makes it difficult to find key facts, leads to requests for clarification	Avoid general explanations about the technical basics of your envisaged project. The readers on the Commission's side who assess the innovativeness of the envisaged project are technical experts; no need to explain technical basics. Limit yourself to a precise description on substance of your envisaged RDI /FID project, clearly describing what and why makes it innovative beyond the global State of the Art (SoA).

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Innovativeness beyond the global State of the Art	For the RDI and FID projects, it is often not stated definitively or described precisely what the innovation concretely is that goes beyond the global State of the Art.	Unable to identify or judge the innovation that makes the project eligible, requiring additional information to be provided	Highlight innovativeness claims for RDI and FID: a clear statement on what are the innovative parts of the project that will go beyond the global State of the Art such as a table listing innovations in technology performance / scale / new permutations combining technologies etc.
FID - general	The notion of FID is often not well understood or presented in ways that are inconsistent with the definition provided by the IPCEI Communication (“[...] <i>first industrial deployment means the upscaling of pilot facilities, demonstration plants or of the first-in-kind equipment and facilities covering the steps subsequent to the pilot line including the testing phase and bringing batch production to scale, but not mass production or commercial activities. [...]</i> ”)	Leads to doubts about eligibility of FID	Align the description of FID in the PP with the definition provided by the IPCEI Communication.
Key Performance Indicators (KPI)	There is often a lack of quantifiable, measurable KPIs to (i) track innovation going beyond the global State of the Art throughout the project duration and (ii) to establish the cut-off between the FID and the mass production phase.	Without quantifiable KPIs it is difficult to judge innovation, and therefore eligibility.	Add a table of quantitative Key Performance Indicators showing global State of the Art (with appropriate references), the current company State of the Art and the quantitative targets for the project. Link performance targets to the different milestones / stages of the project (e.g. RDI, FID, mass production)

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FID phase - Innovation	PPs do not demonstrate and explain which important research and development is to be performed during the FID phase. Mere upgrades of existing facilities and newer versions of existing products are not FID.	Leads to requests for clarification.	Describe the development of a new product or service with high research and innovation content or the deployment of a fundamentally innovative production process planned during the FID phase.
FID phase –Sales	<p>Lack of explanation and not substantiating for the sales during the FID phase and how these sales are different from usual commercial activity of the company. Not explaining the purpose and necessity of these sales for further research and development to be performed during FID phase. Such sales must be related to the testing phase, including sample or feedback or certification sales.</p> <p>In addition, in several PPs and FGC, sales during the FID phase are not limited to samples, but appear to be of commercial volumes.</p>	Puts eligibility of the FID phase into question	A FID phase must never entail mass production or commercial activities. Any sales activities during a FID phase must be duly explained and justified to be carried out for research and development purposed only.

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Dissemination of know-how for RDI and FID projects	<p>Not quantifying to the requisite legal standard the dissemination activities envisaged/committed. Often the actual commitments are missing and simple intentions are mentioned, using vague wording as though the aim was to protect the IP created with State aid, rather than to disseminate it.</p> <p>Absence of straightforward clear commitment to license unconditionally at FRAND terms to any interested third party all (IP) knowledge that comes out of the IPCEI project.</p>	Puts eligibility of the project into question	<p>Beneficiaries of support under IPCEI rules for RDI and FID projects must commit to disseminate the results achieved with public funding. Non-IP-protected results must be shared as widely as possible beyond the beneficiary / the sector / the Member State concerned. IP-protected results of the funded projects must be licensed unconditionally based on FRAND conditions beyond the beneficiary / the sector / the Member State concerned. Therefore, include a clear commitment, as a spillover, in clear and non-conditional terms to license (not to merely base negotiations) on non-exclusive and FRAND terms any IP-protected results that will come out of the IPCEI project. Please include such commitments in the appropriate spillover sections of the project portfolio. Please provide tangible commitments to reach out to and advertise such possibility to whoever is interested (including organizations and companies outside of the IPCEI, beyond your Member State and beyond the market sector). Specify the ways, how you would approach such organizations and companies and commit to implement those efforts. Formulate each know-how dissemination spillover as an active positive commitment.</p>
Granularity of figures	Large sums set out in the PP and FGC without sufficient breakdown	Leads to requests for clarification	Provide appropriate breakdowns for all figures used in the PPs and FGC, in particular all cost categories.

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Allocation of costs	Missing information about cost allocation, e.g. whether tools and equipment would be used exclusively for the projects.	Leads to requests for clarification	Include explanations for all figures used in the PPs and FGC, such as allocation of costs.
Eligible costs	PPs and FGC claim depreciation and other costs made during mass production phase as eligible	Lengthens time needed to assess FGC, leads to requests for clarification	The eligible costs are described in the annex of the IPCEI Communication. For RDI and FID projects, only certain costs, which occur during the RDI and FID phase respectively, are eligible, but no costs of the mass production phase are eligible costs.
Structured presentation of costs	Many PPs lack a systematic breakdown of eligible costs per Work Package.	Makes the claimed expenses difficult to reconcile with the categories of costs set out in the annex of the IPCEI communication, leads to further questions.	The eligible costs are described in the annex of the IPCEI Communication. For RDI and FID projects, only certain costs, which occur during the RDI and FID phase respectively, are eligible, but no costs of the mass production phase are eligible costs.
Company internal documents	All PPs lack justification on expected prices, sales volumes, revenue and cost developments and their project's counterfactual scenario based on company internal documents	Causes delays and leads to requests to submit such documents.	Submit as annex to the PP and FGC company internal documents, such as Business Plans, Management Reports, internal studies, analyses, board documents, management reports, market intelligence / studies, where qualitative and quantitative internal decision criteria, e.g. Free Cash Flow, Return on Sales (EBIT / Sales), Return on Capital Employed (ROCE), and the Net present value (NPV) are presented and discussed concerning the envisaged IPCEI project.

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Funding Gap Calculation incomplete	A number of funding gap calculations does not include sales revenues / positive cash flows during the mass production phase.	Puts eligibility of the project into question, leads to requests for clarification	The funding gap refers to the difference between the positive and negative cash flows over the lifetime of the investment, discounted to their current value on the basis of an appropriate discount factor.
Important own contribution	Explanation and calculation to establish the own contribution is missing.	Leads to clarification questions	Each project must involve important co-financing by the beneficiary. Submit a detailed calculation and explanation of the own contribution based on total costs of the envisaged project.
WACC must be explained in detail	Missing information on the company WACC. Claims that the WACC is a company secret and therefore cannot be explained in detail. It also happened that the calculation deviated from the calculation presented by us.	Causes delays and leads to clarification questions	The WACC and all its components must be presented for each project and company. In case the calculation deviates from the Commission’s calculation, such deviations should be explained and justified.
Market failure	Often PPs either include no description of the market failure that makes State Aid necessary for this particular project – just a general repetition of arguments for the IPCEI as a whole – or the arguments mentioned in the PP are not related to market failure.	Leads to requests for clarification	<p>Each project must demonstrate its specific contribution to overcome important market or systemic failures. Avoid high-level explanations, which are detached from the envisaged project.</p> <p>Guidance on market failure can be found in the Framework for State aid for research and development and innovation point 51 and the Guidelines on State aid for climate, environmental protection and energy point 34.</p>

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Counterfactual	<p>The vast majority of PPs neither includes a qualitative assessment of the envisaged project's counterfactual scenario nor the counterfactual's funding gap calculation.</p> <p>The absence of counterfactual scenario is often poorly substantiated and not supported by company internal documents where such 'doing nothing' counterfactual absent the aid was discussed. Sometimes an alternative scenario is described in a rather elusive manner, without supportive evidence of internal discussions about its potential implementation.</p>	Puts eligibility of the project into question, leads to requests for clarification	Each PP must include a comprehensive description of the counterfactual scenario, which corresponds to the situation where no aid is awarded by any Member State. This description must be supported by internal documents, which demonstrate the internal discussion of the counterfactual scenario and a funding gap calculation of the counterfactual scenario.
Aid instrument used	There is no assessment of why less-intrusive forms of aid (soft loans) would not be appropriate	Leads to requests for clarification	Include an explanation and justification about the choice made for a certain aid instrument and why other aid instruments are not appropriate in view of the market failure or other important systemic failures, which it seeks to address.

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Potential distortions of competition	PPs lack an identification and assessment of what the relevant market(s) are that will be affected by the aid. No qualitative and quantitative information about the market shares or market positions of the beneficiary are provided	Puts compatibility of the requested State aid into question, leads to requests for clarification	Provide a qualitative and quantitative assessment of the competitive situation of the beneficiary before and after the envisaged project, including market shares on the relevant product and geographic markets.
Environmental Impact – Do no significant harm	<p>Member States must provide evidence as to whether the project complies with the principle of ‘do no significant harm’ within the meaning of Article 17 of Regulation (EU) 2020/852, or other comparable methodologies.</p> <p>There is regularly no information in the PPs about the individual project’s contribution to the ‘Do no significant harm’ principle. Quantitative claims of CO₂ reduction are often not supported.</p>	Unable to verify environmental benefit of project, requiring additional information to be provided	Explain and justify specifically for the envisaged project its contribution to and compliance with the ‘Do no significant harm’ principle. Provide calculations of CO ₂ reduction, using a common methodology. Benchmark clearly against a baseline scenario and provide any assumptions made.

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