**Project Portfolio**

**Entreprise name**

City, Country

**Work streams “XXX”, “YYY”, etc. in the strategic value chain**

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1. Project Outline
   1. Company Presentation

*Please give a brief description of your company and type of company*

**e2 additional recommendations:**

* Don’t use too many words like “number one”, “leader”, “best in the market”, etc.
* Identify existing markets
* Explain R&D strategy
* Don’t use “we” but explicitly mention the company’s name in all the document
  1. Objectives of the company in the IPCEI in all technical fields it’s involved

*Please give a brief description of the overall objectives of activities in all technical fields you’re involved, linking objectives between technical fields.*

**e2 additional recommendations:**

* Clarify the market intended to be served by the company through the IPCEI in terms of products, potential customers, applications, geographical coverage
* Mention the key potential suppliers impacted by the company’s planned production
* Use a table to summarize the information at the end of the section
  1. R&D Projects Before IPCEI

*Description of the R&D-parts which were necessary for the IPCEI project and that were carried out before start of the project (background).*

**e2 additional recommendations:**

* Indicate in which projects (name, dates, partners, objective, funding) the company was involved before the IPCEI in the same scientific and technological fields as well as its role / contribution / main results
* Indicate in which projects (name, dates, partners, objective, funding) the company was involved before the IPCEI in the same scientific and technological fields as well as its role / contribution / main results
* Use a table to summarize the information at the end of the section
  1. Technology and Challenges – R&D&I Activities within IPCEI in all technical fields it’s involved

*For each WP describe the state of art, the technical locks, the objective and the technical challenge to solve de technical locks.*

* + 1. State of the art

**e2 additional recommendations:**

* For each WP, describe what is the current state of the art as well as the relevant technical KPIs (not costs-related)
* Use a table to summarize the information at the end of the section
  + 1. Technical locks that prevent improvements in the field

**e2 additional recommendations:**

* For each WP, specify what technical obstacles the sector encounters that prevent further improvements in the field (current limits of the state of the art)
* Use a table to summarize the information at the end of the section
  + 1. Objectives and technical challenges in the project

**e2 additional recommendations:**

* For each WP, describe in sufficient detail the objectives / innovations that the company aims at in the IPCEI with the associated technical KPIs (the “what?”)
* For each WP, prove that these objectives / innovations have never been met on the market so far (new to the world)
* For each WP, describe in sufficient detail what activities will be carried out to reach the objectives (the “how?”); they have to bring about fundamental novelty in the light of the state of the art
* Use a table to summarize the information at the end of the section, for example:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **What?** | **KPI** | **How?** |
| WP1 |  |  |  |
| WP2 |  |  |  |
| …… |  |  |  |
| …… |  |  |  |

* 1. First Industrial Deployment (FID)

*For each WP describe the FID investment and linked Opex insisting on the description of beginning of FID (after R&D phases) and the end of FID (before mass production).*

*Cf. FID definition in Guidelines.*

* + 1. Purpose of the FID phase

**e2 additional recommendations:**

* According to the footnote (1) to the annex of the IPCEI Communication, “First industrial deployment refers to the upscaling of pilot facilities, **or** to the first-in-kind equipment and facilities which cover the steps subsequent to the pilot line including the testing phase” (our emphasis); please make your choice in one of the two possibilities
* Explain in detail what the objectives of the FID phase are (the “what?”), provide the start date and the end date
* Explain in detail what activities will be carried out to reach these objectives (the “how?”)
  + 1. Technical challenges in the FID phase

**e2 additional recommendations:**

* According to letter (g) in the annex of the IPCEI Communication, “the industrial deployment [must] follow on from an R&D&I activity and itself contain a very important R&D&I component which constitutes an integral and necessary element for the successful implementation of the project”; prove that the FID phase has a strong R&D content, i.e. explain and quantify as far as possible the RDI efforts needed to overcome the technical challenges expected during the FID (without a strong R&D content, the FID costs will not be eligible to public funding)
* Use a table to summarize the information at the end of the section, for example:

|  |  |  |  |
| --- | --- | --- | --- |
|  | **What?** | **KPI** | **How?** |
| WP3 |  |  |  |
| WP4 |  |  |  |
| …… |  |  |  |
| …… |  |  |  |

* + 1. Transition from the FID phase to the mass production / commercialisation phase

**e2 additional recommendations:**

* Define which KPIs will be used and the associated values to decide that the FID phase is over and the Mass production / commercialisation starts
  + 1. Revenues in the FID phase

**e2 additional recommendations:**

* If the company decides to have revenues during the FID phase, provide detailed, convincing explanations why the company consider that the amount of sales during the FID phase should not be viewed as normal sales / commercial activities; explain the nature of these sales during the FID phase: what kind of products will be sold, to whom and for what purposes?
* Note: typically, samples and testing or feedback sales can be reconciled with the concept of FID under the IPCEI Communication; however, important volumes and revenues of sales typically correspond to commercial activities under the IPCEI Communication; the sales shall not be larger that 30% of steady state commercial sales
  1. Intellectual Property Rights

*IP management principles*

*IP protections principles*

*IP exploitation principles*

* + 1. IP management principles

**e2 additional recommendations:**

* Briefly describe here the company’s general IP management principles
  + 1. IP protection principles

**e2 additional recommendations:**

* Describe here the IP protection principles that will be followed in the IPCEI
  + 1. IP exploitation principles

**e2 additional recommendations:**

* Describe here the IP exploitation principles that will be followed in the IPCEI; please note that the company will be requested to commit to grant licences on IP protected results from the IPCEI on FRAND conditions if it requires a large State aid amount (see below chapter 3 on Spillovers)
  1. Work Plan

*Please describe your work plan in respect to the described work in the Technical Fields (TF) annex.*

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **TF no.** | **WP no.** | **R&D / FID** | **Title** | **Person Months (global)** | **Person Months (R&D&I)** |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | Total PM |  |  |

Table 1: Work Packages (WP) vs. Person Months (PM)

**e2 additional recommendations:**

* Please remember that FID “must allow for the development of a new product or service with high research and innovation content and/or the deployment of a fundamentally innovative production process”; FID costs will be eligible only if FID activities have a strong R&D content
  1. Investment
     1. Tools and Equipment

*Please cluster your investment by technology classification. Please provide also a brief and simple description of 1 or 2 sentences to the table (what is the purpose of the investment?).*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technology**  **Classification** | **No. of Tools** | **Examples of Tools** | **Investment Cost [EUR]** | **Year\*** | **TF no.** | **WP no.** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Total |  |  |  |  |

\*Investment year

Table 2: Overview of investment in tools and equipment

**e2 additional recommendations:**

* The costs of plug & play equipment (i.e. not modified by R&D activities) are not eligible because they are considered as part of mass production equipment (no R&D content)
* Only the depreciation corresponding to the use of the instruments / equipment for the IPCEI activities will be considered eligible cost (R&D or FID)
  + 1. Construction of Buildings/Laboratory

*Please provide a brief and simple description of 1 or 2 sentences to the table (what kind of building? for what purpose?). Please cluster your investment so that the table does not exceed 1 page.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Technology**  **Classification** | **No. of Tools** | **Examples of Tools** | **Investment Cost [EUR]** | **Year\*** | **TF no.** | **WP no.** |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  | Total |  |  |  |  |

\*Investment year

Table 3: Overview of investment in buildings or laboratories

**e2 additional recommendations:**

* Please explain whether the building would be used only for the IPCEI activities or also for other activities / activities carried out after the period covered by the IPCEI
* Only the depreciation corresponding to the use of the building for the IPCEI activities will be considered eligible cost (R&D or FID)

1. Budget
   1. Eligible Costs

*Eligible costs only cover costs made for the purpose and the time span of the IPCEI:*

*• The following costs should be listed in a disaggregate manner:*

*• Costs for each of the R&D activities*

*• Costs for each of the FID activities*

*• And, within the FID costs, the costs of R&D carried out in the FID phase should be mentioned; this could give an idea of the overall importance of the R&D*

*• The cut-off date of the R&D and FID phases should be provided explicitly by each company (The template Excel contains vertical lines, showing these cut-offs, these should be adapted per company)*

*• Eligible costs cover costs up to the end of the FID phase (even if the FID phase goes beyond the national granting period for some companies)*

*• The end result of this step should be one figure: the total amount of eligible costs at the end of the IPCEI, including the FID phase*

*Note: all costs mentioned in the Excel sheet are considered by the Member States as eligible costs under the IPCEI Communication.*

* 1. State Aid

*Indicate the State aid requirement in nominal terms and discounted terms, as well as the anticipated yearly instalments.*

1. Spill-over Effects
   1. Spill-over by non-protected results diffusion

*Publications and communication on IPCEI results*

* 1. Spill-over by IP protected results diffusion

*Kind of licences (rec. Non exclusives FRAND)*

* 1. Spill-over in FID phases

*Open infrastructures for SMES, RTO, start-up.*

1. Other positive effect on the market

Increasing the level of R&D and innovations in Europe. *Description of how the project will increase the level of innovation and R&D in the sector and the European economy and society.*

* 1. Impact of the Project on Employment and New Investments in Europe

*Estimation of the quantitative and qualitative impact of your project on direct and indirect employment and training in European economy and society new investments in Europe.*

* 1. Environmental protection and reduction in energy dependence

*Description of the project influence on environment protection and on the reduction of energy dependence.*

* 1. Coordination problems

*Due to scale and complexity of the IPCEI explain the difficulty to work together particulary with:*

* *RTOs (not the same objective)*
* *SMEs, suppliers and customers (it’s easier to work in customer-supplier logic than in a cooperative)*
* *Competitors and sectors actors*

*Explain the difficulty due to the necessity to coordinate such a project with such divergent interests.*

* 1. Imperfect and asymmetric information

*Explain the risks of the project*

*Explain the difficulty to access to market finance*

*Explain the difficulty to recruit*

* 1. Adequacy of the state aid instrument

*Explain whether the state aid instrument is adequate to correct the market failure:*

* *Grant = coordination default and spill over*
* *Financial instrument = Imperfect and asymmetric information*
* *Recoverable advance = risks taken in the project prior to marketing*

1. Incentive effect
   1. Absence of similar projects

*Explain that there is no similar project in Europe.*

* 1. Start date of the project

*Explain that the project did not start before the aid application.*

* 1. Counterfactual scenario

*Describe explicitly the effect of the state aid incentive effect on your company.*

*Describe what will happen when funding will not be realized for the project. If you would not realize the project, how will your company maintain business capacity?*

*There should also be a counterfactual scenario at the overall IPCEI level, in order to understand what happens if the IPCEI would not take place. A counterfactual at IPCEI level could consist in technology developments taking place slower than with the aided IPCEI.*

*Description & substantiation of the counterfactual scenario at company level:*

*• The counterfactual scenario should be described in sufficient detail. E.g. a mere statement that "the company would not undertake the project as planned in its Member State without the aid" is not sufficient. It should be described in detail if it will not undertake the project at all, or will undertake it but in a different manner/extent, or will possibly undertake it somewhere else. As the IPCEI Communication requires, the intended change must be specified (the change in behaviour which is expected to result from the State aid, that is to say whether a new project is triggered, or the size, scope or speed of a project is enhanced; The change of behaviour has to be identified by comparing what would be the expected outcome and level of intended activity with and without aid).*

*• This description can be in the technological field documents, or, if confidential in nature, in the accompanying company level text document.*

*• It is vital to have sufficient substantiation of the counterfactual,* eg.via *authentic internal company documents, showing that the company faces a clear choice and how the decision on whether to carry out the project is taken. This requirement is in line with the documentary evidence required in RDI State aid cases.*

* 1. Increase in R&D and FID efforts

*Explain and quantify the increase in R&D and FID efforts that are triggered by the State aid (in terms of size, scope, speed, risk, collaborations, etc.).*

1. Elaboration on Terms of the Funding Gap Questionnaire
   1. Main hypothesis of the business plan

*Each company should provide all costs and revenues associated with the investment as a whole and the boundaries of investment should be defined from the perspective of the business investor: the calculation should include all (positive and negative) cash-flows for what the investor regards as the investment project, at the time these cash-flows are to be incurred. It is not enough to only submit the eligible costs. For the purpose of calculating the funding gap, what matters are all the costs (eligible or not) associated with the investment project and all the revenues over the entire lifetime including the mass production phase.*

* 1. Necessity of state aid

*Point 28 of the guidelines*

* 1. Proportionality of state aid

*Point 30 of the guidelines*

*Excel sheet calculations:*

*a) In the absence of alternative project:*

*• If the counterfactual scenario is that there is no alternative project, there is no need for a counterfactual project tab with calculations in the Excel sheet. The Commission will only assess the eligible cost and funding gap calculations for the basic scenario.*

*• Proportionality of aid amount per beneficiary company: two step check of the IPCEI Communication in case there is no alternative project:*

*1) Identify the eligible costs: The possible eligible costs are listed in the Annex of the IPCEI Communication. The aid amount for any beneficiary can in no case exceed 100% of the eligible costs;*

*2) Identify the funding gap.*

*In general, the discounted aid amount corresponds to the funding gap. The aid amount can in no case exceed the eligible costs established in Step 1.*

*b) In case of a counterfactual alternative project:*

*• Where there is a counterfactual alternative project, there is a counterfactual tab in the Excel sheet with full calculation of the net present value of the positive and negative cash flows of the counterfactual project.*

*• Proportionality of aid amount per beneficiary company in the IPCEI Communication in case there is an alternative project:*

*Step 1) Identify the eligible costs in the basic scenario: The possible eligible costs are listed in the Annex of the IPCEI Communication. The aid amount for any beneficiary can in no case exceed*

*100% of the eligible costs;*

*Step 2) Identify the difference between the NPV of the alternative project and the NPV of the aided project in the basic scenario.*

*In general, the aid amount corresponds to this difference. In the Excel sheet, it would be convenient to insert this calculation at the bottom of the basic scenario tab.*

*The aid amount can in no case exceed the eligible costs established in step 1.*

*• The funding gap calculation is to be done consistent with the following methodology:*

*• For the purposes of this IPCEI, it is sufficient to provide the Excel sheet calculations for one scenario, the basic scenario (no optimistic and pessimistic scenarios and respective probabilities needed), provided the company is able to justify in the accompanying text document why this basic scenario is the most probable one.*

*• The funding gap that must be calculated is the funding gap of the investment project (i.e. all investment costs and operating costs) to be made by the company for the purpose of the IPCEI.*

*• The investments made for the IPCEI in R&D and FID by a company will generate revenues.*

*• The funding gap is the difference between discounted positive and negative cash flows over the entire economic lifetime of the investment project, i.e. covering the entire period during which the investments made generate revenues / the products that are produced thanks to programme. The investments are sold on the market. Hence, the funding gap must not be calculated only for the duration of the IPCEI project, which is up to the end of the FID phase, but must also cover the ensuing commercial/mass production phase.*

*• One option is to include in the excel sheet the best estimate projections that the company has for this entire period.*

*• Alternatively, companies could provide data for the explicit forecast horizon of the company and give a residual/terminal value (i.e. net present value of expected cash flow beyond the explicit forecast horizon for the remaining years of the economic lifetime), discounted to the current value. In that case, the number of years of mass production for which data are inserted should be realistic.*

*• Practically, in the Excel sheet, after the data for the FID phase and after the data for the reasonable number of years of mass production, a column should be inserted and contain the terminal value for the costs and for the revenues.*

*• Sales/revenues (positive cash flows): projected sales figures should be used by each company rather than a formula. These should be the figures actually used by the company in its business plan and decision making process. This can be best estimate figures. This data should overwrite the formula embedded in the Excel sheet which calculates sales/revenues as a function of costs, an assumption of idle share and an assumption of gross margin. Only if a company has no sales projections or any best estimate data, and only if it actually uses the formula embedded in the sheet (function of costs, idle share and gross margin) in its business plan and decision making process, should it apply the formula.*

*• Cash flows should normally be discounted using the weighted average cost of capital (WACC) of the company. The firm should provide evidence that the discount factor applied is the actual WACC used by the company (e.g. by internal documents showing the applied WACC for investment analysis). The reason to deviate from the WACC usually applied by the company should be explained in detail.*

*• The end result of this step should be one figure: the amount of the funding gap, labelled as such in the Excel sheet.*

* + 1. Firm’s hurdle rate
    2. Project’s funding gap

*Explain whereas the State aid (expressed in gross grant equivalent for non-transparent aid) is not exceeding the funding gap*

* + 1. State aid intensity
    2. State aid cumulation
    3. Open selection proceeding

1. Limitation of distortion of competition and trade
   1. Market affected by the state aid
      1. Definition of the relevant market(s)

*Describe the product / service that will be commercialised, the competing solutions, the targeted applications, the market segmentation, the geographical subdivisions of the market.*

* + 1. Current Industry Sector

*Description of the market situation (EU and worldwide) in this sector (market share, competitors) and recent trends / evolutions.*

* + 1. Market Situation / Share today and after IPCEI

*Estimate your market situation / share (EU and worldwide) and your competitors’ market situation / share (EU and worldwide) today and after the project will have been finished in a nominal scenario of success.*

* 1. No strengthening or creation of market power
  2. Limiting distortion of dynamic incentives
  3. No maintaining of an inefficient market structure
  4. No effect on location activities

1. Annex to the Portfolio
2. *Funding Gap Questionnaire*
3. *(If necessary) Internal Company Documents substantiating the counterfactual scenario*