european economics

your State aid expertise

www.europeaneconomics.com

european economics
your State aid expertise

The public funding of Important Projects of Common European Interest (IPCEI)

Marc Isabelle
european economics
marc.isabelle@europeaneconomics.com
+33 673 116 109

FEV kick-off meeting -
Aachen, January 30th, 2020

european economics
your State aid expertise

Presentation outline

1. General principles of State aid regulation
2. The State aid notification procedure
3. An overview of IPCEIs
4. The eligibility criteria of an IPCEI
5. R&D / FID / Environmental, energy or transport projects (infrastructure)
6. Spill-overs in the IPCEI regulation
7. Feedback on spill-overs from previous IPCEI
8. Examples of spill-overs
9. Conclusions

General principles of State aid regulation

➢ **State aid = fourth pillar of European competition law**

General principles of State aid regulation

- **State aid are forbidden**

Art. 107-1 Treaty on the Functioning of the European Union (TFEU)

SECTION 2

AIDS GRANTED BY STATES

Article 107

(ex Article 87 TEC)

1. Save as otherwise provided in the Treaties, any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market.

General principles of State aid regulation

- **… unless justified by reasons of general economic development**

Art. 107-3 Treaty on the Functioning of the European Union (TFEU)

3. The following may be considered to be compatible with the internal market:

(a) aid to promote the economic development of areas where the standard of livi
abnormally low or where there is serious underemployment, and of the regions
Article 349, in view of their structural, economic and social situation;

(b) aid to promote the execution of an important project of common European interest or to remedy a serious disturbance in the economy of a Member State;

(c) aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest;

(d) aid to promote culture and heritage conservation where such aid does not affect trading conditions and competition in the Union to an extent that is contrary to the common interest;

(e) such other categories of aid as may be specified by decision of the Council on a proposal from the Commission.

General principles of State aid regulation

➢ **What is the reason for this regulation (since 1957)?**

- Idea that a market-based economy provides the best guarantee for raising living conditions in the EU to the benefit of citizens (lower prices, more variety and better quality, more innovation, …)

- Need to maintain a level playing field for all undertakings active in the Single European Market

- A company which receives government support usually gains an advantage over its competitors, which then have an interest to take action by opposing State aid law

  State aid complaint form

european economics
your State aid expertise

General principles of State aid regulation

➢ The role of the European Commission

The police(wo)man

EC is in charge of ensuring that State aid complies with EU rules:

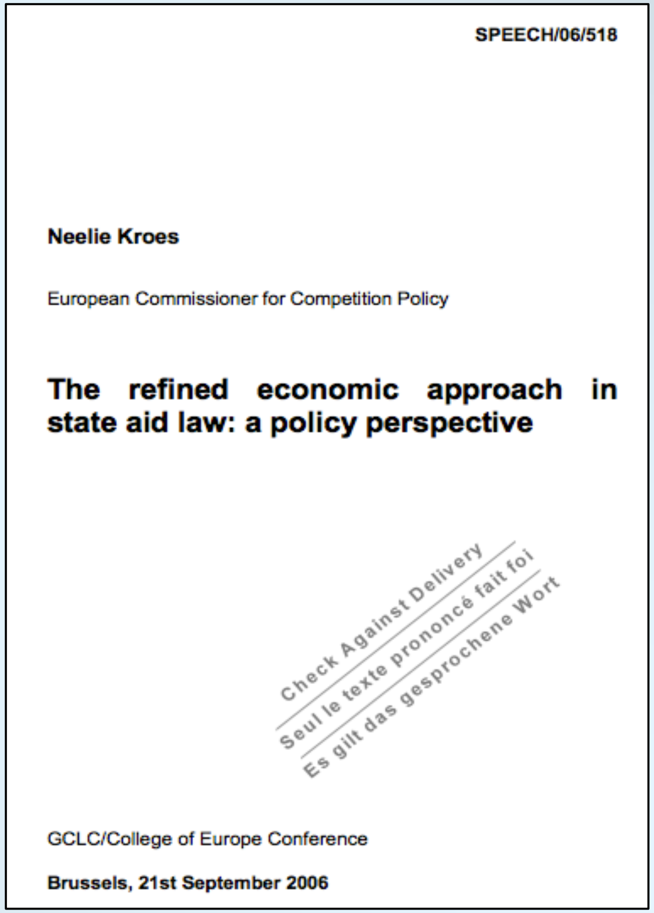
- control
- investigation
- recovery of illegal or incompatible aid
- definition of soft law
- decisional practice

➔ DG Competition is responsible for competition matters
http://ec.europa.eu/competition/index_en.html

General principles of State aid regulation

- **More economics in State aid control since 2007**

DG Competition commissioner Neelie Kroes
State Aid Action Plan (2005-2006)


SPEECH/06/518

Neelie Kroes

European Commissioner for Competition Policy

The refined economic approach in state aid law: a policy perspective

Check Against Delivery
Seul le texte prononcé fait foi
Es gilt das gesprochene Wort

GCLC/College of Europe Conference

Brussels, 21st September 2006

http://europa.eu/rapid/press-release_SPEECH-06-518_en.pdf

General principles of State aid regulation

➢ What is (not) State aid?

State aid = public resources that favour a specific business:

- Subsidies
- Repayable advances
- Soft loans
- Equity
- Guarantee

> Market money

… and that might give an advantage to a given enterprise at the expense of its competitors on the internal market

NB : Enterprise = « any entity engaged in an economic activity, irrespective of its legal form »

General principles of State aid regulation

➤ **State aid or not State aid: combining various public funding sources**

The decisive element in the classification of resources as State resources is not their origin but **whether the State can exercise control over them**

Allocation decision

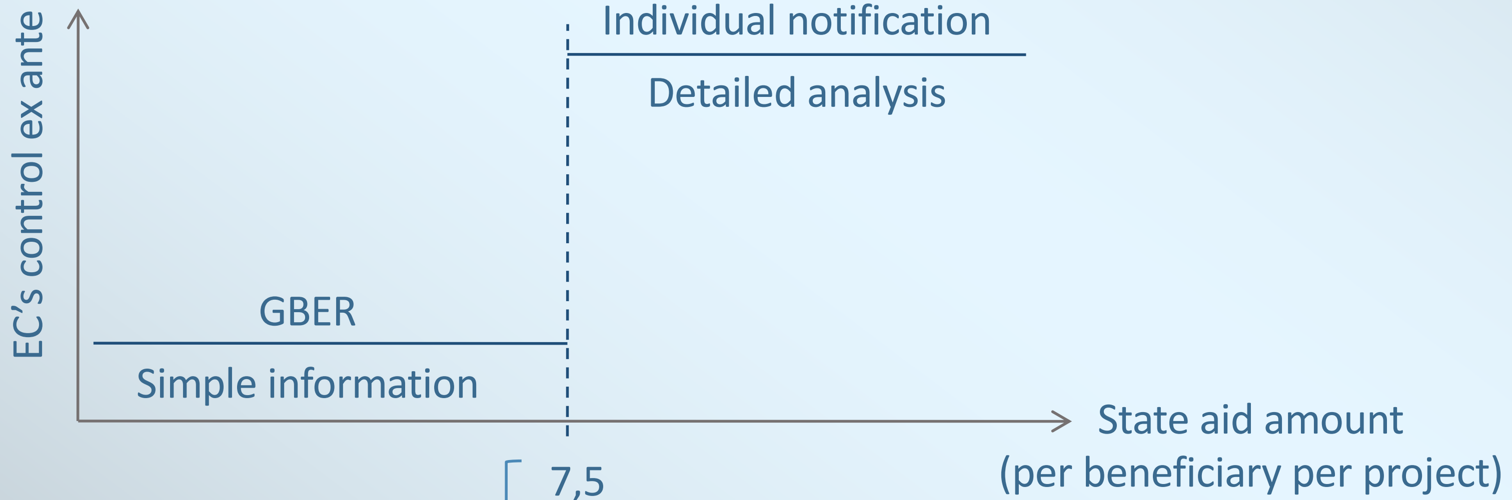
Funding source	European Union	Member State / Public agency	Local government
European Union	Horizon Europe		ERDF
Member State / Public agency		IPCEI	
Local government			Local support

→ Where Union funding is combined with State aid, **only the latter will be considered for determining notification thresholds and aid intensities**

General principles of State aid regulation

➢ **European Commission's control ex ante: a strong threshold effect**

Art. 108-3 TFEU	The Commission shall be informed, in sufficient time to enable it to submit its comments, of any plans to grant or alter aid



e.g. R&D
7,5
15 M€
20

depending on the project's distance from the market

[Art. 4 p.31 GBER (General Block Exemption Regulation)]

General principles of State aid regulation

➢ **GBER: a large safe harbour (since 2014)**

General Block Exemption Regulation
(Ref. N° 651/2014 of 17 June 2014)

State aid for research and development and innovation
(Ref. 2014/C 198/01 of 27 June 2014)

State aid for environmental protection and energy 2014-2020
(Ref. 2014/C 200/01 of 28 June 2014)

Regional aid
(Ref. 2013/C 209/01 of 23 July 2013)

State aid to promote risk finance investments
(Ref. 2014/C 19/04 of 22 January 2014)

Training aid
(Ref. 2009/C 188/01 of 11 August 2009)

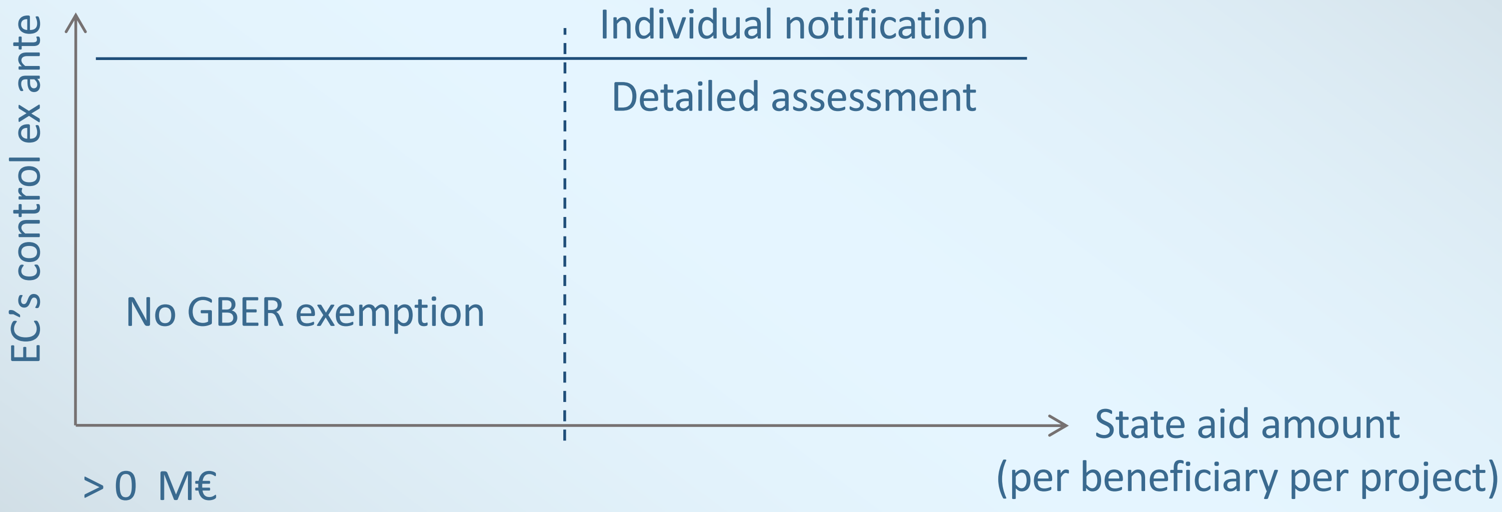
Out of GBER

State aid to promote the execution of important projects of common European interest
(Ref. 2014/C 188/02 of 20 June 2014)

State aid for rescuing and restructuring non-financial undertakings in difficulty
(Ref. 2014/C 249/01 of 31 July 2014)

The State aid notification procedure

➢ **European Commission's control ex ante: no threshold effect for IPCEIs**



→ The individual notification process is part of the overall IPCEI life-cycle

The State aid notification procedure

➢ **The balancing test for compatibility assessment**

The Commission considers a State aid measure to be compatible if and only if its positive economic effects overweight its negative economic effects

Balancing test

Positive effects

- objective of common interest
- market failure
- incentive effect
- appropriateness
- necessity & proportionality

Negative effects

- distorting dynamic in- -centives
- creating market po- -wer
- maintaining inefficient market structures
- location effects

→ Tools derived from economic theory to assess whether the aid is likely to create wealth for the European Union

The State aid notification procedure

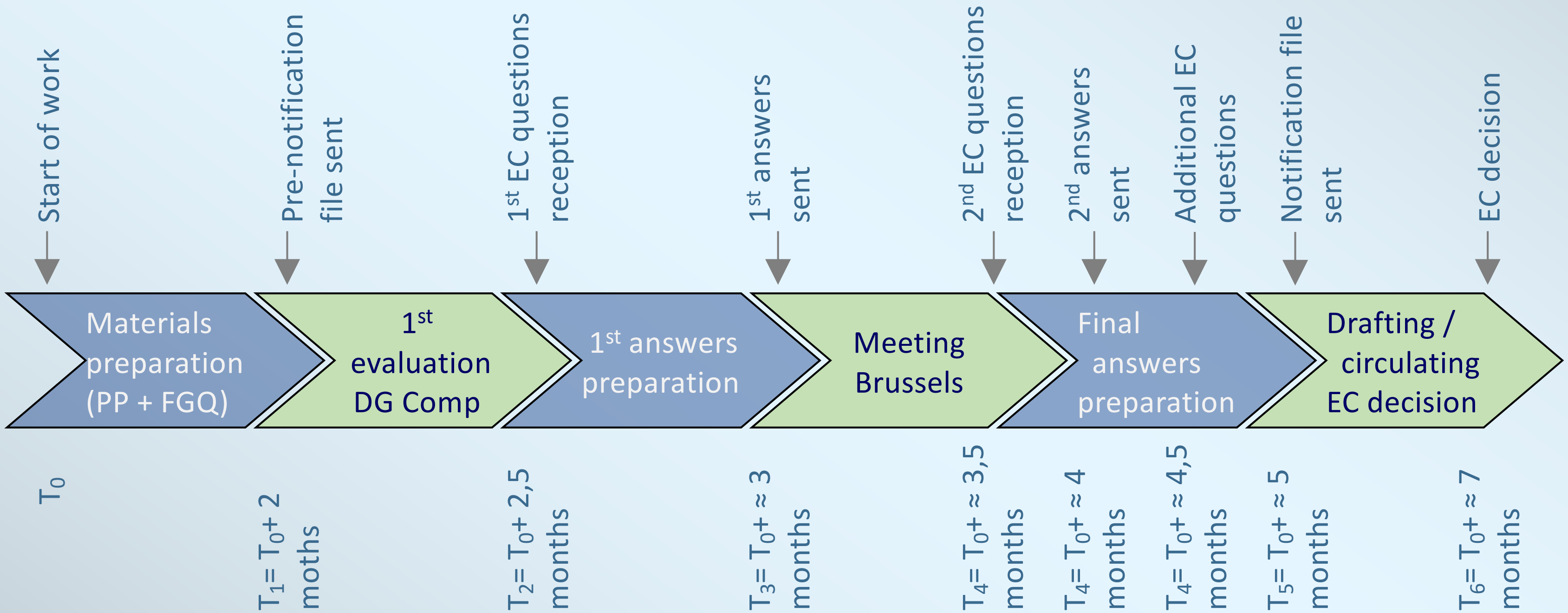
➢ **A very important milestone**

Art. 108-3 TFEU	The Member State shall not put its proposed measures into effect until this procedure has resulted in a final decision
Art. 108-2 TFEU	If the Commission finds that aid is not compatible with the internal market, it shall decide that the Member State shall abolish such aid

→ Member States will not be allowed to pay a single euro of aid before the decision of the European Commission => **timing of procedure is critical**

The State aid notification procedure

➢ **A relatively short and pressurised process**

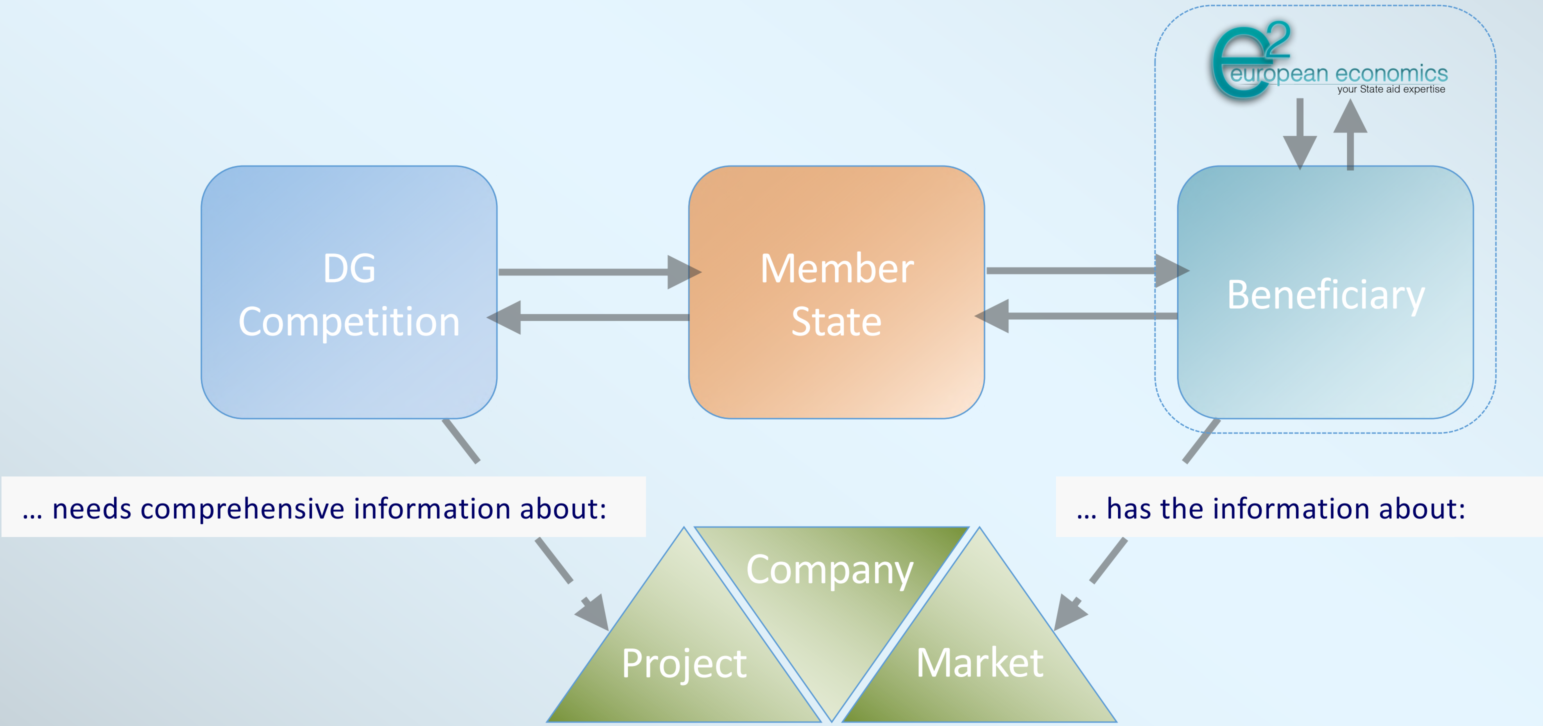


→ IPCEI process moves on under **strong political pressure**

→ Outcome = **maximum State aid authorisation** (no actual support)

The State aid notification procedure

➢ A clear organisation



→ NB: a company receiving public funding in several Member States can go through a single notification procedure; Member States must coordinate closely

The State aid notification procedure

➢ **A lot of drafting & brain juice**

Notification file Business plans	80 pages 15 versions	"Project portfolio" "Funding Gap Questionnaire"
EC 1st set of questions Business plans	45 questions 8 versions	45 additional pages
EC 2nd set of questions Business plans	30 questions 4 versions	30 additional pages
EC additional questions Business plans	25 questions 3 versions	25 additional pages

The State aid notification procedure

➢ **Anticipation is key**

The notification procedure should be prepared as soon as possible & connected to the investment decision

E.g. proofs required by EC regarding necessity & proportionality of State aid =

- Record of decision by Executive committee stating that a minimum of (say) € 100 millions is required to decide upon the investment
- Business plan supporting the above decision

→ Materials should be prepared before the aid application

An overview of IPCEIs

- **Three preceding IPCEI experiences**

Fehmarn Belt Fixed Linkproject (2015)
A 19 km immersed tunnel between Denmark and Germany – Notification for reasons of legal certainty following complaints from ferry operators alleging that Danish State had granted unlawful State aid – € 8.7 Bil. investment – € 2.8 Bil. State aid (guarantee, loan and capital)

IPCEI on Microelectronics (2018)
A project comprising R&D and First Industrial Deployment activities – 29 direct participants in France, Germany, Italy and the United Kingdom – € 7.75 Bil. budget – € 1.75 Bil. State aid (mainly direct grants)

Summer IPCEI on Batteries (2019)
A project comprising R&D and First Industrial Deployment activities – 18 direct participants in Belgium, Finland, France, Germany, Italy, Poland and Sweden – € 8.2 Bil. budget – € 3.2 Bil. State aid (mainly direct grants + claw-back mechanism)

An overview of IPCEIs

➢ What is an IPCEI?

- An Important Project of Common European Interest is a very-large scale integrated project
- It must involve companies from several Member States
- It must contribute in a concrete, clear and identifiable way to one or more objectives of the European Union
- It must have a significant impact on competitiveness and sustainable growth

The IPCEI provides **a unique opportunity to fund with public money:**

- **Capex & Opex for R&D activities / First Industrial Deployment**
- **construction of infrastructure in Environmental, Energy and Transport projects**

→ Very important size (order of magnitude = € billions)
→ Long term (~ 5 years +)
→ Extensive partnership to structure strategic value chains in Europe

An overview of IPCEIs

➢ A new funding tool for a reinforced European industrial policy

IPCEI = unique European regulatory framework for the funding of industrial activities by EU Member States (European Commission's communication on IPCEI)

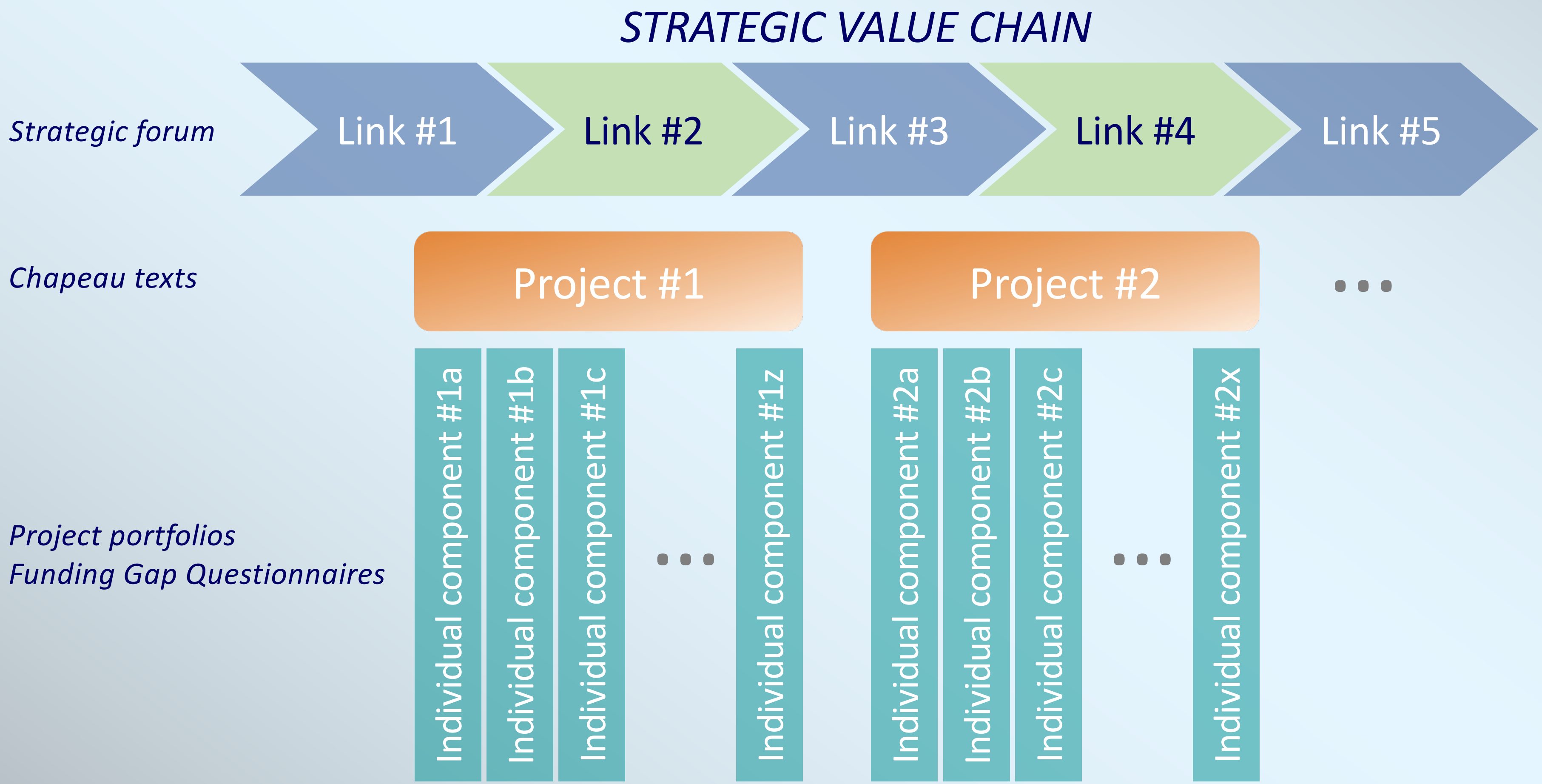
The European Commission is involved in the design, selection, management structure and funding of IPCEIs (DG Grow, DG Move, DG Ener, DG RTD, JRC, DG Comp)

→ IPCEI = a financing tool that is foreseen to become more important in the near future **for economic sectors open to strong global competition and contributing to the strategic independence of the European Union**

→ The Strategic Forum for IPCEIs identified eight strategic value chains as best candidates for IPCEIs: Microelectronics (2018), Electric batteries (2019), Clean, Connected and Autonomous Vehicles, Smart Health, Low CO_2 emissions indus--try, H_2 technologies and systems, Industrial Internet of Things, Cybersecurity

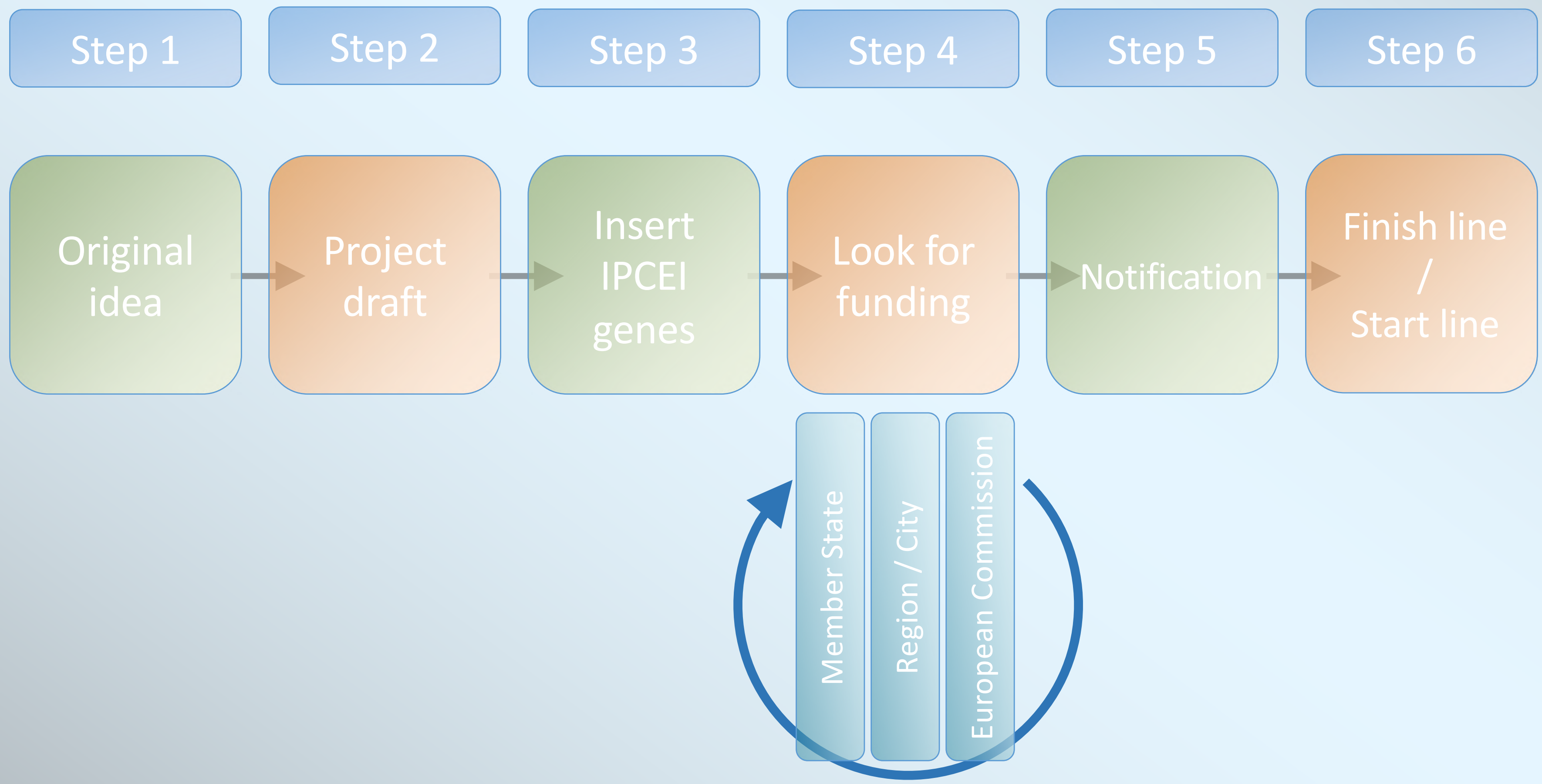
An overview of IPCEIs

➢ **An IPCEI has three interdependent layers**



An overview of IPCEIs

➢ **A way through the thicket from the idea to the start of activities**



An overview of IPCEIs

➢ The role of public authorities

Preparation | Application | Notification

Talk with:

- *European Commission*
- *Other Member States*
- *Local authorities*
- *Candidates*

- *Issue calls*
- *Assess applications*
- *Select participants*
- *Decide funding*

Talk with:

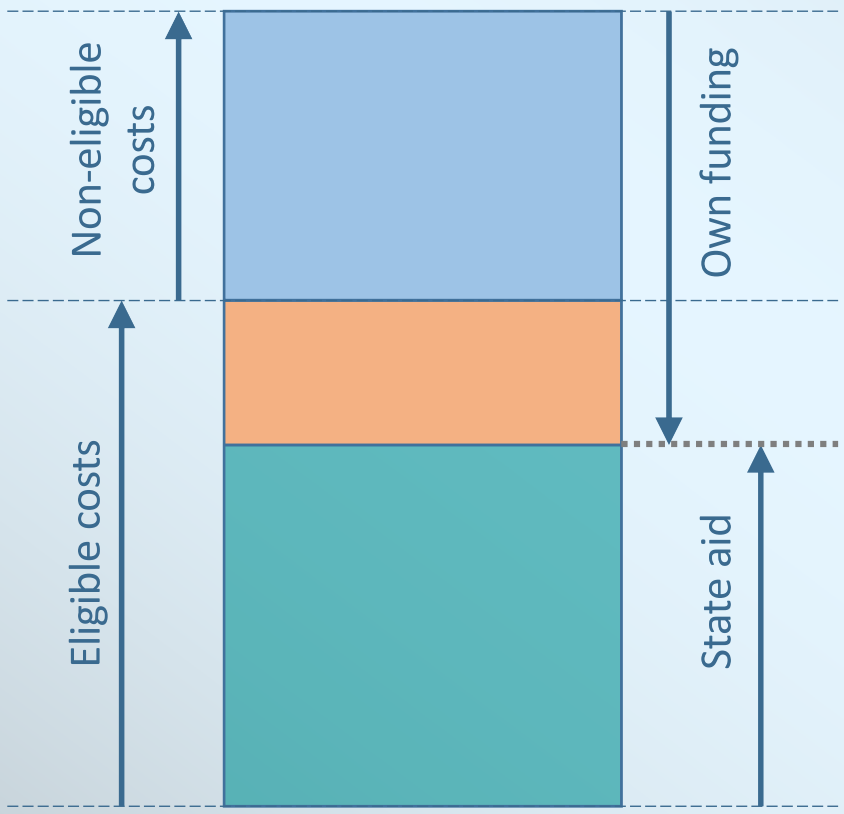
- *European Commission*
- *Other Member States*
- *Local authorities*
- *Candidates*

→ National governments have a key role: **supporting, coordinating and notifying the IPCEI**

European economics — your State aid expertise

An overview of IPCEIs

➢ **Financial engineering: eligible & non eligible costs, State aid intensity**



State aid intensity
up to 100 % of eligible costs

An overview of IPCEIs

➤ Categories of eligible costs

The company may **receive State aid for the following expenses**

- R&D / Energy Transport Environment projects
  - Feasibility studies
  - Costs of instruments & equipment (depreciation within the project lifetime)
  - Costs of acquisition / construction of buildings (depreciation within the project lifetime)
  - Costs of patents / intangible assets / contractual research
  - Costs of materials / supplies
  - Personnel / administrative costs including overheads (only for construction not exploitation)

- First Industrial Deployment
  - Capital expenditures (excluding the share allocated to mass production => **transition point from FID to mass production should be looked at carefully**)
  - Operational expenditures which relate to the RDI component (incl. personnel & administrative costs, overheads)

The eligibility criteria of an IPCEI

➢ Sources of soft law

An IPCEI is any type of project that ticks all the IPCEI eligibility boxes set in "Part 3. Eligibility criteria" of the following document:
"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 Ref. 2014/C 188/02" The IPCEI communication

This IPCEI communication has been complemented in 2018 (during the notification of the IPCEI on Microelectronics) by several Commission's IPCEI non papers:

- on antitrust
- on integration
- on proportionality
- on RDI content
- on spillover effects

The eligibility criteria of an IPCEI

➢ What are the eligibility criteria?

List of criteria which the Commission will use to assess the nature and the importance of such projects for the purposes of the application of Article 107(3)(b) of the Treaty

Eligibility criteria:
3.1. Definition of a project
3.2. Common European interest
  3.2.1. General cumulative criteria
  3.2.2. General positive indicators
  3.2.3. Specific criteria
3.3. Importance of the project

→ Only two pages in the IPCEI Communication

The eligibility criteria of an IPCEI

- **How much interconnected should the activities be?**

Either one project (e.g. Fehmarn Belt Fixed Linkproject)

… or a group of projects inserted in a common structure, roadmap or programme (e.g. IPCEI on Microelectronics & IPCEI on Batteries) where individual components must be complementary and necessary for the achievement of the European objectives

→ The demonstration of the integration of individual projects in the IPCEI is performed through **the preparation of a "Chapeau text" (after the selection of participants at national levels)** where all companies and Member States bring their contribution; this document is shared among participants and is non-confidential

NB: the "project" refers to the IPCEI globally speaking, not to the individual components

The eligibility criteria of an IPCEI

➢ **How to tick the "Common European interest" box?**

The project must contribute in a concrete, clear and identifiable manner to one or more Union objectives and must have a significant impact on competitiveness of the Union, sustainable growth, addressing societal challenges or value creation across the Union

→ Not a big issues for Hydrogen & Fuel cells which are contributing (i) to EU strategy for competitive, sustainable and secure energy, (ii) to EU policy framework for climate and energy, (iii) to the European Energy Security Strategy, etc.

The project (the IPCEI) must involve more than one Member State

But to tick the "Common European interest" box, the benefits of the project must also not be limited to the undertakings or to the sector concerned but must be of wider relevance and application to the European economy or society through **positive spillover effects which are clearly defined in a concrete and identifiable manner**

The eligibility criteria of an IPCEI

➢ The European Commission should be stakeholder

The European Commission, along with Member States, should be involved in:

- The design of the project
- The selection of the project
- The governance structure of the project
- The funding of the project

→ **The IPCEI on Hydrogen could be larger than the previous ones by an order of magnitude**; it will be necessary to use every possible funding sources (national, regional, local, European Union, banks incl. EIB and equity…)

The eligibility criteria of an IPCEI

➢ **The project must be large, composite and very risky**

Large means several € billions (based on previous experiences)

Composite means:

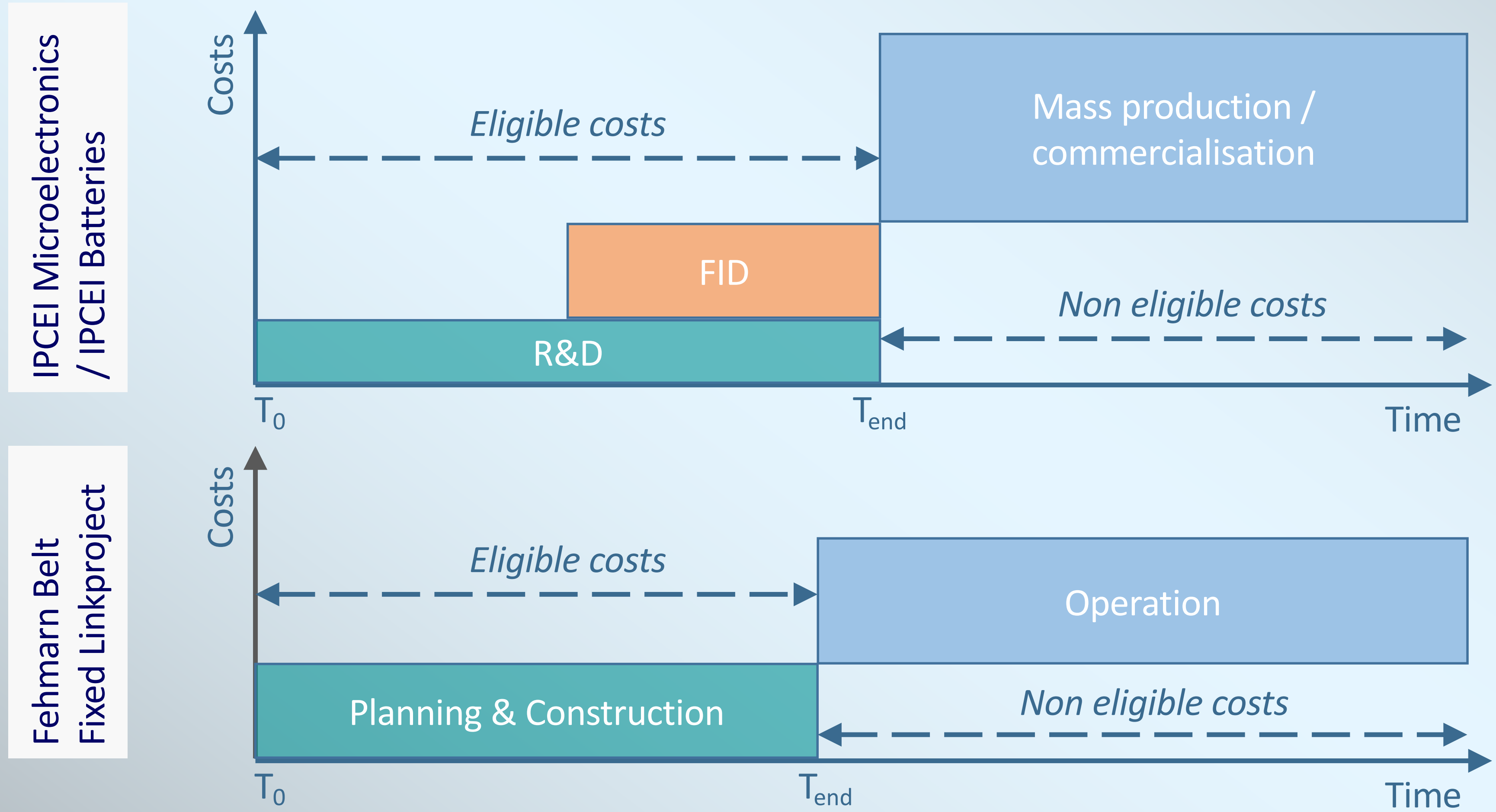
- collaborative interactions in terms of number of partners (tens according to previous experiences)
- involvement of organisations of different sectors (all along the strategic value chain according to previous experiences)
- the involvement of undertakings of different sizes (the Commission highly values the participation of SMEs along with LEs)

Very risky means:

- a very considerable level of technological risk (e.g. not business as usual R&D and innovation)
- a very considerable level of financial risk (e.g. large investments and uncertain markets, long pay-backs)

R&D / FID / Energy Transport Environment

- **Three IPCEIs so far, two families**



european economics
your State aid expertise

R&D / FID / Energy Transport Environment

➢ The specific eligibility criteria of an IPCEI

Any company could cherry-pick one, two or three of the following activities to contribute to an IPCEI:

- "R&D&I projects must be of **a major innovative nature or constitute an important added value in terms of R&D&I in the light of the state of the art** in the sector concerned" (point 21. IPCEI Communication)

- "Projects comprising of industrial deployment 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. **Regular upgrades without an innovative dimension** of existing facilities and the development of newer versions of existing products **do not qualify as IPCEI**" (point 22. IPCEI Communication)

- "Environmental, energy or transport projects must either be **of great importance for the environmental, energy, including security of energy supply, or transport strategy** of the Union or contribute significantly to the internal market, including, but not limited to those specific sectors" (point 23. IPCEI Communication)

european economics
your State aid expertise

R&D / FID / Energy Transport Environment

➢ How to make R&D&I activities eligible?

1. Describe the **state of the art** in the sector concerned, in detailed scientific & technical terms + with KPIs (section 1.4.1 of the Project Portfolio)

2. Describe the **technical locks** which prevent further improvements in the sector (section 1.4.2 of the Project Portfolio)

3. Describe the objectives of the R&D&I activities (incl. KPIs) and explain in detailed technical terms **how the company plans to reach the targets** (section 1.4.3 of the Project Portfolio)

→ 20 pages recommended **(1/4th of the Project portfolio)**; more than half of the Commission's questions point at section 1.4 on innovativeness

R&D / FID / Energy Transport Environment

➢ How to make FID activities eligible?

1. 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 => make your choice and describe the purpose of the FID activities (section 1.5.1 of the Project Portfolio)

2. Describe the technical challenges in the FID phase and explain how the company plans to overcome them (section 1.5.2 of the Project Portfolio)

3. FID does not include **mass production nor commercial activities**; the costs of these activities are **not eligible to public funding** => describe the KPIs and the associated values that will trigger the transition from FID (a facility which smokes and sparks and has a lot of scrap) to mass production / commerciali--sation (a fully-efficient industrial facility) (section 1.5.3 of the Project Portfolio)

→ 10 pages recommended **(1/8th of the Project portfolio)**; more than a quarter of the Commission's questions point at section 1.5 on FID

R&D / FID / Energy Transport Environment

➢ **How to make environmental, energy or transport projects eligible?**

1. Hydrogen & Fuel cells, as innovative technologies for energy storage and production, contributes to a better integration of intermittent electricity sources (wind, solar)

2. Hydrogen & Fuel cells, as a innovative technologies for the transportation of energy from areas of production to areas of consumption, contributes to a better integration of the European energy market

3. Hydrogen & Fuel cells, as innovative powering technologies for heavy duty vehicles, commercial vehicles, boats, trains, … contributes to cleaner transportation means

→ Regarding personnel and administrative costs specifically, only **those that are incurred during the construction of the infrastructure are eligible to public funding**

R&D / FID / Energy Transport Environment

➢ How to make environmental, energy or transport projects eligible?

1. Hydrogen & Fuel cells, as innovative technologies for energy storage and production, contributes to a better integration of intermittent electricity sources (wind, solar)

2. Hydrogen & Fuel cells, as a innovative technologies for the transportation of energy from areas of production to areas of consumption, contributes to a better integration of the European energy market

3. Hydrogen & Fuel cells, as innovative powering technologies for heavy duty vehicles, commercial vehicles, boats, trains, … contributes to cleaner transportation means

→ Regarding personnel and administrative costs specifically, only **those that are incurred during the construction of the infrastructure are eligible to public funding**

The spillovers of an IPCEI

➢ **The results of an IPCEI shall benefit the European society at large**

"**The benefits of the project** must not be limited to the undertakings or to the sector concerned but **must be of wider relevance and application** to the European economy or society **through positive spillover effects** (such as having systemic effects on multiple levels of the value chain, or up- or downstream markets, or having alternative uses in other sectors or modal shift) which are clearly defined in a concrete and identifiable manner" (point 17. IPCEI Communication)

→ Companies receiving State aid for an IPCEI must **commit to disseminate the results they will obtain** in the project; commitments shall be proportionate to the risk posed on competition by the company's public funding

NB: Spillover commitments also provide some form of protection against law suits attempted by third parties that do not participate in the IPCEI

The spillovers of an IPCEI

- **Three main categories of spillovers**

1. Spillover by diffusion of non-IP protected results (section 3.1 of the Project Portfolio)
   - Conferences and scientific publications
   - Workshops & events
   - PhDs and post-doc fellows
   - Education
   - Participation in European collaborative research programs
   - Press releases and media activities

2. Spillover by diffusion of IP protected results (section 3.2 of the Project Portfolio)
   - Commitments to grant IP licenses on FRAND conditions

3. Spillover in the FID phase (section 3.3 of the Project Portfolio)
   - Open access to pilot and FID lines to research organisations and SMEs

→ Spillovers must be clearly defined in a concrete and identifiable manner

Necessity & Proportionality of IPCEI State aid

➢ **The State aid must be necessary to decide upon the investment**

"The aid must **not subsidise the costs of a project that an undertaking would anyhow incur** and must not compensate for the normal business risk of an economic activity. Without the aid the project's realisation should be impossible, or it should be realised in a smaller size or scope or in a different manner that would significantly restrict its expected benefits"

(point 28. IPCEI Communication)

If the company carries out the project anyhow, you'd better keep the public money for another purpose

→ Analysis of the necessity based on a nominal business plan = **the Internal Rate of Return without State aid must be below the hurdle rate** (or the **NPV must be negative = Funding Gap**)

Necessity & Proportionality of IPCEI State aid

➢ **The State aid must be proportionate i.e. limited to the minimum amount**

"[…] the Commission will verify that the aid amount does **not exceed the minimum necessary for the aided project to be sufficiently profitable**, for example by making possible to achieve an IRR corresponding to the sector or firm specific benchmark or hurdle rate. Normal rates of return required by the beneficiary in other investment projects of a similar kind, its cost of capital as a whole or returns commonly observed in the industry concerned may also be used" (point 30. IPCEI Communication)

The public support shall not generate windfall profits

→ Analysis of the proportionality based on a nominal business plan = **the Internal Rate of Return with State aid must be equal to the hurdle rate**

Necessity & Proportionality of IPCEI State aid

➢ The Funding Gap Questionnaire

The Funding Gap Questionnaire is a standard business plan of the project built so as to make the identification of eligible costs possible:

- one section for R&D eligible costs
- one section for FID eligible costs
- one section for infrastructure eligible costs
- one section for mass produc° / commercialis° / exploit° **non eligible costs**

The duration shall be chosen so as to capture all the value of the investment

→ The **maximum State aid requirement** can be calculated as a fixed proportion of eligible costs every year (aid intensity) so as to achieve the targeted IRR

Necessity & Proportionality of IPCEI State aid

➢ The claw-back mechanism

In order to guarantee the proportionality of State aid during the project's operation, a claw-back mechanism can be put in place by which **the company shall repay "extra" profits to the Member State** during the project's operation

<u>First experience with the IPCEI on Batteries:</u>

Every five years, the Funding Gap is compared to the actual State aid disbursements; a share of the surplus, if any, is clawed-back to the Member State

→ No feedback on the claw-back mechanism so far

IPCEI on Hydrogen

➢ Conclusions

1. IPCEI Microelectronics & IPCEI Batteries 1st and 2nd of-a-kind => strong learning process; highly valuable information and knowledge can be derived from preceding experiences
2. Go cherry-picking the type of activities you would like to promote in the IPCEI
3. Look for complementary public funding sources
4. Very strong pressure on timing (“hurry up” = dominant project management tool)
5. Notification procedure should be anticipated as soon as possible (e.g. gathering of proofs)
6. Constraint on State aid amount could arise from a narrow definition of eligible costs, not so much from the Funding Gap analysis
7. Commitments to spillovers could be the focus of a specific WP on dissemination activities

Thank you for your attention!