<u>Disclaimer:</u> These replies have been drafted for the sole purpose of facilitating the preparation of a possible IPCEI on Hydrogen Technology and Systems. Statements and opinions given in this note are tentative and do not necessarily represent the only possible interpretation of current EU legislation. This Guidance does not bind the Commission services and does not prejudge any future Commission assessment.

Coordinating input from member states

(1) Does DG COMP prefer that all participating MS use the same format throughout the process (open calls, proposing concrete projects, etc.)? Is DG COMP willing to provide guidance on the proposed formats?

Point 39 of the IPCEI Communication states that: "the selection of beneficiaries through a competitive, transparent and non-discriminatory tender will be considered as a positive indicator". In that respect, if they are competitive, transparent and non-discriminatory, the COM recognizes "calls" to have a similar effect as tenders. Therefore, the COM cannot impose a common language requirement to MS' calls. In particular, MS' calls may differ having regard to the type of project(s) along potentially different segments of the value chain each MS may want to support, the objectives pursued, their financing needs and the administration of each MS. Of course this is something that MS could discuss between them in designing a common IPCEI. Please note however, that several MS have already launched calls in relation to supporting hydrogen. It is for the MS to coordinate and ensure integration and if they wish, they could coordinate at least the basic conditions of such calls.

(2) Should a pan-European road map for hydrogen projects describe the period towards a final goal (i.e. climate neutrality in 2050) or only the envisioned projects that would fall under the IPCEI?

The roadmap is a project tool, which DG COMP suggested to MS to facilitate the selection and integration of the individual company projects and MS. It should be linking the envisioned projects that would fall under a possible hydrogen IPCEI and demonstrate how they are integrated and based on a coherent systemic approach, the envisaged cooperation between companies and projects functions, including a time plan, so that the whole integrated IPCEI contributes significantly to the EU's energy, environment and/or transport objectives. This would also be helpful in case the MSs would decide to design more than one IPCEI, as this will enable them to demonstrate the differentiation and complementarity between those subsequent IPCEIs. Coordination of efforts of MS for an IPCEI are necessary and of utmost importance.

The COM Communication for a Hydrogen strategy of 8 July 2020includes concrete Europe-wide aims and milestones for achieving decarbonisation and climate goals by shifting from fossil-based hydrogen to renewable hydrogen. This strategy should serve as a basis to develop the road map for a possible IPCEI in (clean) hydrogen.

Timelines

(3) What timeline is foreseen between pre-notification and actual notification for IPCEI Hydrogen project(s)? Could the current need for green recovery impact that timeline?

There is neither a legal nor any other deadline set by the Commission for a possible IPCEI on hydrogen technologies and systems. IPCEI funding stems from Member States' budgets and it is up to the MS to design an IPCEI and define when to allocate funding for a possible hydrogen IPCEI.

Please note that IPCEIs are considered as a priority for the Commission and as such, they are assessed swiftly. However the speed of their approval is very dependent on the quality of the MS submitted 'chapeau' document outlining the relevant market failures and justifying the eligibility including the integration of the IPCEI, as well as on the quality of the company project portfolios and financial data on eligible costs, funding gaps, the necessity and proportionality of aid and the form of aid proposed. We expect that MS relevant authorities screen the quality of all company documents before submitting them to avoid delays in their assessment and multiple rounds of requests for information and clarifications.

Investments in the context of an IPCEI in hydrogen would actually be seen as contributing to the economic and green recovery of the EU so one would expect that, if anything, the timeline between pre-notification and notification will not be negatively impacted subject to the quality requirement mentioned above.

Therefore, the phase between pre-notification and notification is used to assess the submitted projects and clarify all open issues in areas as indicatively mentioned above. The Notification phase would then ideally be rather short allowing the Commission to finalise its assessment and adopt the relevant decision.

Experience also shows that MS have to coordinate timing and decision-making as the joint moving of MS significantly facilitates the process.

(4) Should MS be able to join an existing IPCEI after the notification has been approved?

There is nothing in the rules preventing additional MS to join an already approved IPCEI. However, the MS and their projects joining later must clearly demonstrate the additionality they would bring to an already integrated IPCEI, the new projects should be fully integrated with the already approved projects and collaborations with the existing participants should be clearly demonstrated as well as how they contribute together towards the achievement of the common European objective(s). Timing is also very important. Joining at a late stage when most of the existing projects have already substantially progressed, might raise issues with regard to demonstrating additionality, integration and real collaborations. The governance structure of the IPCEI may provide if and how this can be done as it could impact the timeline and on-going collaborations within the IPCEI.

Overall, it is fair to say that joining later an already approved IPCEI would be far more demanding compared to joining from the beginning. Since the IPCEI process is open to all interested MSs (e.g. through the forum, alliances and other fora etc.) all interested MSs should be aware and participate from the start.

(5) Would it be possible to align different subsidies (Innovation Fund, CEF etc.) in the run-up to a notification process as some projects are dependent on multiple subsidies?

Point 20 (f) of the IPCEI Communication considers it a positive indicator where the project involves cofinancing by a Union fund. Whether a participating company has applied to a relevant call by such other EU centrally managed funds, or it has received support or approval from such EU funds (including EIB financing) should be clearly mentioned in its project portfolio. It should also mention whether its IPCEI project builds on the results of a prior project already supported by other EU funds.

Eligible IPCEI-projects

(6) What constitutes an 'environmental, energy or transport' project and how does this differ from RD&I or FID projects?

An 'environmental, energy or transport' project is a project which contributes to environmental, energy or transport policies or strategies of the EU. For example the Fehmarn Belt project, which contributes the EU's TEN-T objective constitutes a transport project. Please note that several footnotes mainly on page 3 of the IPCEI Communication refer to relevant policy Communications, but those date from 2014 and more recent policies/strategies may have been adopted in the meantime.

As stated in point 23, to qualify as IPCEI, such projects must be of <u>great</u> <u>importance</u> to achieving the environmental, energy or transport policy of the EU. Projects under point 23 are distinct from projects under points 21 and 22. There is nothing preventing a company's overall project from encompassing sub-projects falling under points 21, 22 and 23.

Please be aware that in addition to compliance with points 21 and/or 22 and/or 23 of the IPCEI Communication, a project also has to comply with all other conditions laid down in the IPCEI communication, such as the eligibility criteria as listed in section 3 of the IPCEI Communication.

(7) Given that mass production is defined as a boundary for granting state aid: how can we define the moment we reach mass production in the case of green hydrogen projects (hydrogen production or production of electrolysis stacks for example)?

The Annex of the Communication clarifies the eligible costs for calculating aid. Further guidance can be found in previous IPCEI decisions¹. Some of the letters in this Annex relate only to points 21/22 of the IPCEI Communication due to the very nature of the activities (RDI and FID). As regards the Funding Gap projections, all revenues and expenditures should be projected for the entire lifetime of the project.

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¹ E.g. SA. 46578 IPCEI on Microelectronics-Germany, SA.

(8) It is clear that focus should be on green hydrogen, but at the same time the Commission has yet to define the exact requirements for additionality and spatial and temporal correlation for green hydrogen production. So in the meantime: how to define the types of hydrogen eligible for state aid under IPCEI?

The published COM Communication for a Hydrogen strategy and roadmap include concrete references to the types of hydrogen in line with the Green Deal decarbonisation objectives, see here.

Resides the above in line with point 19 of the Communication 'The project must respect the principle.

Besides the above in line with point 19 of the Communication, 'The project must respect the principle of phasing out of environmental harmful subsidies...'.

In addition, in line with point 3 of the Communication, IPCEIs make it possible... to overcome **important** market or systemic failures and societal challenges which could not otherwise be addressed.

The Commission is not convinced that for example grey hydrogen faces market failure in a manner that deserves aid.

(9) What qualifies as green hydrogen, according to the Commission? Is the procurement of green electricity sufficient for the hydrogen produced to be qualified as green hydrogen?

As mentioned in the Commission's hydrogen strategy renewable hydrogen is hydrogen produced through the electrolysis of water (in an electrolyser, powered by electricity), and with the electricity stemming from renewable sources. Such hydrogen (often referred to as 'green hydrogen') has very limited emissions across its full life cycle. Renewable hydrogen may also refer to hydrogen produced through the reforming of biogas (instead of natural gas) or biochemical conversion of biomass which – combined with carbon capture – could create negative emissions, or through the pyrolysis of biomass.

As regards the mere procurement of green electricity: using it to produce green hydrogen in a way as described above is acceptable. Using green electricity for methane steam reforming does not qualify the resulting hydrogen as green. In this context, please refer also to the EU hydrogen strategy for further guidance.

(10) Will there be a minimum of capacity of electrolysers to qualify for IPCEI status?

Please refer to the EU Hydrogen strategy, where it is mentioned that at least 6 GW of renewable hydrogen electrolysers should be installed in the EU by 2024, 40 GW of renewable hydrogen electrolysers by 2030 and 500 GW by 2050 in order to reach the climatic and Green Deal objectives. This will help to determine whether the project can be considered to render an important contribution to the Union's objectives.

Eligible costs

(11) Have the three existing IPCEI only received CAPEX-support or also partly OPEX-support?

The Annex to the IPCEI Communication provides details of the eligible costs. Some limited OPEX – support is possible. For example letters f and g refer to certain OPEX and also potentially under letter d.

(12) Is a pre-purchased volume of electricity (paid upfront, delivered over a number of years) regarded as a Capital Expenditure, eligible for a CAPEX subsidy?

No. There is an objective distinction between operating and capital cost, generally following good accounting practice. The type of operating or capital cost does not change regardless whether it is prepaid or not.

(13) Are the cost of electricity seen as operational cost if the renewable production installation is not connected to the electricity grid and market i.e. there is an exclusive direct connection between a wind-farm and the power-to-gas installation?

See also reply to question 12 above. The type of cost does not change, regardless whether the electricity produced by a wind-farm is directly linked to a power-to-gas installation or not.

If a company producing hydrogen constructs its own renewable electricity generation plant, investment costs for the construction of the plant would probably be considered as eligible cost. The aid amount however would be determined on the basis of the overall project's funding gap during its lifetime.

(14) When considering the benefits for the calculation of the funding gap, will the Commission require common assumptions for the duration time of main equipments (such as electroysers)?

The question seems to relate to the depreciation method and period in relation to equipment and in particular electrolysers. The Commission normally would accept a reasonable depreciation method as accepted by national accounting or tax rules and used in the independently audited accounts of the company. Manufacturers' specifications may also be used in case of suspected manipulation. Yet for similar types of investments, the Commission would expect to see the project developers use same or very close depreciation periods.

Possible state aid exemptions under IPCEI status

(15) How does the IPCEI status impact the EU regulation regarding the award of scarce resources, such as land? E.g. although not allowed under current EU regulations, is it possible that an IPCEI status makes it possible to award scarce resources, such as land?

Contribution in kind (e.g. in the form of provision of land below market price) could be a form of aid, but it is at the discretion of the MS. However there is no such thing as an "IPCEI status" that would allow to override any other EU regulations.

(16) Can Capital Expenditure for an offshore wind farm and grid connections to shore, feeding into an electrolyser, be subsidized under IPCEI rules when either: a) 100% of the electricity is used to produce hydrogen, or b) electricity is partially used to produce hydrogen?

For a) Yes, for b) yes, to the extent it is used for hydrogen production.

(17) Can hydrogen for e.g. mobility be exempted from paying excises?

The EU hydrogen strategy recommends to facilitate the use of hydrogen in the transport sector through the upcoming Sustainable and Smart Mobility Strategy, and in related initiatives, including by encouraging more favourable taxation of hydrogen and corresponding vehicles. The Commission will address the use of hydrogen in the transport sector in the upcoming Sustainable and Smart Mobility Strategy, announced in the European Green Deal and due to be presented before the end of 2020.

This is a regulatory issue, which you should refer to your tax and energy authorities. This issue might also be an issue relevant in the framework of the upcoming revision of the Energy Taxation Directive.

As already mentioned above, tax exemption over the lifetime of the facility/equipment does not belong to the list of eligible costs under the Annex to the IPCEI Communication. Other State aid provisions might be more relevant (State aid rules on aid to energy and environmental protection).

Combining different subsidies

(18) Is there a specific order that developers need to take into mind when applying for the national financial instruments agreed under an IPCEI and EU funding instruments, e.g. is it necessary to file application for national subsidies prior to an application for one of the calls of the EU ETS Innovation Fund?

No specific order applies. In both cases account will be taken of what was obtained under the other instrument. Also to disclose the different types of funding applied for (State Aid including ESIF, Horizon, CEF, EIB, EFSI etc.). As mentioned in point 20 lit. f of the IPCEI Communication, co-financing from a Union Fund for an IPCEI project is considered as general positive indicator. When combining funds, attention must be paid to cumulation rules and to incentive effect.

(19) What is the relationship between IPCEI and the Just Transition Fund? Can projects, receiving national subsidies through an IPCEI, also apply for the Just Transition Fund?

Yes. See reply to question 18 above.

(20) What are the rules concerning public co-investments and public co-financing (alongside private investments / financing)? To what extent are price guarantees allowed under IPCEI and how is the level of state aid established?

Price guarantees are not foreseen under the IPCEI Communication. Other regulatory or State aid guidelines might be more relevant. However, price guarantees will be taken into account in order to assess the business plan of the specific projects and their funding gap.