



BRIEFING FOR STEFANO GRASSI

H2MED – MEETING WITH ENAGAS

12 January 2023, Brussels

SCENE SETTING

The project H2Med (formerly called ‘BarMar’) is an interconnection project for hydrogen infrastructure between Portugal, Spain and France submitted for PCI status by 4 different gas transmission operators: Enagas (Spain), GRTgaz and Terega (France), REN (Portugal). The next list of PCIs is to enter into force in early 2024.

It was agreed at the level of Leaders in the presence of the Commission President in the Alicante summit on 8/9 December 2022.

The project includes onshore pipelines, offshore pipelines and compressor stations. The project includes 2 cross-border connections, namely Celorico-Zamora (PT-ES) and Barcelona-Marseille (ES-FR).

The main part of the project is a hydrogen interconnection project between Spain and France which will be ready in 2030, enabling the transport of 2 Mt/y of H₂ (i.e. a 10% of the expected EU consumption targets by 2030: 20 Mt/y) and contributing to the emergence of one of the major import corridors via the Mediterranean identified in the REPowerEU plan. The main part of the project concerns a 455 km, 28 inch diameter offshore pipeline connecting Barcelona and Marseille, reaching a maximum depth of 2560 m.

The other interconnector is developed alongside the interconnection between Portugal and Spain, consisting of a 248 km onshore pipeline (162 km in Portugal, 86 km in Spain) of 28” diameter as well as a compressor station in Zamora. The interconnection will have a capacity of 0.75 Mt/yr of H₂.

Welcome words

- The REPowerEU plan to provide 10 million tonnes of domestic renewable hydrogen and 10 million tonnes of imported renewable hydrogen will require infrastructure to bring large volumes of hydrogen to the end-consumers.
- This will require several hydrogen corridors from the South of Europe towards demand centres and industrial clusters inland.
- We welcome the H2Med as it has the potential to ensure the crucial connection between the Iberian Peninsula and France for transporting renewable hydrogen towards North-Western and Central Europe.
- To be effective, the pipeline will need be complemented in time by a hydrogen grid on the Iberian Peninsula and by a South-North connection in France and further on. I would be interested in knowing from you the plans of Enagas to create a hydrogen backbone in Spain, with capacity to integrate in the grid and transport 2 Mt of hydrogen through Spain towards France.

PCI and interconnection angle

- H2Med and complementary projects have indeed been proposed as part of the on-going selection of Projects of Common Interest under the TEN-E Regulation.

The Commission will work with Member States, Regulators and project promoters in regional groups to come up with the first list of Projects of Common and of Projects of Mutual Interest under the revised TEN-E Regulation by the 4th quarter of 2023 (entry into force in early 2024). *On potential CEF funding*

- The Connection Europe Facility (CEF) is one key source of EU funding for energy infrastructure. In order to be eligible for a CEF grant, the H2Med project would first need to be selected as a project of common interest (PCI) under the TEN-E Regulation. The first Union List of Projects of Common and of Mutual Interest will be final by early 2024. A CEF call for selected projects would follow in the course of 2024.
- Moreover, CEF funding, like all Union funding, for PCIs is a last resort. The CEF budget is limited, and not all PCIs receive CEF funding. In fact, most PCIs should be commercially viable. The TEN-E Regulation already provides other advantages, procedural and regulatory, to PCIs.
- CEF grants are awarded through recurring calls for proposals, where several PCIs compete for a limited call budget, meaning that not all proposals will be selected for funding.

Hydrogen Bank

- Another potential source of financing can come through the future European Hydrogen Bank, via support to hydrogen producers and consumers, who will in turn pay the transport fees of using the H₂ corridors.
- The key objectives of the European Hydrogen Bank is i) to cover the cost gap between renewable and fossil hydrogen, whilst leveraging a maximum amount of private financing into subsidized projects and ii) to contribute to early market formation by providing price/cost discovery.
- In terms of scope, the Hydrogen Bank would be a temporary mechanism designed to complement already existing public funding resources for development of the production, use and infrastructure of hydrogen at both EU and MS level.
- The European Hydrogen Bank will be a financial policy instrument (not as a physical entity) which de-risks and creates bankable hydrogen projects, ensures competition on EU-level and avoids over-subsidizing projects;
 - will include a domestic and an international leg of operations;

- Our intention is to develop the final design of the Hydrogen Bank during 2023, including as regards the adoption of legal proposals.
- While the Bank will initially focus on supporting domestic hydrogen production, our REPowerEU objectives also include the import of 10 Mt/year of renewable hydrogen from Third countries by 2030. I understand that with its 2 Mt/year capacity (roughly 66 TWh/y), H2Med will still have some capacity left (around 45 TWh/y) to transport H2 which is not produced in the Iberian Peninsula. How would the imported H2 reach the Iberian Peninsula? Are there any plans of interconnections with the North of Africa or are these volumes expected to arrive by sea? How feasible would the scalability of the H2Med, should additional domestic production or imports be available?

Background

Project outline

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It is still unclear how the hydrogen will be transported inside the Spanish network (i.e. if and which ones sections of the Spanish gas network will be refurbished to become H2-dedicated pipelines) and similarly, which infrastructure plans have GRTgaz and Terega to transport the hydrogen as from Marseille.

Alternative routes

There is no other comparable South-North corridor connecting the Iberian Peninsula with North-Western/Central Europe. We received PCI applications for a South-North hydrogen corridor/backbone within Italy. We see another South-North corridor emerging in South-Eastern Europe, albeit much smaller in capacity. We have not received project proposals for hydrogen interconnectors from Africa as part of the on-going PCI-PMI selection, although according to the numbers presented by the three governments, the H2Med would have an excess of transportation capacity in 2030 (only 45 TWh/y of the 66 TWh/y capacity of the interconnector with France would be filled with H2 produced in the Iberian peninsula -see slide 4 in the PPT in annex, where 33 TWh represents 1 Mt of H2).

The preliminary cost estimation of the project is around 2.5 billion EUR. The project is in pre-feasibility stage, construction should start in 2026, and the focus is now on allocating funding for first phase studies (15 million EUR).

Earlier competing project

Before the announcement of the H2Med project, Snam and Enagas had signed a MoU aiming for a feasibility study on a sub-sea pipeline from Barcelona to Tuscany designed to transport either natural gas or hydrogen. The pipeline capacity under assessment was in the range of 10-15bcm/year of natural gas. Our understanding from discussions with the operators is however that this project was abandoned/frozen, provided good progress with H2Med.

H2 potential of the Iberian Peninsula

The Commission is about to kick off a study to assess the H2 potential of the Iberian Peninsula and related infrastructure needs, steered by the High-Level Group Southwest Europe.

Potential CEF funding

If the Barmar / H2Med project is included in the list of projects of common interest (PCIs) established under the TEN-E Regulation, this would bring a series of advantages: First, the project would benefit from accelerated authorisation procedures and procedural simplification (notably a one-stop shop in the Member States concerned). Second, depending on the applicable regulatory regime, it could also benefit from the regulatory tools that the TEN-E Regulation offers to facilitate the implementation of PCIs: the cross-border cost allocation procedure (to share construction costs among the relevant Member States according to the respective benefits the project procures them), or the granting of regulatory incentives by national regulatory authorities (NRAs).

Third, it would be eligible to apply for EU funding under the Connecting Europe Facility (CEF). However, CEF grants, like all Union grants, are a “last resort” option to support PCIs after other support measures provided by the TEN-E Regulation have been exhausted. Given that the CEF budget is limited (EUR 5.8 billion over the whole MFF period 2021-2027, of which approx. EUR 1.6 billion have already been committed to other projects), only a small number of PCIs will therefore receive funding, and only after applying for a CEF call where their proposals will be competing with funding proposals from other PCIs for a call budget that is lower than the sum of all grants requested.

Among the highest CEF grants awarded for PCIs so far, there are the following (with the year of the call in brackets): a total of EUR 1.2 billion for the synchronisation of the Baltic States (several calls); EUR 579 million for the French-Spanish electricity interconnector Biscay Bay (2017); EUR 531 million for the French-Irish electricity interconnector Celtic (2019); EUR 656 million for the Cypriot-Greek electricity interconnector EuroAsia (2021).

Attachment: PowerPoint on H2Med used for the Alicante Summit at Leaders’ level, 8/9 December 2022



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