Country	Directive 2024/1788 transposition status (June 2026)	Regardless of the Directive's transposition, is there a national regulatory framework for the hydrogen sector in place?	Framework in place per topic										
			Unbundling	Certification of network operators	Network tariffs	Third party access	Balancing rules	Interoperability rules	Network planning	Monitoring	Congestion management	Dispute settlement	Consumer protection
AT	In preparation[1]	No	No framework in place										
BE	In preparation	Yes	✓[3]	✓		✓[4]	✓ [5]		✓ [6]				
BG	Partially transposed	No data	No framework in place										
CY	No data	No data	No data										
CZ	Partially transposed	Yes[11]		✓					✓				
DE	Partially transposed[13]	Yes	✓[14]	✓	✓	✓[15]	✓	✓	✓[16]				✓[17]
DK	Public consultation completed	Yes[22]	✓	✓	✓	✓				✓			
EE	In preparation[25]	No	No framework in place										
ES	In preparation[27]	Yes[28]	✓[29]	✓[30]					✓[31]				
FI	Public consultation completed[34]	No[35]	No framework in place										
FR	Not started	No	No framework in place										
GR	No data	No	No data										
HR	No data	No data	No data										
HU	Partially transposed[37]	No	✓	✓		✓	✓		✓				
IE	No data	No data	No data										
IT	Transposed	No	No framework in place										
LT	Public consultation completed	No[39]	No framework in place										

Country	Directive 2024/1788 transposition status (June 2026)	Regardless of the Directive's transposition, is there a national regulatory framework for the hydrogen sector in place?	Framework in place per topic										
			Unbundling	Certification of network operators	Network tariffs	Third party access	Balancing rules	Interoperability rules	Network planning	Monitoring	Congestion management	Dispute settlement	Consumer protection
LU	Not started	Yes	✓		✓	✓[41]			✓				
LV	NA	No	No framework in place										
MT	No data	No data	No data										
NL	Public consultation completed[46]	Yes[47]			✓	✓			✓				
PL	Partially transposed[49]	Yes[50]	✓[51]	✓		✓			✓	✓			
PT	Partially transposed[54]	Yes[55]							✓[56]				
RO	No data	No data	No data										
SE	In preparation[58]	No	No framework in place										
SI	Public consultation completed[60]	No	No framework in place										
SK	Public consultation completed[62]	No	No framework in place										

Country	NRA competences per topic											HNO	
	Unbundling	Certification of network operators	Network tariffs	Third party access	Balancing rules	Interoperability rules	Network planning	Monitoring	Congestion management	Dispute settlement	Consumer protection	Designated	Certified
AT	No framework in place											No[2]	
BE	✓	✓	✓[7]	✓[8]	✓	✓	✓	✓	✓			Fluxys Hydrogen SA, 100% owned by Fluxys Belgium, but distinct entity.[9]	
BG	No framework in place											No[10]	
CY	No data												
CZ	✓	✓	✓[12]		✓	✓	✓	✓	✓		✓	No	
DE	✓	✓	✓[18]	✓[19]	✓		✓				✓[20]	No[21]	
DK		✓	✓	✓[23]				✓		✓		No[24]	
EE	NAP											No[26]	
ES	✓[32]											No[33]	
FI	NAP											No	
FR	NAP											No	
GR	No data											No	
HR	No data											No[36]	
HU	No data											No[38]	
IE	No data											No	
IT	✓	✓	✓	✓	✓		✓	✓	✓		✓	No	
LT	NAP											No[40]	

Country	NRA competences per topic											HNO	
	Unbundling	Certification of network operators	Network tariffs	Third party access	Balancing rules	Interoperability rules	Network planning	Monitoring	Congestion management	Dispute settlement	Consumer protection	Designated	Certified
LU	✓		✓[42]	✓[43]			✓	✓			✓	Creos Luxemburg appointed as HNO[44]	No
LV	NAP											No[45]	
MT	No data											No	
NL	No framework in place											No[48]	
PL	✓	✓		✓[52]			✓	✓		✓	✓	GP GAZ-SYSTEM S.A. appointed as HNOby law[53]	
PT	ERSE is designated as the NRA for the renewable gas, natural gas and hydrogen market; detailed competences for the hydrogen market are not specified											No[57]	
RO	No data											No	
SE	NAP											No[59]	
SI	NAP											No[61]	
SK	NAP											No	

1 Expected within 2026. While the NRA, E-Control, already has the regulatory competence for hydrogen, until the transposition of the Directive, the NRA can only apply the provisions of the Hydrogen and Decarbonised Gases Regulation.

2 Both gas TSOs perform hydrogen infrastructure development functions and/or act as representatives in ENNOH.

3 Ownership unbundling is currently foreseen. HTNOs cannot have any link with a company whose activities are in production and/or supply of any kind of CH4, H2 or electricity.

4 Regulated third party access is mandated before 2033.

5 The key principle behind the balancing model is to incentivize Network users to keep their balancing portfolio in balance. Three balancing positions are defined : - Balancing group position - Balancing portfolio position - System position More here: https://www.creg.be/fr/publications/etude-f3104

6 A first indicative investment plan as been published by Fluxys hydrogen. This indicative plan has not been approved by any authority. A formal Network Development Plan is being drafted. It should be approved by the Minister for Energy by Q2 2027. On NDP, H2 law must be adapted to be aligned to G&H package (cf. NRA's competences)

7 The NRA develops the tariff methodologies and approves the tariffs

8 The NRA has competences on the access conditions and on capacity allocation.

9 The process is completed; opinion of the EC issued in April 2026 and final decision by the NRA, CREG, in May 2026.

10 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.

11 In the first phase of the transposition, hydrogen is treated like natural gas.

12 The NRA sets the tariffs

13 Parts of the Directive have already been implemented with regard to specific provisions in the areas of unbundling, network tariffs, third-party access, balancing rules, and network planning, primarily, though not exclusively, concerning the core network for hydrogen.

14 Basic model is that of ownership unbundling (§ 8 EnWG draft), if network operators do not opt for alternative unbundling model (ISO § 9 EnWG draft; ITO § 10 EnWG draft).

15 Regulated third party access is mandated before 2033.

16 A biannual integrated NG/H2 NDP is foreseen.

17 It is already an NRA competence. Please verify that it should not be ticked.

18 Please verify. BNetzA sets the ramp-up tariff for the core network. Regulated network operators of H2-networks outside the core network set tariffs themselves without approval but based on approved costs. Until now, there is no regulated H2- infrastructure outside the core network.

19 The NRA has competences on the access conditions and on capacity allocation.

20 As of now, consumer protection is part of the competencies. In contrast to gas and electricity, this does not include default supply or dispute settlement.

21 Existing H2 networks are non-regulated, none of the gas TSOs is currently operating as HNO. There are multiple potential future HNOs, but none have yet been certified or officially designated. Several are already involved in the preparation of the NDP though a coordination service.

22 Denmark has established the regulatory framework required due to an early implementation of the EU Gas and Hydrogen Package. However, a number of detailed market rules are still under development.

23 The NRA has competences on the access conditions and on capacity allocation.

24 Energinet (Danish TSO) and Evida (Danish DSO) are planning to operate as HNO. There is an officially designated HNO (subsidiary of the certified power and gas TSO), but it has not yet been certified. The certified gas TSO has applied for certification.

25 In Estonia all gas/hydrogen matters related to the transposition of the directive and the establishment of a national regulatory framework for the hydrogen market are still part of an ongoing process (on Ministry of Climate level), which is expected to be completed only in the second half of this year or towards the end of the year.

26 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.

27 In Spain, at present, the Ministry of Ecological Transition and Demographic Challenge is working on the transposition of Directive 2024/1788. Some provisions on hydrogen are already included in the normative framework.

28 In Spain Directive (EU) 2024/1788 is in the process of being transposed by the Ministry of Ecological Transition and Demographic Challenge. The regulatory framework on hydrogen has only been partially developed in Spain. In Spain, the Ministry provisionally designated Enagás Infraestructuras de Hidrógeno, S.L.U. as HNO and the Spanish representative of ENNOH. The Royal Decree-Law 8/2023, in its additional provision number 9, required the provisional HNO to present a non-binding proposal for a ten-year hydrogen backbone infrastructure plan in 2024, which is still being analyzed by the Ministry. Enagás Infraestructuras de Hidrógeno, S.L.U., by Resolution of 14 August 2024 of the Secretary of State of Energy, may deploy the network hydrogen PCIs on an unbundling regime until its definitive designation as HNO. CNMC must yearly assess the legal unbundling requirements. The first assessment was made and CNMC´s report is available at: https://www.cnmc.es/sites/default/files/6073083.pdf .Royal Decree-Law 8/2023 (see additional provision 9 ("Disposición adicional novena")). Link: https://www.boe.es/buscar/act.php?id=BOE-A-2023-26452 .Resolution of 14 August 2024 of the Secretary of State of Energy. Link: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2024-19047 CNMC has developed Circular 2/2025, of 9 of April, establishing the methodology and conditions for access and allocation of capacity in the natural gas system. Link: https://www.boe.es/eli/es/cir/2025/04/09/2/con CNMC has developed Resolution of 13 June 2025 approving the procedure for the management of applications and the contracting of the connection of renewable and low carbon production plants to the natural gas network. (It refers to hydrogen blending and biomethane). Link: https://www.boe.es/eli/es/res/2025/06/13/(3)/con Circular 2/2025 and Resolution of 13 June 2025 aim to promote and facilitate the access / connection of renewable and low carbon gases production plants to transmission or distribution networks. In Spain, in the first process of capacity allocation for the injection of hydrogen in the natural gas grid (blending), 12,64 GWh/day have been allocated, with 35 assigned requests. As already mentioned, in Spain, at present, the Ministry of Ecological Transition and Demographic Challenge is still working on the transposition of Directive (UE) 2024/1788. Recently, Royal Decree-Law 7/2026, approved on 20 March 2026, assigned CNMC competences to temporarily develop tasks included in Article 16 of Regulation (EU) 2022/869 (Enabling investments with a cross-border impact). However, up to date CNMC has not received any information/investment request from TSOs to this respect. Link: https://www.boe.es/eli/es/rdl/2026/03/20/7/con In Spain, the percentage of hydrogen that can be injected in the network is limited to 5% mol, with a 2% limit at IPs and network areas near sensitive facilities (compression stations, underground storages, some consumers' facilities, etc.). Link: https://www.boe.es/eli/es/o/2025/02/13/ted181

29 In Spain, a full regulatory framework on unbundling has not been elaborated yet, there is the following development: Enagás Infraestructuras de Hidrógeno, S.L.U., by Resolution of 14 August 2024 of the Secretary of State of Energy, may deploy the network hydrogen PCIs on an unbundling regime until its definitive designation as HNO. CNMC must yearly assess the legal unbundling requirements. The first assessment was made and CNMC´s report is available at: https://www.cnmc.es/sites/default/files/6073083.pdf According to CNMC´s report on monitoring of fulfillment of the unbundling criteria of Enagás Infraestructuras de Hidrógeno S.L.U. of

3 July 2025 (INF/DE/146/24), it is accredited than Enagás and Enagás Infaestructuras de Hidrógeno S.L.U. have implemented measures oriented to accomplish and guarantee that Enagás Infaestructuras de Hidrógeno acts as an horizontally separated legal person from Enagás Transporte in the provisional exercise of the functions for the development of the hydrogen backbone in the framework of European PCIs, according to the Agreement of the Council of Ministers of 30 July 2024, made public by Resolution of 14 August 2024 of the Secretary of State for Energy. However, CNMC makes certain recommendations to implement new actions or keep the existing ones that are included in the report.

30 In Spain, the Ministry provisionally designated Enagás Infraestructuras de Hidrógeno, S.L.U. as HNO and the Spanish representative of ENNOH.

31 The Royal Decree-Law 8/2023, in its additional provision number 9, required the provisional HNO to present a non-binding proposal for a ten-year hydrogen backbone infrastructure plan in 2024, which is still being analyzed by the Ministry.

32 CNMC must yearly assess the legal unbundling requirements. The first assessment was made and CNMC´s report is available at: https://www.cnmc.es/sites/default/files/6073083.pdf. Recently, Royal Decree-Law 7/2026, approved on 20 March 2026, assigned CNMC competences to temporarily develop tasks included in Article 16 of Regulation (EU) 2022/869 (Enabling investments with a cross-border impact).

33 The Ministry provisionally designated Enagás Infraestructuras de Hidrógeno, S.L.U. as the HNO and the Spanish representative in ENNOH. The Royal Decree-Law 8/2023 requires the provisional HNO to present a non-binding proposal for a hydrogen backbone NDP in 2024, which is under the Ministry's analysis. Enagás Infraestructuras de Hidrógeno, S.L.U. may deploy the network hydrogen PCIs on an unbundling regime until its definitive designation as HNO. The NRA issued its first assessment of the legal unbundling requirements.

34 Draft legislations for transposition of the directive are issued for public consultation until 8.7.2026. After that the draft legislations will be set under consideration by the Parliament in the fall 2026.

35 The RFNBO regulation refers to the RED III and not to the H2/Gas Directive so we chose NO. Please verify.

36 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.

37 The final hydrogen-related regulatory provisions are set out in the Act on Gas Supply (GET: https://uj.jogtar.hu/#doc/db/62/id/A0800040.TV/). The following provisions are in place: Unbundling, Certification of network operators, Third party access, Balancing rules, Network planning, Monitoring, Other: Licensing, Oversight of hydrogen blending into gas network

38 There is an officially designated HNO (gas TSO), but it has not yet been certified. It was designated for the purpose of the nomination to ENNOH.

39 There is no specific regulatory framework for the hydrogen, however both existing infrastructure (oil refinery, fertilizer producer) and newly built one are being developed under existing legal framework.

40 There is currently no acting HNO. The Gas TSO is expected to assume this role once the relevant hydrogen legal framework is in place and the necessary certification and designation procedures have been completed.

41 Regulated third party access is mandated before 2033.

42 The NRA develops the tariff methodologies and approves the tariffs

43 The NRA has competences on the access conditions.

44 Creos Luxembourg Hydrogen was officially designated in 2025 with an entry into operation on 1 December 2025.

45 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH.

46 Expected transposition completion by end of 2026.

47 Hynetwork Services (HNS) is tasked with a Service of General Economic Interest (SGEI) to develop and operate the national hydrogen network in the Netherlands. Linked to the subsidy provided to this task there are several rules in place like TPA, a regulated tariff set by the minister of Economic Affairs and Climate, and the obligation for an annual and more annual investment plan to be approved by the minister https://zoek.officielebekendmakingen.nl/stcrt-2025-44652.html

48 There is no officially designated or certified HNO. Hynetwork Services has been tasked with a Service of General Economic Interest to develop and operate the national hydrogen network.

49 Regulatory framework for the operation of the hydrogen market is established (definitions necessary for the development and functioning of the hydrogen market, NRA competences, as well as rights and obligations of market participants).

50 NRA competences also include: designation of network operators (system operators), licensing, regulatory sandbox, imposing financial penalties

51 Ownership unbundling is currently foreseen. There can be derogations from unbundling rules for geographically confined networks.

52 The NRA has competences on the access conditions and on capacity allocation.

53 The gas TSO by the operation of law became the only HNO in Poland on 17 June 2025 for the period until 4 August 2026, extended by law until 4 August 2036. Certified by URE (NRA) on 9 June 2026 after the EC had issued an opinion pursuant to Article 14 of Regulation (EU) 2024/1789 and Article 71 of Directive (EU) 2024/1788. The HNO has been granted an exemption from the horizontal unbundling requirements under Article 69 of Directive (EU) 2024/1788.

54 Some provisions of the Directive (EU) 2024/1788 have been transposed by DL 94/2026. A proposal for the draft law was finished by the working group in the first quarter of 2026. The transposition act is currently in the legislative process.

55 In Portugal, there are some provisions related to the hydrogen sector, before the transposition of the Directive 2024/1788. The Decree-Law 79/2025 of 21 May (https://diariodarepublica.pt/dr/detalhe/decreto-lei/79-2025-918823455) and Order n.º 6750-C/2025 of 23 July (https://diariodarepublica.pt/dr/detalhe/despacho/6750-c-2025-922258608) assigned temporary competences for licensing, regulation and planning/ operation of "renewable gas, natural gas and hydrogen markets". Additionally, the Decree-Law 94/2026 of 30 April (https://diariodarepublica.pt/dr/detalhe/decreto-lei/94-2026-1102472596) transposed very few provisions of Directive 2024/1788 concerning gas network planning and development.

56 Under Article 6 of the Decree-Law 79/2025 of 21 May, the Portuguese Ministry of Environment and Energy designated REN Gas (a company that belongs to the same holding of the gas TSO - REN Gasodutos) as the entity responsible for the planning, development and management of the hydrogen network infrastructure in Portugal, but without detailing the competencies. This was a temporary assignment until the transposition of Directive 2024/1788." (Order n.º 6750-C/2025 of 23 July - https://diariodarepublica.pt/dr/detalhe/despacho/6750-c-2025-922258608)

57 A fellow subsidiary company that belongs to the same holding of the gas TSO performs hydrogen infrastructure development functions and/or acts as representative in ENNOH, until the transposition of Directive 2024/1788.

58 Transposition completion expected in late 2026, beginning of 2027. Technical regulations governing planning, permit review, and safety are in place.

59 The gas TSO performs hydrogen infrastructure development functions and/or act as representative in ENNOH. However, the government has announced that the electricity TSO should prepare for certification.

60 Transposition completion expected in Q3 or Q4 of 2026.

61 Slovenian government has appointed the gas TSO as an associated partner in the ENNOH. The HNO has not yet been officially appointed, as the relevant legislation has not yet been adopted.

45 The amendment to the Energy Act, which will transpose the Directive 2024/1778, being currently in the process of public consultation, will enter into force on 1 January 2027