

Multi-Party Cooperation Framework – preliminary draft with focus on information sharing



ABOUT INTEROPERA:

The InterOPERA project will define technical frameworks and standards for electricity transmission and accelerate the integration of renewable energy. Ensuring that HVDC systems, HVDC transmission systems or HVDC components from different suppliers can work together – making them “interoperable” - is a top priority to accelerate Europe’s energy transition.



Co-funded by
the European Union

DISCLAIMER:

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

PROJECT DETAILS:

Duration: 1 January 2023 – 30 April 2027

Grant agreement: 101095874 — InterOPERA — HORIZON-CL5-2022-D3-01

Multi-Party Cooperation Framework – preliminary draft with focus on information sharing

DELIVERABLE 4.2

DECEMBER 2023

AUTHORS:

Grant Dawson, Lead Legal Specialist WP4, RUG
Ceciel T. Nieuwenhout, Professor, RUG

PRIMARY WP4 REVIEWERS:

Syed Hamza H. Kazmi, Work Package 4 Leader, Ørsted Wind Power A/S
Jan Stensrud, Project Manager, T4.2 Leader, Statnett
Erik Bruun, Head of Legal, Statnett
Åke Petersson, HVDC Manager, Ørsted Wind Power A/S
John Moore, InterOPERA Deputy Project Coordinator, SuperGrid Institute

OTHER CONTRIBUTORS:

Sebastien Silvant, InterOPERA Project Coordinator, SuperGrid Institute
Carlo Degli Esposti, Project Manager, T&D Europe

Table of Contents

Executive Summary	6
Preamble	8
Article 1 – Purpose and scope.....	12
Article 2 – Parties.....	13
Article 3 – Definitions	16
Article 4 – Responsibilities of the Parties	16
Article 5 – New Parties.....	17
Article 6 – Compliance with competition law and information exchange	18
Article 7 – Intellectual property	19
Article 8 – Confidentiality and non-disclosure of information.....	22
Article 9 – Liability	24
Article 10 – Amicable settlement of disputes.....	28

VERSION CONTROL

Version	Date	Created/modified by	Comments
0.1	05 Oct 2023	Grant Dawson	First draft after stakeholder interviews
0.2	26 Oct 2023	Grant/Ceciel	Version Ready for WP4 Reviewers
1.0	03 Nov 2023	Grant/Hamza/Jan	Version addressing primary reviewer’s comments and ready for distribution to InterOPERA parties
2.0	28 Nov 2023	Grant/Hamza/Jan	Version addressing comments from relevant parties to version 1
3.0	13 Dec 2023	Grant/Hamza/Jan	Version addressing comments from relevant parties to version 2

Article 11 – Costs	28
--------------------------	----

Article 12 – Annual meeting and amendment 28

Article 13 – Succession..... 30

Article 14 – Severability 30

Article 15 – Entire Agreement 30

Article 16 – Language 30

Article 17 – Applicable Law 30

Article 18 – Withdrawal, survival rights, and termination..... 31

Article 19 – Entry into force..... 32

Annex A – Sequence of designing and building MVMT HVDC
grids 33

Annex B – Model certificate of accession 37

Annex C – Model non-disclosure agreement..... 38

Annex D – Code of Conduct..... 45

References 49

DRAFT

Executive Summary

The purpose of the InterOPERA project, which is funded by the EU programme for research and innovation, is to bring together a diverse set of stakeholders from the renewable energy industry to develop multi-vendor multi-terminal (MVMT) high-voltage direct current (HVDC) electricity grids in order to transition Europe to sustainable energy at large scale. The Project will set future legal and technical interoperability standards for these grids, which will enhance offshore wind development and integration.

The present document is a preliminary draft of a Multi-Party Cooperation Framework. The purpose of the Cooperation Framework is to establish guidelines for the cooperation of the parties taking part in the InterOPERA project to assist in the development and/or operation of MVMT HVDC grids. Specifically, the purpose of the Cooperation Framework is to assist the Parties in the following: (1) unlocking MVMT HVDC grids and fostering the transition of the European energy sector at large scale through a coordinated approach between a diverse, high-level group of industries at the forefront of renewable energy sources development and grid management; (2) making HVDC systems mutually compatible and interoperable by design; (3) improving the grid forming capabilities of offshore and onshore converters and coordinating offshore network planning and future system expansion; (4) de-risking interoperability of control and protection systems through the execution of all necessary activities relevant to the implementation of physical demonstrators; and (5) creating operational and strategic tools for the development of MVMT HVDC grids that will enhance offshore wind development and integration.

The preliminary draft of the Cooperation Framework is the deliverable (D4.2) of Work Package 4 of the InterOPERA project. Work Package 4.2 commenced its work in June 2023 and was tasked to produce a preliminary draft of the Cooperation Framework by the end of the year (a period of six months). A thorough review of the relevant literature was conducted in order to draw upon information and resources that may be applicable to the project. A list of some of this literature is set forth at the end of the present document. Parties were asked to complete questionnaires in order to collect their views on key aspects of the Cooperation Framework. These questionnaires were followed by structured interviews in which parties' responses were discussed in detail. The preliminary draft was circulated to the parties, who had an opportunity to comment and suggest changes. After changes and comments were discussed and integrated into the preliminary draft, a second version was circulated to the parties, who had another opportunity to provide suggested changes and comments, which were further integrated into the preliminary draft.

The present document is necessarily a work in progress, and the parties are still in the process of discussing key issues, such as (1) the form and scope of the document; (2) whether and how liability will be dealt with in the Cooperation Framework; (3) confidentiality and non-disclosure obligations; and (4) how to integrate into the Cooperation Framework the work of other work packages of the InterOPERA project. The Cooperation Framework will be further negotiated, and changes will be made accordingly, as other work packages progress in their work, all of which will feed into the final

Multi-Party Cooperation Framework, as necessary and appropriate, which is scheduled to be delivered in December 2026.

DRAFT

Preamble

Taking into account that:

1. The Parties wish to enter into a Multi-Party Cooperation Framework (Cooperation Framework) in order to establish guidelines for their cooperation in the development and/or operation of multi-vendor, multi-terminal high-voltage direct-current grids (MVMT HVDC grids);
2. The Treaty on the Functioning of the European Union provides:
 - a. “In the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to: (a) ensure the functioning of the energy market; (b) ensure security of energy supply in the Union; (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and (d) *promote the interconnection of energy networks*”;¹
 - b. The European Union (EU) “shall establish a series of guidelines covering the objectives, priorities and broad lines of measures envisaged in the sphere of trans-European networks; and these guidelines shall identify projects of common interest”; “*shall implement any measures that may prove necessary to ensure the interoperability of the networks*, in particular in the field of technical standardisation”; and “may support projects of common interest supported by Member States, which are identified in the framework of [these] guidelines ... particularly through feasibility studies, loan guarantees or interest-rate subsidies”;²
3. The 2010 Memorandum of Understanding of the North Seas Countries’ Offshore Grid Initiative aims to contribute to the move towards a sustainable low-carbon economy; maximise the potential of the renewable energy resources of the North Sea; identify and tackle barriers to offshore grid development; and facilitate the strategic, coordinated, and cost-effective development of offshore and onshore grids;³

¹ Consolidated Version of the Treaty on the Functioning of the European Union, Official Journal of the European Union, C 326/47, dated 26 October 2012 (TFEU), Article 194(1) (emphasis added).

² TFEU, Article 171 (emphasis added).

³ North Sea Countries’ Offshore Grid Initiative, Memorandum of Understanding, 3 December 2010; see also North Sea Countries’ Offshore Grid Initiative, Declaration, 7 December 2009, paragraphs 10–15 (stating that multilateral cooperation is essential for the effective development of offshore wind and infrastructure development in the North Sea and that efficient and optimal solutions for the North Sea countries should be identified collectively, rather than on a national basis).

4. The Paris Agreement, which was adopted by consensus in 2015 and entered into force in 2016, aims to strengthen the global response to the threat of climate change by, inter alia, holding the increase in the global average temperature to well below two (2) degrees Celsius above pre-industrial levels and by pursuing efforts to limit the temperature increase to 1.5 degrees Celsius; increasing the ability of countries to adapt to the adverse impacts of climate change; and making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development;⁴
5. The 2016 Political Declaration on Energy Cooperation between the North Seas Countries aims to facilitate the further cost-effective deployment of offshore renewable energy, *in particular wind*, through voluntary cooperation, with the aim of ensuring a sustainable, secure, and affordable energy supply in the North Seas countries; facilitate further interconnection between North Seas countries; further integrate and increase efficiency of wholesale electricity markets in the longer term; contribute to a reduction of greenhouse gas emissions and electricity prices; and enhance security of supply in the region;
6. The EU has stated that an offshore electricity transmission grid in the North Sea is a priority corridor in the trans-European energy network;⁵
7. Belgium, Denmark, Germany, and the Netherlands—in their 2022 Esbjerg Declaration on the North Sea as a Green Power Plant of Europe—state that, in order to reach EU climate neutrality according to the European Commission’s Strategy on Offshore Renewable Energy, they will increasingly replace fossil fuels with European renewable energy from the North Sea, *including offshore wind*, by jointly developing an offshore renewable energy system consisting of *multiple connected offshore energy projects and hubs*, offshore wind production at massive scale, and *electricity interconnectors*;
8. The European Commission, in 2022, launched its REPowerEU plan in order to respond to the problems in the global energy market by saving energy, accelerating the transition to clean energy, and diversifying its energy supply;⁶
9. The European Commission—in its 2023 Green Deal—states that it is committed to accelerating the move away from fossil fuels and to achieving its climate targets towards

⁴ Paris Agreement, adopted 12 December 2015, opened for signature 22 April 2016, entered into force 4 November 2016, 3156 UNTS 79, article 2.

⁵ Commission Delegated Regulation (EU) 2018/540 of 23 November 2017 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest, Official Journal of the European Union L 90, 6 April 2018.

⁶ < https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/repower-eu-affordable-secure-and-sustainable-energy-europe_nl >.

net-zero carbon emissions by 2050 in order to set the framework for the transformation of the EU's industry for the net-zero age;⁷

10. Belgium, Denmark, France, Germany, Ireland, Luxembourg, the Netherlands, Norway, and the United Kingdom—in their 2023 Ostend Declaration of Energy Ministers on the North Seas as Europe's Green Power Plant Delivering Cross-Border Projects and Anchoring the Renewable Offshore Industry in Europe—state that energy security and climate change mitigation are crucial to the future of Europe; the role of efficient and effective offshore electricity market arrangements are instrumental for a swift realisation of joint and hybrid offshore renewable energy projects; they will take all relevant and appropriate steps to accelerate regulatory and permitting processes for renewable energy *and the related grid infrastructure* and aim to work with the European Commission to actively support these efforts; and renewable energy should serve the public interest and public safety while promoting balanced co-existence of renewable energy, biodiversity, and environmental protection and should contribute to a healthy marine ecosystem;

11. The European Commission acknowledges that cooperation between companies on research and development “can contribute to achieving the objectives of the European Green Deal”;⁸

Recalling that:

12. The objectives of the Best Paths Transmission for Sustainability project, from 2014 to 2018, were the evolution of the transmission grid to ensure its readiness to cover market actors' requirements in the new energy paradigm at an affordable cost, by speeding up HVDC grid development, both in terms of de-risking the use of different HVDC converter technologies coupled with converter-based offshore wind energy generation and *addressing interoperability issues to enable multi-vendor systems*; by validating technologies and solutions that would increase the grid capacity and flexibility by upgrading and revamping existing alternating current and direct current; and by validating the functioning of gigawatt-scale superconducting cables;⁹

13. The objectives of the Progress on Meshed HVDC Offshore Transmission Networks project (PROMOTioN), from 2016 to 2020, were to unlock the full potential of Europe's offshore resources, by addressing technical, legal, regulatory, economic, and financial barriers to the implementation of an *offshore HVDC transmission network*; by connecting key stakeholders from industry, academia, consultancies, and transmission system

⁷ European Commission, COM(2023) 62 final, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, A Green Deal Industrial Plan for the Net-Zero Age, dated 1 February 2023, page 1.

⁸ Commission Regulation (EU) 2023/1066 of 1 June 2023 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to certain categories of research and development agreements, Official Journal of the European Union, L 143/9, dated 2 June 2023, preambular paragraph 2.

⁹ < <http://www.bestpaths-project.eu/> >.

operators; providing a platform for interdisciplinary development; and increasing acceptance of required novel technologies and frameworks;¹⁰

14. The objectives of the Ready4DC project, from 2022 to 2023, were to create and engage a community of experts to assess and give recommendations on the major technical and legal aspects of designing and building *an interoperable multi-vendor direct current grid* and to prepare the ground for the development of the first MVMT HVDC project in Europe;¹¹

15. The EU's European Climate, Infrastructure, and Environment Executive Agency (CINEA), in 2022, entered into a Grant Agreement to fund the InterOPERA Project, the objective of which is to, from 2023 to 2027, unlock MVMT HVDC grids and to foster the transition of the European energy sector at large scale through the joint development of the technologies necessary to achieve interoperability between the relevant on- and offshore systems in order to facilitate real projects;

Considering that:

16. The Parties are determined to cooperate with each other and also with other stakeholders to achieve Europe's target of carbon neutrality by 2050 under the Paris Agreement, EU law, and/or national law in order to reduce the societal and economic impact of the continued use of depletable resources for the generation of electricity;

17. The Parties are convinced that the development and/or operation of MVMT HVDC grids would be facilitated, both in the present and in the coming decades, by a Cooperation Framework to coordinate the activities of the various stakeholders, both private and public, so that the systems of these stakeholders may be made interoperable by design;

18. The Parties are cognisant of the Golden Principles of the International Federation of Consulting Engineers (FIDIC);¹²

19. The Parties express their willingness to cooperate—to the greatest extent possible—to share intellectual property where necessary and at reasonable cost in order to facilitate the interoperability of MVMT HVDC grids;

20. The Parties, acutely aware of article 101 of the Treaty on the Functioning of the European Union, are committed to cooperating with each other in order to achieve the objectives of the InterOPERA Project, while at the same time strictly adhering to EU competition law;

¹⁰ < <https://www.promotion-offshore.net/> >.

¹¹ < <https://www.ready4dc.eu/> >.

¹² International Federation of Consulting Engineers (FIDIC), Golden Principles (1st edition 2019).

21. The Parties are committed to the future expandability of the offshore energy market in the Northern Seas (and elsewhere) and encourage new parties to join the Cooperation Framework, provided that they share the objectives of the InterOPERA Project and are committed to interoperability and hence the potential development and/or operation of MVMT HVDC systems with grid forming capability, not only in Europe, but potentially in other regions, and perhaps between regions, when the technology and the resources become available;

22. The Parties are of the view that their fiduciary responsibilities to their shareholders would be advanced by a business strategy that is consistent with the shared goals of energy security, energy efficiency, consumer protection, and net-zero carbon emissions;

23. The Parties are cognisant of the need to comply with all relevant environmental laws and regulations and of the duty to protect and preserve the marine environment when developing, building, maintaining, and decommissioning offshore MVMT HVDC grids;

Expressing the hope that:

24. The European Commission will promulgate law and/or regulations applicable to all stakeholders involved in the offshore energy sector in order to mandate that new MVMT HVDC systems are made interoperable by design;

25. Stakeholders outside the Cooperation Framework will, as a matter of urgency, execute Certificates of Accession to join the Cooperation Framework in order to facilitate cooperation on the development and/or operation of MVMT HVDC grids;

Keeping in mind that:

26. The exact sequence of events for the development and/or operation of MVMT HVDC grids may differ based upon the specific circumstances of the project, and the Cooperation Framework contains the general guidelines to facilitate cooperation amongst the Parties in respect of such projects;

The Parties hereby AGREE as follows:

Article 1 – Purpose and scope

1. The purpose of the Cooperation Framework is to establish guidelines for the cooperation of the Parties in the development and/or operation of MVMT HVDC grids in all areas of the world.
2. Specifically, the purpose of the Cooperation Framework is to assist the Parties in the following:
 - a. Unlocking MVMT HVDC grids and fostering the transition of the European energy sector at large scale through a coordinated approach between a diverse, high-level group of industries at the forefront of renewable energy sources development and grid management;
 - b. Making HVDC systems mutually compatible and interoperable by design;
 - c. Improving the grid forming capabilities of offshore and onshore converters and coordinating offshore network planning and future system expansion;
 - d. De-risking interoperability of control and protection systems through the execution of all necessary activities relevant to the implementation of physical demonstrators; and
 - e. Creating operational and strategic tools for the development of MVMT HVDC grids that will enhance offshore wind development and integration.
3. Any entity, independent of its country of incorporation or operation, that intends to be or is active in the realisation of MVMT HVDC projects may become a party to the Cooperation Framework. Such entities must be committed to work in the spirit and under conditions included in the Cooperation Framework.
4. The Cooperation Framework is intended to apply to MVMT HVDC projects being developed at the time the Cooperation Framework enters into force and also to projects initiated after the Cooperation Framework enters into force.
5. The Cooperation Framework will be reviewed at least on an annual basis, under the procedures set forth in article 12 (Annual meeting and amendment), so that it is kept fit for purpose and up to date in relation to political, economic, and technological developments.

Article 2 – Parties

1. Subject to **article 13** (Succession), by submitting a duly executed Certificate of Accession (**annex B**) to the depositary, the following Parties have agreed to be bound by the terms of the Cooperation Framework:

- a. SUPERGRID INSTITUTE SAS, a French corporation with registered office at 23 rue Cyprian 69100 Villeurbanne, France, SIRET No. Lyon B 799 482 153;
- b. SIEMENS ENERGY GLOBAL GMBH & CO. KG, a company incorporated in Germany and having its registered office at Otto-Hahn-Ring 6, 81739, Munich, Germany;
- c. HITACHI ENERGY SWEDEN AB, incorporated under the laws of Sweden, with its head office located in 721 83 Västerås, registered number 556029-7029;
- d. UK GRID SOLUTIONS LIMITED, a company duly registered under the laws of England and Wales, having its registered office at St Leonards Building, Harry Kerr Drive, ST16 1WT Stafford, United Kingdom;
- e. GE GRID GMBH, a company duly registered under the laws of Germany, having its registered office at Bleichstrasse 64-66, Frankfurt Am Main 60313, Germany, PIC 884881822;
- f. RTE RESEAU DE TRANSPORT D'ELECTRICITE (RTE), PIC 999954183, established in IMMEUBLE WINDOW, 7C PLACE DU DOME, PARIS LA DEFENSE CEDEX 92073, France;
- g. TENNET TSO GMBH, PIC 989214052 with legal address Bernecker Strasse 70, Bayreuth 95448, Germany;
- h. T&D Europe (ASSOCIATION EUROPEENNE DE L'INDUSTRIE DES EQUIPEMENTS ET DES SERVICES DE TRANSMISSION ET DE DISTRIBUTION D'ELECTRICITE AISBL), with legal address BD A, Reyers 80, 1030 Brussels, Belgium;
- i. ORSTED WIND POWER A/S, PIC 952875136, established in KRAFTVAERKVEJ 53, FREDERICIA 7000, Denmark;
- j. AMPRION GMBH, with legal address Robert-Schuman-Straße 7, 44263 Dortmund, Germany, registered number HRB 15940;
- k. WINDEUROPE with legal address at Rue Belliard, 40, 1040 Bruxelles, Belgium;

- l. VESTAS WIND SYSTEMS A/S, with legal address Hedeager 42, 8200 Aarhus N, Denmark;
- m. SIEMENS GAMESA RENEWABLE ENERGY AS (SGRE), with legal address in BORUPVEJ 16, BRANDE 7330, Denmark;
- n. SCIBREAK AB, a company incorporated and existing under the laws of SWEDEN, with legal address Skarprättarvägen 7 lokal 14, 176 77 Järfälla, SWEDEN, and registered with the trade register Swedish Companies Registration Office under file number 556985-3335;
- o. ENERGINET, PIC 999804027, established in TONNE KJAERSVEJ 65, FREDERICIA 7000, Denmark;
- p. TENNET TSO BV, PIC 997801850, with legal address Utrechtseweg 310, Arnhem 6812AR, the Netherlands;
- q. EQUINOR WIND POWER AS, PIC 887386168 with legal address Forusbeen 50, 4035 STAVANGER, Norway;
- r. 50HERTZ TRANSMISSION GMBH, PIC 996588962, with legal address Heidestraße 2, 10557 Berlin, Germany;
- s. VATTENFALL VINDKRAFT A/S, PIC 905032214, with legal address Jupitervej 6, 6000 Kolding, Denmark;
- t. TERNA, RETE ELETTRICA NAZIONALE SPA, PIC 997943373, established in VIALE EGIDIO GALBANI 70, ROMA 00156, Italy;
- u. STATNETT SF, NO 962 986 633 MVA, with legal address Nydalen alle 33, 0484 Oslo, Norway,

hereinafter, jointly or individually, referred to as "Parties" or "Party".

- 2. New Parties may join the Cooperation Framework after its entry into force by submitting a duly executed Certificate of Accession (**annex B**) to the depositary. When a New Party accedes to the Cooperation Framework, the Hosting Party shall add, in alphabetical order, the name of the New Party to the foregoing list of Parties and issue, as soon as practicable, a new version of the Cooperation Framework reflecting the new list of Parties. After a New Party has submitted its Certificate of Accession, it shall henceforth be referred to simply as a "Party".

3. All Parties to the Cooperation Framework are equal to each other in respect of their rights and obligations contained within the Cooperation Framework.
4. The Parties shall designate an appropriate administrative authority to serve as the depositary for the Cooperation Framework. An appropriate administrative authority may be a Party, notary, or other independent legal body approved by the Parties.

Article 3 – Definitions

1. “Clean team”: A clean team generally refers to individuals within a Party who are not involved in the Party’s commercial operations and are bound by strict confidentiality protocols with regard to the commercially sensitive information.
2. “Confidential Information”: See article 8.1.
3. “Disclosing Party”: A Party that is disclosing, or has disclosed, Confidential Information.
4. “Hosting Party”: The Party that hosts the annual meeting on a rotational basis and in the order set forth in the names of Parties in article 2 (Parties).
5. “New Party”: A legal person that submits a duly executed Certificate of Accession to the depositary after the Cooperation Framework has entered into force. After a New Party has submitted its Certificate, it shall henceforth be referred to simply as a “Party”. For the convenience of the reader and to distinguish between Parties that submit their Certificates before and after entry into force, a Party that submits its certificate after entry into force may sometimes be referred to herein as a “New Party”.
6. “Purpose”: See article 1.
7. “Recipient”: A Party that is receiving, or has received, Confidential Information.
8. “Trustee”: A trustee is an independent third party that provides to a Party services that are related to the scope and/or purpose of the Cooperation Framework.

Article 4 – Responsibilities of the Parties

1. Each Party shall cooperate, perform, and fulfil—promptly and in good faith—their obligations under the Cooperation Framework as may be reasonably required from them

and in furtherance of the Purpose of the Cooperation Framework, as articulated in [article 1](#) (Purpose and scope).

2. Each Party shall take reasonable measures to ensure the accuracy of information or materials that it provides to the other Parties.

3. During the activities undertaken in connection with the Cooperation Framework, the Parties shall share knowledge and information, including general and detailed model and data sharing, that are necessary for the performance of dynamic systems interaction/integration studies, with the aim being to achieve interoperability, maintain and expand the systems necessary to develop and/or operate MVMT HVDC grids, and assess the performance thereof. The sharing of information shall be done in accordance with the provisions set forth in [article 6](#) (Compliance with competition law and information exchange) and [article 7](#) (Intellectual property).

4. Each Party shall adhere—to the extent practicable—to the following general functional requirements when developing and/or operating MVMT HVDC grids:

a. *[Note: the general functional requirements (i.e., generic data or model sharing) will be included here in writing (and perhaps diagrammatic form) when Work Packages 1–3 have completed their work. Reference may also be made here to annex A.]*

5. Participation in the Cooperation Framework does not necessarily imply any obligation to enter into other agreements or contracts related to the Cooperation Framework or its Purpose.

Article 5 – New Parties

1. In accordance with [article 2.2](#) (Parties) of the Cooperation Framework, a New Party—for example, in the case of expansion of an HVDC system—may join the Cooperation Framework after its entry into force by submitting a duly executed Certificate of Accession ([annex B](#)) to the depositary.

2. When a New Party becomes a Party to the Cooperation Framework, it shall be considered equal to the other Parties in respect of the rights and obligations contained within the Cooperation Framework.

3. All Parties shall, in accordance with [article 4](#) (Responsibilities of the Parties) of the Cooperation Framework, cooperate, perform, and fulfil—promptly and in good faith—their obligations in respect of New Parties as may be reasonably required and in

furtherance of the Purpose of the Cooperation Framework (**article 1** – Purpose and scope).

4. In particular, each Party shall:
 - a. take reasonable measures to ensure the accuracy of information or materials it provides to a New Party; and
 - b. share with a New Party knowledge and information, including general and detailed model and data sharing, that are necessary for the performance of dynamic systems interaction/integration studies, with the aim being to achieve interoperability, maintain and expand the systems necessary to develop and/or operate MVMT HVDC grids, and assess the performance thereof. The sharing of information shall be done in accordance with the provisions set forth in article 6 (Compliance with competition law and information exchange) and article 7 (Intellectual property).
5. All Parties, including New Parties, when entering into specific agreements with each other to develop and/or operate MVMT HVDC projects under the Cooperation Framework, shall respect each other's rights and fulfil their obligations as set forth in the Cooperation Framework.

Article 6 – Compliance with competition law and information exchange

1. The Parties acknowledge and agree that all activities under the Cooperation Framework must be conducted in strict compliance with applicable laws, regulations, or public licenses granted or imposed by a Party's country of incorporation and/or operation, including but not limited to EU competition law and regulations.
2. When exchanging commercially sensitive information in connection with activities under the Cooperation Framework, the Parties shall limit the exchange to what is necessary for the intended purpose and implement measures to restrict access to the information and/or control how it is used.
3. In furtherance of compliance with EU competition law and regulations, each Party shall strictly abstain from exchanging, in an unlawful or inappropriate way, any competitively sensitive information, especially on market data or pricing.
4. The foregoing measures may include the following:

- a. the use of clean teams or trustees to receive and process information;
 - b. personnel of a Party who are participating in a reciprocal data-sharing arrangement, such as a data pool, should, in principle, only have access to their own information and the final, aggregated information of another Party;
 - c. prior to planned contacts, Parties should carefully review the agenda and purpose of the meeting to ensure that potential risks concerning the exchange of commercially sensitive information are identified in advance and that appropriate measures are taken to avoid them;
 - d. during contacts, Parties should adhere to the agenda; if commercially sensitive information is disclosed or exchanged, Parties should raise objections, ensure that their objections are recorded in the minutes of the meeting, and publicly distance themselves if the exchange of information occurs despite their objections; if the objection is ignored, the Party should immediately leave the meeting in a manner that makes the reason for its departure apparent to all present and ensure there is a record of its departure.
5. In the event that a situation arises that the Parties cannot resolve amongst themselves through negotiation, a Party may escalate the situation to mediation and/or arbitration, pursuant to the procedures set forth in [article 10](#) (Amicable settlement of disputes).
6. Additional guidelines for the exchange of information in accordance with applicable competition law are located in [annex D](#).

Article 7 – Intellectual property

General principles

1. During the activities undertaken in connection with the Cooperation Framework, the Parties will need to cooperate and work together in order to develop and build their systems in a manner that render them interoperable. This cooperation may entail the sharing of intellectual property between Parties.
2. The present section aims at regulating those rights amongst the Parties and to provide guidance in order to protect the rights of the Parties and to advance the aims of the Cooperation Framework.
3. The Cooperation Framework does not intend to set forth comprehensive intellectual property rights amongst the Parties in respect of the sharing of intellectual property to

achieve interoperability of MVMT HVDC grids. Rather, general principles are set forth herein as guidelines for the Parties when entering into specific bilateral or multi-lateral agreements for a specific project.

4. When conducting activities in connection with the Cooperation Framework, the Parties shall adhere to EU/European Economic Area (EEA) competition law and intellectual property law in as far as they are not already bound thereby.

Licensing

5. In a spirit of cooperation and good faith, a Party [*shall / shall endeavour to*] provide access to its intellectual property to another Party when such access is necessary for the latter Party to engage in a project to develop and/or operate MVMT HVDC grids.

6. As agreed between Parties in separate, written agreements, access rights to intellectual property:

- a. may be granted on a non-exclusive and non-transferable basis;
- b. may be granted via royalty-free licenses;
- c. shall be used only for the purposes for which such rights have been granted; and
- d. shall, in any case, always be concluded on fair, reasonable, and non-discriminatory terms.

7. A Party that holds a standard essential patent that is necessary for the development and/or operation of MVMT HVDC grids [*shall / shall endeavour to*] license such a patent to another Party involved in a project to develop and/or operate MVMT HVDC grids. When such a license agreement is concluded, it shall always be on fair, reasonable, and non-discriminatory terms.

8. The Parties may engage in bilateral licensing or licensing pools, as they deem most appropriate and provided that fair, reasonable, and non-discriminatory terms are applied.

9. For the avoidance of doubt, a Party granting to another Party access to its intellectual property shall retain absolute discretion in respect of whether—and on what terms—it grants such access—provided that both Parties, at all times, strictly adhere to EU/EEA competition law, including the use of fair, reasonable, and non-discriminatory terms.

Ownership

10. During their interactions, Parties may generate intellectual property. When this occurs, the intellectual property that results is owned by the Party that generates it. Two or more Parties may jointly own such intellectual property if they have jointly generated it and if it is not possible to establish the respective contribution of each Party or separate each Party's respective contribution for the purpose of determining ownership.

11. The mere provision by a Party of specifications aimed at having the other Party develop intellectual property does not necessarily, in the absence of an inventive or original contribution, give the Party that provided the specifications the status of joint owner of a result.

12. The joint owners must agree—in writing—on the allocation and terms of exercise of their joint ownership.

13. Unless otherwise agreed in the joint ownership agreement, each joint owner may grant non-exclusive licences to third parties to exploit the jointly owned results (without any right to sub-license), if the other joint owners are given at least forty-five (45) days advance notice and fair and reasonable compensation.

14. The joint owners may agree—in writing—to apply another regime other than joint ownership.

Transfer of intellectual property

15. Each Party may transfer ownership of its own intellectual property, including its share in jointly owned intellectual property and all rights and obligations attached to such intellectual property, provided that the transfer does not affect compliance with the Party's obligations under the Cooperation Framework and any bilateral and multi-lateral agreements between the Parties. Parties must ensure that such obligations are passed on to the new owner and that this new owner has the obligation to pass them on in any subsequent transfer.

16. Transferring Parties must inform the other Parties with access rights of the transfer at least forty-five (45) days in advance (or less if agreed in writing), unless agreed otherwise in writing for specifically identified third parties (including affiliated entities) or unless impossible under relevant law. This notification must include sufficient information on the new owner to enable the Parties concerned to assess the effects on their rights. The Parties may object within thirty (30) days of receiving notification (or less if agreed in writing), if they can show that the transfer would adversely affect their rights. In this case, the transfer may not take place until agreement has been reached between the Parties concerned.

17. The Parties recognise that, in the framework of a merger or an acquisition of an important part of its assets, it may be impossible—under applicable EU and/or national laws on mergers and acquisitions and under respective confidentiality obligations—for a Party to give at least forty-five (45) calendar days prior notice for the transfer. In these cases, no notification of the intended transfer of ownership needs to be given, due to confidentiality obligations arising from national and/or community laws on mergers and acquisitions, for as long as such confidentiality obligations are in effect and/or for as long as such notice is prohibited under applicable EU and/or national laws on mergers and acquisitions.

18. When a Party (Party 1) grants another Party (Party 2) access to its intellectual property, Party 2 may allow another entity (Party 3) access to that intellectual property, provided that Party 3 is under the control of Party 2 and provided that Party 3 is bound by the same obligations as Party 2 with respect to access to the intellectual property in question. The foregoing may be accomplished, inter alia, via licenses and sub-licenses granted on fair, reasonable, and non-discriminatory terms.

Use of names, logos, or trademarks

19. Nothing in this Cooperation Framework shall be construed as conferring rights upon a Party to use—in advertising, publicity, or otherwise—the name of another Party or any of its logos or trademarks without prior written approval.

Article 8 – Confidentiality and non-disclosure of information

1. All information in whatever form or mode of communication, which is disclosed by a Party (Disclosing Party) to any other Party (Recipient) in connection with activities under the Cooperation Framework.
2. The Recipients hereby undertake not to use Confidential Information otherwise than for the purpose for which it was disclosed and not to disclose Confidential Information to any third party, other than to entities under their control and authorised subcontractors, without the prior written consent of the Disclosing Party, wherein the Recipient must ensure that an arrangement is in place prior to such disclosure that subjects the entities and/or authorised subcontractors to provisions at least as strict as provided in this article:
 - a. to ensure that internal distribution of Confidential Information by a Recipient, its entities, or authorised subcontractors to any of their employees and seconded employees shall take place on a strictly need-to-know basis; and

- b. to return to the Disclosing Party or destroy, on request, all Confidential Information that has been disclosed to the Recipients, including all copies thereof and to delete all information stored in a machine-readable form to the extent practically possible (i.e., back-up copies). The Recipients may keep a copy to the extent that it is required to keep, archive, or store such Confidential Information because of compliance with applicable laws and regulations or for the proof of on-going obligations, provided that the Recipient complies with the confidentiality obligations contained herein with respect to such copy as long as it is kept.
3. The Recipients shall be responsible for the fulfilment of the above obligations on the part of their employees, seconded employees, or third parties (their authorised subcontractors and entities) having access to Confidential Information and shall ensure that they remain so obliged, as far as legally possible, for an indefinite period after the disclosure of the Confidential Information.
4. The above shall not apply to the disclosure or use of Confidential Information, if and in so far as the Recipient can show that:
 - a. the Confidential Information has become or becomes publicly available by means other than a breach of the Recipient's confidentiality obligations;
 - b. the Disclosing Party subsequently informs the Recipient that the Confidential Information is no longer confidential;
 - c. the Confidential Information is communicated to the Recipient without any obligation of confidentiality by a third party who is in lawful possession thereof and under no obligation of confidentiality to the Disclosing Party;
 - d. the Confidential Information, at any time, was developed by the Recipient completely independently of any such disclosure by the Disclosing Party and without access to the Disclosing Party's Confidential Information;
 - e. the Confidential Information was already lawfully known to the Recipient prior to disclosure without any confidentiality obligation to the Disclosing Party;
or
 - f. the Recipient is required to disclose the Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order.
5. The Recipient shall apply at least the same degree of care with regard to the Confidential Information disclosed within the scope of the Cooperation Framework as

with its own confidential and/or proprietary information, but in no case less than reasonable care.

6. Each Recipient shall promptly inform the relevant Disclosing Party by written notice of any unauthorised disclosure, misappropriation, or misuse of Confidential Information after it becomes aware of such unauthorised disclosure, misappropriation, or misuse.

7. If any Recipient becomes aware that it will be required, or is likely to be required, to disclose Confidential Information in order to comply with applicable laws or regulations or with a court or administrative order, it shall, to the extent it is lawfully able to do so, prior to any such disclosure,

- a. notify the Disclosing Party;
- b. comply with the Disclosing Party's reasonable instructions to protect the confidentiality of the Confidential Information; and
- c. make such disclosure only to the extent it is compelled to do so.

8. Parties may utilise non-disclosure agreements, as they deem necessary and appropriate, in connection with activities undertaken pursuant to the Cooperation Framework. A model non-disclosure agreement is annexed to the Cooperation Framework ([annex C](#)).

Article 9 – Liability

General principles

1. When the Parties are negotiating specific contracts with each other or other stakeholders in connection with the development and/or operation of MVMT HVDC grids, they shall endeavour to achieve a balanced and fair allocation of risk and reward—in defining roles, duties, obligations, and rights—in accordance with the following factors:

- a. which party can best control the risk and/or its associated consequences;
- b. which party can best foresee the risk;
- c. which party can best bear that risk; and
- d. which party ultimately benefits or suffers the most when/if a risk materialises.

Roles and responsibilities

2. The Parties acknowledge that the roles and responsibilities of all Parties will need to be clearly identified in the specific contracts necessary for implementing the following phases:
 - a. design and procurement;
 - b. engineering and commissioning;
 - c. construction;
 - d. operation and maintenance;
 - e. grid expansion; and
 - f. refurbishment and decommissioning.
3. When entering into contracts involving these phases, the Parties shall take into account the following general principles:
 - a. Parties shall work together to ensure that all the relevant systems are interoperable with future and existing HVDC systems developed and built under the Cooperation Framework and shall clearly allocate roles and responsibilities in the relevant contracts. For example:
 - i. Manufacturers are expected to deliver systems, sub-systems, and design components (such as converter control systems and fault separation devices) that comply with agreed standards, general and specific functional requirements, and regulatory aspects as generated and adopted within InterOPERA and subsequently to InterOPERA by the respective standards and regulatory organisations; and provide owners/operators with the knowledge and information necessary for the owners/operators to manage and maintain the system.
 - ii. Owners/operators are expected to assume responsibility for planning the system and ensuring the harmonisation of MVMT HVDC grids.
 - iii. Developers are expected to support and deliver interfaces between the MVMT HVDC systems and offshore windfarms, along with detailed design of these interfaces; comply with agreed standards, general and specific functional requirements, and regulatory aspects; and provide

owners/operators with the knowledge and information necessary for the owners/operators to manage and maintain the system.

- b. Parties are expected to cooperate in the engineering, construction, and commissioning phase to develop test methods that allow subsystems to be developed and tested independently of each other.
- c. The Parties shall develop clear procedures (e.g., third-party investigator) for investigating and allocating liability in the event of damages due to mistakes or delays in MVMT HVDC grids. Once the root cause of the damages and/or of the delay has been identified, liability can be allocated based on the roles and responsibilities outlined in the relevant contract.

Release of liability and indemnification when negotiating contracts in connection with the development and/or operation of MVMT HVDC grids

- 4. When the Parties are negotiating contracts with each other or other stakeholders in connection with the development and/or operation of MVMT HVDC grids, they shall endeavour to include, in such contracts, provisions regarding the mutual release of liability and reciprocal indemnification, in the following terms:
 - a. Mutual release of liability: Each Party does hereby agree to fully release each of the other Parties from any and all liabilities, claims, demands, damages, actions, causes of action, or suits of any kind or nature whatsoever, except to the extent that such liabilities, claims, demands, damages, actions, causes of action, or suits arise from the gross negligence or wilful misconduct of either of the Parties.
 - b. Reciprocal indemnification: Each Party does hereby agree to indemnify, defend, and hold harmless every other Party to this Agreement.

Release of liability and indemnification under the Cooperation Framework

- 5. The liability and indemnification provisions in article 9.4 shall apply to any disputes between the Parties that arise under the provisions of the Cooperation Framework relating to, inter alia, confidentiality/non-disclosure and intellectual property.

Liability caps

- 6. Any liability caps are to be determined by the Parties when they are negotiating specific contracts with each other or other stakeholders in connection with the

development and/or operation of MVMT HVDC grids, taking into account all relevant law, including applicable national law.

Force majeure

7. No Party shall be considered to be in breach of the Cooperation Framework if it is prevented from fulfilling its obligations under the Cooperation Framework by a *force majeure* event.
8. Parties shall notify each other of a *force majeure* event without undue delay. If the consequences of the *force majeure* event are not overcome within six (6) weeks after such notice, the transfer of tasks, if any, shall be discussed amongst the affected Parties.
9. If a Party is unable to perform—completely, partially, or only with delay—any of its obligations under the Cooperation Framework due to a governmental decision (e.g., COVID-19 restrictions), such Party shall be treated as if such failure were due to *force majeure*.

Article 10 – Amicable settlement of disputes

1. The Parties shall endeavour to settle their disputes amicably.
2. All disputes arising out of or in connection with the Cooperation Framework that cannot be solved amicably shall be finally settled:
 - a. under the Mediation Rules of the International Chamber of Commerce (ICC); or, if not settled thereunder,
 - b. under the Rules of Arbitration (Rules) of the ICC. Any arbitral tribunal shall consist of three arbitrators to be appointed in accordance with the Rules. The award of the arbitration will be final and binding upon the Parties.
3. The place of mediation/arbitration shall be Brussels, Belgium, unless otherwise agreed by the conflicting Parties.
4. The language to be used in the mediation/arbitration proceeding shall be English.
5. Nothing in the Cooperation Framework shall limit the Parties' right to seek injunctive relief to preserve the status quo ante or interim measures in any applicable competent court or arbitral tribunal.

Article 11 – Costs

Each Party shall bear its own costs for activities undertaken in connection with the Cooperation Framework.

Article 12 – Annual meeting and amendment

Annual meeting

1. The Parties shall meet annually in order to:
 - a. Enhance their coordination under the Cooperation Framework;
 - b. Discuss and resolve any issues that have arisen in connection with activities undertaken pursuant to the Cooperation Framework;

- c. Review the operation of the Cooperation Framework; and
 - d. Consider and adopt amendments to the Cooperation Framework that are deemed to be necessary and appropriate.
2. Each Party's participation in the annual meeting is voluntary. Annual meetings may be held in person, virtually, or in a hybrid mode.
 3. Each Party shall host (Hosting Party) the annual meeting on a rotational basis and in the order set forth of the names of the Parties in **article 2** (Parties). A Hosting Party's tenure shall last for the entire calendar year (1 January to 31 December).
 4. The Hosting Party shall circulate to all Parties a draft agenda for the annual meeting at least two (2) months prior to the meeting.
 5. Each Party in attendance may designate one natural person as a representative of the Party to the annual meeting. Each representative shall be accompanied by as many advisers as deemed appropriate by the sending Party.
 6. Each Party shall bear its own costs in connection with the annual meeting.
 7. Any decisions by the Parties at an annual meeting shall be taken unanimously by the representatives of the Parties present at the meeting. In the event that a Party is absent at the meeting, the absent Party may object, in writing and on notice to all the Parties, to a decision taken at the annual meeting within one (1) month of being given notice of the decision—in which case the decision shall be considered not adopted. Any decisions taken by the Parties outside the context of an annual meeting shall be taken by unanimous written consent of all the Parties to the Cooperation Framework. There shall be no voting.

Amendment

8. A Party may submit—in writing and to all the Parties—a proposed amendment to the Cooperation Framework (along with an explanatory note) no later than three (3) months prior to the annual meeting described in this article. The Hosting Party shall include the proposed amendment (and explanatory note) in the draft agenda for the annual meeting circulated to all Parties in accordance with this article.
9. Decisions to amend the Cooperation Framework shall be adopted via the procedures for decision making set forth in this article.

10. In the event that an amendment to the Cooperation Framework is adopted, the Hosting Party shall circulate to the Parties an amended version of the Cooperation Framework as soon as practicable.

Article 13 – Succession

1. If a Party passes on its rights or obligations under the Cooperation Framework to another entity, it shall make best efforts to ensure that the succeeding entity accedes to the Cooperation Framework.
2. If a Party is acquired by another entity that is not a Party to the Cooperation Framework, the Party being acquired shall make best efforts, prior to the acquisition, to ensure that the acquiring entity accedes to the Cooperation Framework.

Article 14 – Severability

Should any provision of the Cooperation Framework become invalid, illegal, or unenforceable, it shall not affect the validity of the remaining provisions of the Cooperation Framework. In such a case, the Parties concerned shall be entitled to request that a valid and practicable provision be negotiated that fulfils the purpose of the original provision.

Article 15 – Entire Agreement

The Cooperation Framework sets forth the entire understanding of the Parties with respect to the Cooperation Framework.

Article 16 – Language

The Cooperation Framework has been prepared in English, which language shall govern all documents, notices, meetings, arbitral proceedings, and processes relevant thereto.

Article 17 – Applicable Law

1. The Cooperation Framework shall be construed in accordance with and governed by the laws of Belgium, excluding conflict of law provisions.

2. Nothing in the Cooperation Framework shall be deemed to require a Party to breach any mandatory statutory laws or regulations under which the Party is operating or public licenses granted or imposed by a Party's country of incorporation and/or operation.

Article 18 – Withdrawal, survival rights, and termination

1. A Party may withdraw from the Cooperation Framework by filing written notice to all the Parties. A Party's withdrawal shall be effective ninety (90) days after such notice has been accomplished.
2. A Party's rights and obligations under the following articles shall survive withdrawal and remain in force:
 - a. **article 7** (Intellectual property);
 - b. **article 8** (Confidentiality and non-disclosure of information);
 - c. **article 9** (Liability);
 - d. **article 10** (Amicable settlement of disputes);
 - e. **article 11** (Costs);
 - f. **article 13** (Succession);
 - g. **article 14** (Severability);
 - h. **article 15** (Entire agreement);
 - i. **article 16** (Language); and
 - j. **article 17** (Applicable law).
3. Notwithstanding **article 12.7** (Annual meeting and amendment), the Cooperation Framework may be terminated by a formal written decision of at least two-thirds of the Parties.

Article 19 – Entry into force

1. The Cooperation Framework shall enter into force on the date that two-thirds of the Parties listed in article 2 (Parties) have submitted their Certificates of Accession to the depositary.
2. After its entry into force, the Cooperation Framework shall enter into force for a New Party on the date that the New Party transmits its Certificate of Accession to the depositary.
3. As the cooperation envisaged under the Cooperation Framework will span decades and require the continued engagement of the Parties, there is no automatic termination date for the Cooperation Framework.

Annex A – Sequence of designing and building MVMT HVDC grids

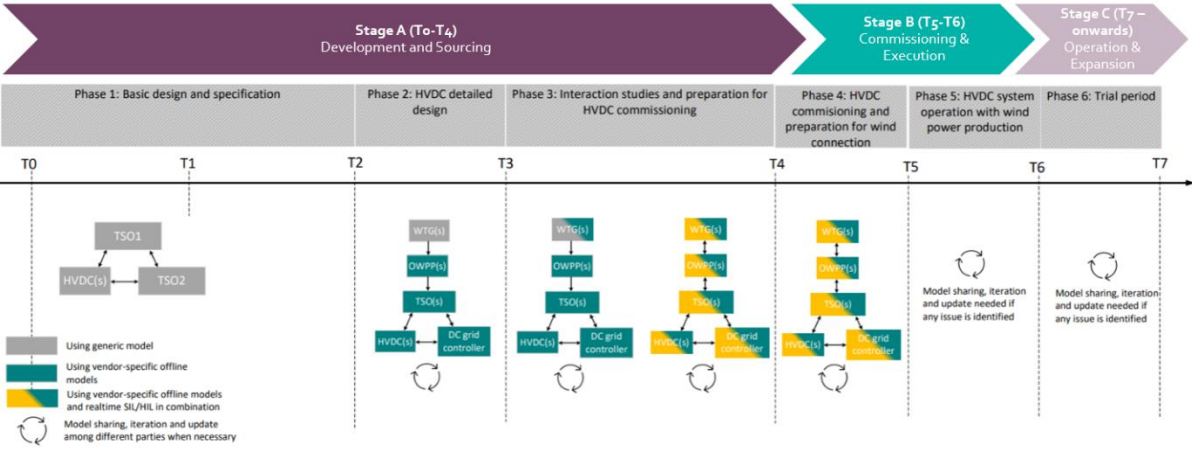
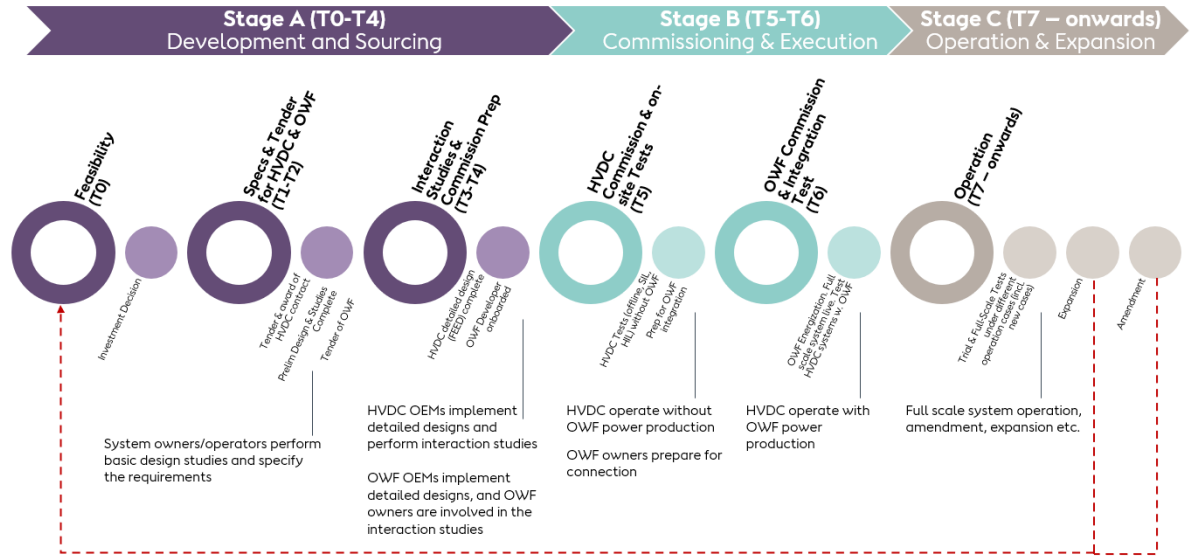
The information contained within the present annex is a work-in-progress and is tied to the outcome of a number of deliverables in InterOPERA. The most immediate work packages (WPs) and the identified deliverables include WP 1 (D1.3), WP4 (D4.3), and WP5. The close collaboration of WP4 with WP2 and WP3 will result in further coherence of the information provided below.

The intention of the diagram and narrative below is to set out typical steps for developing and building MVMT HVDC grids and the different roles and responsibilities of the Parties in such activities.

The Parties, when developing and/or operating MVMT HVDC grids, shall endeavour to adhere to the following general sequence. The first diagram provides an overview of the steps to be taken for developing and/or expanding new MVMT HVDC systems in the future (e.g., the construction stage), whereas the second diagram focuses on the interaction studies aspect of the process and the expectations on models and tests to be conducted throughout the project lifecycle. The sequence and individual steps in the process will be updated in light of the information received from WPs 1, 2, 3, and 5 as work progresses.

The exact sequence of events for the development and/or operation of MVMT HVDC grids may differ based upon the specific circumstances of the project, but the general sequence set forth herein is intended to facilitate cooperation amongst the Parties and to guide and optimise the processes.

The technical design and performance for a specific MVMT HVDC grid shall be in accordance with the agreed technical guidelines and specifications of the Cooperation Framework (similar to IEC industry standards). The technical specifications for a specific MVMT HVDC grid shall adhere to the relevant grid codes. Any additional or other standards requested by a transmission system operator (or another relevant entity) shall remain unaffected and prevail.



[The above process is taken from WP1 D1.3. This is a work in progress and will be updated once D1.3 is finalised.]

High-level elaboration of the process (as it stands today)

1. Stage A (T0-T4)—Development and Sourcing

Expected outcome: Finalised HVDC system design and preparation of commissioning and execution phase

- a. This stage focuses on the feasibility of a MVMT HVDC project with multi-party offshore wind integration into the system of the relevant transmission operator.

b. **In T₁**, once an investment decision is taken by the owner/proposer of the system, system specifications and performance requirements by the system owner (usually transmission system operators) are finalised.

i. Preliminary design studies are performed using generic models in this period.

ii. Tender preparations for the MVMT HVDC systems are also finalised in T₁.

c. **In T₂**, the HVDC system tender process is completed, and HVDC contracts are awarded to the chosen vendor(s).

i. Preliminary design studies and tests until this point are done using generic models by the transmission system operators or the nominated party.

ii. The tender process for offshore windfarms may occur in this period, and the offshore windfarm developer(s) could be awarded offshore windfarm development contracts by the end of T₂.

d. **In T₃**, the detailed design for HVDC system is finalised, and vendor-specific models for HVDC systems are used to run interaction studies and control and protection development.

i. The tests are performed by one of the following parties: HVDC vendors, transmission system operators, labs, or other third-party organisation(s).

ii. For offshore windfarms, the relevant interaction studies and control and protection development are run in this period using specific windfarm models and generic/specific turbine models.

iii. Frequent interaction (e.g., model and data sharing), control and protection development, and close coordination will be needed between HVDC vendors, labs, transmission system operators, and offshore windfarm developers.¹³

e. **In T₄**, the tests in T₂ and T₃ are completed using offline models (e.g., electromagnetic transient (EMT), small signal (SS), other stability models).

¹³ It is hereby noted that there can be types of developers other than offshore windfarm developers.

i. Vendor-specific real-time software and hardware in the loop tests will be performed before the end of T₄.

ii. By the end of Stage A, the HVDC detailed system design is finalised, construction and installation work is ready to begin, and the HVDC systems are ready to commission. The offshore windfarm detailed design is still in progress and can continue in the next stage.

2. Stage B (T₅-T₆)—Execution and Commissioning

Expected Outcome: Commissioning of MVMT HVDC systems and integration of offshore windfarms (if any)

a. **In T₅**, vendor-specific offline models and real-time software and hardware in the loop tests continue. The HVDC system commissioning is completed, and the on-site tests of MVMT HVDC systems are finalised. Furthermore, the preparations of windfarm commissioning (e.g., detailed design, construction, and installation) are finalised.

b. **In T₆**, commissioning and energisation of offshore windfarm(s) are carried out. The full-scale system is expected to go live and may undergo full-scale site tests for HVDC and offshore windfarm integration, including scenarios not tested in T₅.

3. Stage C (T₇-onwards)—Operation and expansion

a. **In T₇**, the operations phase (Phase 6) focuses on continued tests for full-scale systems with HVDC and offshore windfarms in operation. Special scenarios missed until this point are tested, including any minor changes made to the system.

b. Expansion of the system or any significant amendments to the system shall result in repetition of all of the stages and steps mentioned above.

c. The roles and responsibilities of all the parties during the operation and expansion stage are a matter of discussion at the moment and further work needs to be done to address this at the right level.

Annex B – Model certificate of accession

CERTIFICATE OF ACCESSION

ACCESSION

of a Party to the InterOPERA Project Multi-Party Cooperation Framework, version **xx**, dated **[xx]** (Cooperation Framework)

[OFFICIAL NAME OF THE PARTY]

hereby CONSENTS to become a Party to the Cooperation Framework identified above and accepts all the rights and obligations of a Party effective **[date]**.

[INSERT NAME OF THE DEPOSITARY],

in its capacity of depositary of the Cooperation Framework, hereby CERTIFIES that a duly executed copy of this CERTIFICATE OF ACCESSION was received on **[date]** and will be stored at **[INSERT NAME OF THE DEPOSITARY]**, pursuant to **article 2.4** (Parties) of the Cooperation Framework.

This CERTIFICATE OF ACCESSION has been duly signed by the undersigned authorised representatives.

[Date and Place]

[INSERT NAME OF THE PARTY]

Signature(s)

Name(s)

Title(s)

[Date and Place]

[INSERT NAME OF THE DEPOSITARY]

Signature(s)

Name(s)

Title(s)

Annex C – Model non-disclosure agreement

Non-Disclosure and Restricted Use Agreement

between
[...]
with its registered seat in [...], [...];
and
[...],
with its registered seat in [...], [...];
and
[...],
with its registered seat in [...], [...];
and
[...],
with its registered seat in [...], [...].

all of them are herein referred to individually as “Party” or collectively as “Parties”.

The Parties intend to engage in discussions and/or conduct business activities concerning [...] (“Purpose”).

In the course of such discussions and/or activities, it is anticipated that the Parties will disclose among each other proprietary information for the Purpose, which information the Parties regard as confidential.

Therefore, the Parties enter into the following agreement (“Agreement”):

Article 1 – Definitions

“Affiliate” means a corporation, company, or other entity, now or hereafter, directly or indirectly, owned or controlled by, or owning or controlling, or under common control with, one of the Parties, but such corporation, company, or other entity shall be deemed to be an Affiliate only so long as such ownership or control exists. For purposes of this definition, “control” of a corporation, company, or other entity shall mean to have, directly or indirectly, the power to direct or cause the direction of the management and policies of a corporation, company, or other entity.

“Confidential Information” means any information and data, including, but not limited to, any kind of business, commercial, financial, or technical information and data disclosed by one Party or its Affiliates to the other Parties, in connection with the Purpose, which is marked “Confidential”, “Proprietary”, “Restricted”, or similarly marked, by the disclosing Party, or is—when disclosed orally or visually—identified as such prior to disclosure and summarised in writing by the disclosing Party and said summary is provided to the receiving Party marked “Confidential” or similarly labelled within

thirty (30) days after such disclosure. Confidential Information shall include any copies or abstracts made thereof as well as any apparatus, modules, samples, prototypes, or parts thereof. Confidential Information shall also include the fact that the Parties are in discussions regarding the Purpose and that Confidential Information is being disclosed.

“Effective Date” means the last date that this Agreement has been executed by the Parties.

“Permitted Recipients” means:

- (i) Affiliates of the receiving Parties; and
- (ii) advisers or consultants advising the receiving Parties, and/or their Affiliates, with regard to the Purpose,

but limited to such recipients who each reasonably need to know Confidential Information for the Purpose, and who have, in addition, prior to receiving Confidential Information, executed a written agreement imposing confidentiality obligations with respect to the Confidential Information not less stringent than the obligations imposed on the receiving Parties by this Agreement.

Article 2 – Confidentiality and restricted use

2.1 All Confidential Information

- (i) shall be used by the receiving Parties exclusively for the Purpose;
- (ii) shall not be distributed or disclosed in any way or form by the receiving Parties to anyone except to directors or employees of the receiving Parties and/or directors or employees of the Permitted Recipients who each reasonably need to know such Confidential Information for the Purpose, and who, in addition, are bound to confidentiality in writing (including by employment agreements) with respect to the Confidential Information not less stringent than the confidentiality obligations imposed on the receiving Parties by this Agreement; and
- (iii) shall be kept confidential by the receiving Parties with the same degree of care as is used with respect to the receiving Parties’ own equally important confidential information to avoid disclosure to any third party, but at least with reasonable care.

2.2 Each Party shall have the right to refuse accepting information under this Agreement prior to its disclosure; information disclosed despite such a refusal is not covered by the confidentiality obligation under this Agreement. Nothing herein shall obligate either Party to disclose any particular information.

Article 3 – Exceptions

3.1 The obligations under Article 2 shall not apply to any information which:

- (i) was rightfully in the receiving Parties' possession without an obligation of confidentiality prior to receipt from the disclosing Party;
- (ii) is at the time of disclosure already in the public domain or subsequently becomes available to the public through no breach of this Agreement by the receiving Parties and no breach of the corresponding obligations of Permitted Recipients;
- (iii) is lawfully obtained by the receiving Parties from a third party without an obligation to keep confidential, provided such third party is not, to the receiving Parties' knowledge, in breach of any obligation of confidentiality relating to such information;
- (iv) is independently developed by the receiving Parties without the use of any Confidential Information; or
- (v) is approved for release by written agreement of the disclosing Party.

The Parties seeking the benefit of such exception shall bear the burden of proving its existence.

3.2 A receiving Party may disclose Confidential Information of the disclosing Party if this receiving Party is required to do so by any ruling of a governmental or regulatory authority, a court order, or by mandatory law, provided that, if not prohibited by law, written notice of such ruling or order is given without undue delay to the disclosing Party so as to give the disclosing Party an opportunity to intervene, and provided further that this receiving Party uses reasonable efforts to obtain assurance that the Confidential Information will be treated confidentially. Confidential Information disclosed pursuant to such mandatory law, ruling, or court order should be marked "Confidential".

Article 4 – No license

4.1 It is understood by the Parties that nothing herein is intended to grant, or shall be construed as granting, to any receiving Party any intellectual property rights in the disclosing Parties' Confidential Information. The receiving Parties shall not be entitled to file for patents or other statutory protection in any country based on or using any Confidential Information received hereunder, and any such patent or statutory protection must be transferred to the disclosing Party upon its reasonable request and without any charge. The disclosure of Confidential Information does not constitute any right of prior use for the receiving Parties.

4.2 The receiving Parties may not reverse engineer, disassemble, or decompose any prototypes, software, or other tangible objects that embody Confidential Information.

Article 5 – Warranty and liability

5.1 The Parties agree that all information is disclosed "as is" and that no warranties are given, or liabilities of any kind are assumed, with respect to such information, including, but not limited to, its fitness for the Purpose, non-infringement of third party rights, or its correctness, suitability, or completeness. The disclosing Party shall not be liable to the receiving Party/Parties for any indirect,

incidental, special, or consequential damages, loss of revenue, cost of capital, or loss of profit or business opportunity, whether such liability arises out of contract, tort (including negligence and strict liability), or otherwise.

5.2 If a receiving Party discloses or distributes Confidential Information to Permitted Recipients, or has given its consent to the respective disclosure or distribution of Confidential Information, that receiving Party shall be liable for acts or omissions by its Permitted Recipients or by their employees (even where such Permitted Recipients ceased to be a Permitted Recipient), as if such acts or omissions had been the receiving Party's own acts or omissions, where such acts or omissions result in unauthorised distribution, use, and/or disclosure of such Confidential Information.

Article 6 – Term, termination, and survival period

6.1 This Agreement shall come into force on the Effective Date and shall expire one (1) year thereafter, unless terminated earlier by either Party with thirty (30) days' prior written notice to the other Parties.

6.2 Each Party's confidentiality obligations that accrued under this Agreement prior to termination or expiration of this Agreement shall continue for a period of five (5) years following termination or expiration of this Agreement (the survival period).

6.3 The Parties are under no legal obligation to conclude any other contract with regard to the Purpose.

Article 7 – Return

7.1 Confidential Information shall remain the property of the disclosing Party. The disclosing Party may, within ninety (90) days after termination or expiration of this Agreement, request in writing from the receiving Parties that the receiving Parties, at their discretion, either return or destroy all Confidential Information in their possession and/or in possession of its/their Permitted Recipients, including Confidential Information stored electronically and/or on record-bearing media as well as any copies thereof. The receiving Parties shall certify in writing such destruction or return of the Confidential Information as well as any copies thereof to the disclosing Party within fourteen (14) days after receipt of the disclosing Party's request.

7.2 These provisions shall not apply to:

(i) copies of electronically exchanged Confidential Information made as a matter of routine information technology backup and to Confidential Information or copies thereof that must be stored by the receiving Parties or Permitted Recipients according to provisions of mandatory law; and

(ii) originals and copies of this Agreement, provided that such Confidential Information or copies thereof shall be subject to the confidentiality obligation according to the terms and conditions set forth herein until returned and/or destroyed.

Article 8 – Dispute resolution

- 8.1 The Parties shall endeavour to settle their disputes amicably.
- 8.2 All disputes arising out of or in connection with this Agreement that cannot be solved amicably shall be finally settled under the Rules of Arbitration (Rules) of the International Chamber of Commerce (ICC) by one or more arbitrators appointed in accordance with the ICC's Rules.
- 8.3 If the value of the total matter in dispute, including the value of any counter claims, is EUR one (1) million or above, the expedited procedure provisions of the Rules shall not apply, and the arbitral tribunal shall consist of three arbitrators. If the tribunal consists of three arbitrators, each Party shall nominate one arbitrator for confirmation by the ICC. Both arbitrators shall agree on the third arbitrator, within thirty (30) days after their appointment. Should the two arbitrators fail to reach agreement on the third arbitrator within the thirty-day period, the ICC shall select and appoint the third arbitrator.
- 8.4 The place of arbitration shall be Brussels, Belgium, unless otherwise agreed by the conflicting Parties.
- 8.5 The language to be used in the arbitration proceeding shall be English.
- 8.6 The award of the arbitration will be final and binding upon the Parties.
- 8.7 Nothing in this Agreement shall limit the Parties' right to seek injunctive relief to preserve the *status quo ante* or interim measures in any applicable competent court or arbitral tribunal.

Article 9 – Governing law

This Agreement shall be subject to the substantive law in force in Belgium without reference to any of its conflict of law rules.

Article 10 – Assignment

10.1 Neither this Agreement nor any rights and obligations under this Agreement may be assigned, transferred, novated, or delegated by either/any Party without the prior written consent of the other Parties, except that no consent is required for assignment of this Agreement by a Party to that Party's Affiliate.

10.2 However, any Party may, without the consent of the other Parties, while remaining entitled and obligated under this Agreement, provide any Confidential Information received under this Agreement to a successor or an acquirer of all or a substantial part of the business to which the Confidential Information pertains (whether by way of a share deal, asset deal, or otherwise) provided such successor or acquirer is bound by a prior written agreement imposing on such successor or acquirer confidentiality obligations with respect to the Confidential Information that are no less stringent than the obligations imposed on the receiving Parties under this Agreement.

Article 11 – Notices

11.1 Notices and communications between the Parties shall be in English.

11.2 Any notice required to be given under this Agreement shall be in writing and shall be delivered to each Party required to receive the notice as set out below or as otherwise specified by the relevant Party by notice in writing to the other Parties:

[...]

[...]

[...]

[...]

Article 12 – Export regulations

Notwithstanding anything to the contrary within this Agreement, for all Confidential Information disclosed hereunder, the Parties shall comply with all applicable export control, customs, and foreign trade laws, regulations, orders, embargos, and other restrictions (Foreign Trade Restrictions) and the disclosing Party shall obtain all necessary export licenses. Upon written request from the receiving Parties, the disclosing Party shall provide the receiving Parties with all information and data that is reasonably required by the receiving Parties to comply with all applicable Foreign Trade Regulations, e.g., the export control list number or the Export Control Classification Number pursuant to the U.S. Commerce Control List (ECCN). Neither Party shall be obligated to fulfil this Agreement if such fulfilment is prevented by any impediments arising out of national or international Foreign Trade Regulations or any other sanctions.

Article 13 – Severance clause

If provisions of this Agreement are, or should become, entirely or partially invalid or unenforceable, this shall not affect the validity or enforceability of the remaining provisions. In such cases, the invalid or unenforceable provision shall be deemed to be restated, to the extent legally permissible, to reflect as closely as possible the original intentions of the Parties concluding the Agreement.

Article 14 – Third parties

A person who is not a party to this Agreement may not enforce any of its provisions.

Article 15 – Miscellaneous

15.1 No Party will act or have the authority to act as an agent of any other Party for any purpose whatsoever. Nothing in this Agreement shall be construed as forming a partnership, joint venture, or any other business relationship among the Parties.

15.2 The failure of a Party at any time or times to require performance by the other Parties of any provision hereof shall in no manner affect its right, at a later time, to enforce the same. Waiver of any

breach or violation of this Agreement shall not constitute a waiver of subsequent breach or violation of the same or different kind.

15.3 This Agreement sets forth the entire understanding of the Parties with respect to the subject matter of this Agreement and supersedes any previous or contemporaneous agreements, understandings, or communications, whether written or oral, relating to such subject matter.

15.4 This Agreement itself, termination notices, or amendments to this Agreement (including any waiver of the written form requirement) must be executed, either in writing or by electronic signature, using a software tool for electronic signatures. "Written form" or "in writing" as described in this Agreement shall therefore also include electronically signed documents and electronically transmitted copies (e.g., PDF scan sent as an attachment to an email) carrying the signatures of the Parties.

Each Party hereto has caused this Agreement to be executed by their duly authorised representatives on the dates specified below.

Name:
Place, Date:

Name:
Place, Date:

Name:
Place, Date:

Name:
Place, Date:

Annex D – Code of Conduct

Compliance with competition law

Do	Don't
Stick to an exchange of technical information that is deemed strictly necessary for the successful execution of a project.	Do not participate in discussions concerning competitively sensitive information (e.g., information which cannot be identified through publicly available sources and, if obtained by any participant, is likely to reduce the strategic uncertainty as to the future operation on the relevant market) or exchange competitively sensitive information, including: <ul style="list-style-type: none"> • prices, price components, or other conditions; • profits, margins, or market shares; • allocation of markets or territories; • orders or order volumes; • capacities, production numbers, or quotas; • production-, marketing-, or other costs; • corporate strategies and intended future market conduct (e.g., sales strategies, current or future product development); • bids, project tenders, and conduct during tenders.
Ask for a meeting's adjournment if you have any objection to its legality. Such a request shall be recorded in the minutes. If the discussion continues, leave the meeting immediately ("noisy withdrawal").	
Contact your supervisor for advice in case of doubt and for further escalation of the reported incident.	
Refer to past or running projects in a generic way when the experience is required for a technical discussion.	Do not provide specific information regarding the progress or content of current or past negotiations and projects.
If you have been sent information or documents that give rise to competition law concerns, speak with your supervisor about the next steps.	Do not misuse the Cooperation Framework to bypass bilateral discussions and agreements in running tenders and projects.
Only participate in a meeting if a written invitation and agenda have been provided,	Do not distribute documents containing competitively sensitive information and do not accept such documents if provided.

representatives of noncompetitors are present, and minutes are being taken.	
---	--

Protection of Parties' intellectual property

Do	Don't
Classify information/data/documents made available to other partners according to the relevant classification rules.	Do not introduce any information without proper classification.
Share information based on the classification and according to the need-to-know principle.	Do not distribute information to anyone who is not in the scope of the chosen classification according to relevant classification rules.
Access to the models (online/offline) is regulated by laboratories. Follow the instruction of the laboratory staff and do not enter laboratories alone.	Do not share protected information from one party with anyone else without explicit approval by the party.
Demonstrator results (online/offline) must be analysed and limited to the individual party's scope of supply (point-of-connection) before distribution.	Do not share demonstrator results (online/offline) without checking intellectual property issues with the individual parties.
Ensure that no party visiting a laboratory is left without supervision by the laboratory owner's personnel whenever there is a risk of unintentional exposure of another party's products.	Do not take any pictures of another party's products and solutions without explicit written permission of the concerned party.
Ensure that the sensitive information that any party intends to share is adequately protected by intellectual property rights prior to sharing.	Do not use confidential information of another party within your own activities without explicit approval of the owner of such confidential information.

Standard setting

Do	Don't
Ensure that participation in standards setting is unrestricted and that the procedure for adoption	Do not include elements in standards that exclude suppliers or competitors from the

is transparent (good faith disclosure of intellectual property rights).	marketplace for any reason other than technical considerations.
Ensure fair, reasonable, and non-discriminatory (FRAND) access to standards.	Do not use standard-setting activities as an excuse to enter agreements with competitors, which may limit competition for any reason other than technical considerations or exchanges of competitively sensitive information between competitors.
Ensure that standards are voluntary and non-binding.	—

Sharing of sensitive data and models

Sharing of sensitive data and models may require additional non-disclosure agreements (NDAs) between the parties involved. A model NDA is contained in **annex C** of the Cooperation Framework.

The exchange of information between Parties (e.g., vendor and laboratory) may require a signed NDA defining that the purpose of the model is for testing and validation of connected equipment for stable operation.

NDAs from each Party do not necessarily need to be identical but shall endeavour to include elements necessary to execute the interaction studies, such as the following:

- scope, content, format, and form (e.g., black-boxed) of information to be exchanged;
- time schedule for the exchange of information;
- process and conditions for meetings to discuss potential issues identified during the study;
- type of studies to be performed; and
- period of time before public disclosure is possible.

The workflow for interaction studies may follow three stages:

- Stage 1: Interaction studies start with relevant Parties exchanging the minimum set of required models, based on the applicable NDAs.

- Stage 2: The agreed interaction studies are performed using the models provided by each of the relevant Parties. In case of any interactions or issues, the workflow will go into stage 3.
- Stage 3: In accordance with the applicable NDAs, discussions are held amongst the relevant Parties about any interactions or issues that have arisen. If, after such discussions, the issue cannot be resolved, the Parties may resort to the dispute settlement procedures in the Cooperation Framework or the applicable NDA(s).

DRAFT

References

1. 3 GW Energy Island Bornholm - Denmark - Market Dialogue, 30 June 2023
2. Annex to the Communication from the Commission, Approval of the content of a draft for a Communication from the Commission, Guidelines on the applicability of Article 101 of the Treaty on the Functioning of the European Union to horizontal co-operation agreements (2023)
3. Energinet, Multi-Party Design and Interaction Studies for Energy Island Application, 14 April 2022 (work in progress)
 - a. Energinet, Model and Resulting Data Sharing Framework, 31 March 2023 (work in progress)
4. European Association of the Electricity Transmission and Distribution Equipment and Services Industry (T&D Europe), White Paper, Studies for Interaction of Power Electronics from Multiple Vendors in Power Systems, 7 July 2022
5. European Climate, Infrastructure and Environment Executive Agency (CINEA), CINEA.C – Green research and innovation, C.2 – Horizon Europe Energy, Grant Agreement, Project 101095874 – InterOPERA (2022)
6. European Network of Transmission System Operators for Electricity (ENTSO-E), Life-cycle steps of an electricity transmission project (August 2023)
 - a. European Network of Transmission System Operators for Electricity (ENTSO-E), Position on Offshore Development, Assessment of Roles and Responsibilities for Future Offshore Systems (November 2022)
7. European Network of Transmission System Operators for Electricity (ENTSO-E), European Association of the Electricity Transmission and Distribution Equipment and Services Industry (T&D Europe), Wind Europe, Workstream for the development of multi-vendor HVDC systems and other power electronics interfaced devices (March 2021)
8. Adrien de Hauteclocque, *Article 102 TFEU Abuse of a Dominant Position*, in Christopher Jones (ed.), *EU ENERGY LAW, VOLUME II, EU COMPETITION LAW AND ENERGY MARKETS* (Claeys and Casteels 2019), pages 309–310
9. Higher Education Research Commercialisation Intellectual Property Framework Multi-Party Collaboration Agreement, 30 August 2022

10. International Federation of Consulting Engineers (FIDIC)
 - a. Golden Principles (1st edition 2019)
 - b. Conditions of Contract for Construction, General Conditions; Guidance for the Preparation of Particular Conditions and Annexes: Forms of Securities; Forms of Letter of Tender, Letter of Acceptance, Contract Agreement and Dispute Adjudication/Avoidance Agreement (2nd edition 2017)
11. InterOPERA
 - a. Consortium Agreement (2023)
 - b. D4.1 Preliminary Cooperation Framework – Code of Conduct (July 2023)
 - c. Stakeholder Structured Interviews (September 2023)
 - d. Stakeholder Questionnaires (September 2023)
12. JUSTIA Business Contracts, Applicable Law Contract Clauses
13. Hannah Kruimer, *Non-Discriminatory Energy System Operation: What Does It Mean?*, 12.3 Competition and Regulation in Network Industries 260 (2001)
14. Law Insider, Sample Clauses Liability
15. Netdocuments, Mutual Indemnification Clause Samples
16. Ceciel Nieuwenhout, *Regulating Offshore Electricity Infrastructure in the North Sea: Towards a New Legal Framework*, University of Groningen (2020)
17. Ceciel Nieuwenhout, Vincent Lakerink, Philipp Ruffing, Whitepaper on the Conclusions of Ready4DC WG2: Legal and Regulatory Aspects of a Multi-Vendor Multi-Terminal HVDC Grid (Ready4DC 2023)
18. Organisation for Economic Cooperation and Development (OECD), Policy Roundtable, The Essential Facilities Concept (1996)
19. Public-Private Infrastructure Advisory Facility (PPIAF), Toolkit for Public-Private Partnerships in Roads and Highways: Sample Boiler Plate Clauses

20. Olivia Woolley, *Governing a North Sea Grid Development: The Need for a Regional Framework Treaty*, 14.1 *Competition and Regulation in Network Industries* 73 (2013)

DRAFT