

JUS399 Master Thesis

# Licencing Offshore Wind Farms

*A Comparative Analysis of the Authorisation Regimes  
for Offshore Wind Energy Production in Denmark,  
Norway and the United Kingdom.*

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“A great wind is blowing  
and that gives you either imagination  
... or a headache”

*Catherine the Great (1729-1796)*

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# 1 Introduction

## 1.1 Thesis topic and scope

The objective for this thesis is to perform a comparative analysis of the authorization regimes for energy production from offshore wind in Denmark, the United Kingdom of Great Britain and Northern Ireland (UK), and Norway. The thesis' focus will be the kind of authorisations needed for this and how to obtain them. Additionally, it will look at what the Norwegian legislators may learn from these experienced nations to in order to develop the offshore wind energy production at home and its regulation, which still remains rather immature despite the country's potential.

## 1.2 Relevance and justification of topic

In Europe, production of energy from offshore wind can be categorised as a 'small industrial fairy-tale'. What was 20 years ago a small occupation for particularly interested, is today a growing industry in several parts of the world with European countries leading the way. In Europe today there are 4500 turbines spread across 105 offshore wind farms, creating 18.5 Giga watt (GW) and over 40.000 jobs.<sup>1</sup>

A contributing factor for Europe's success may be the increased focus in the European Union (EU) on energy production from renewable sources. Energy production from offshore wind is both a way to reach the Union and Member States' goal of minimum percentage share of energy from renewable sources in gross final consumption<sup>2</sup> as well as lowering their CO<sub>2</sub> emissions.<sup>3</sup>

In Norway, the enthusiasm has been curbed. Almost a decade after the Offshore Energy Act came into force little has happened.<sup>4</sup> In the period after the adoption of the Act, reports on

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<sup>1</sup> Wind Europe *European Offshore Wind: the story behind the success*

<https://windeurope.org/newsroom/news/european-offshore-wind-the-story-behind-the-success/>  
(Accessed 10 May 2019)

<sup>2</sup> Directive (EU) 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources [2018] OJ L328/82 (Directive 2018/2001), Annex 1.

<sup>3</sup> Denmark's target after the 2018/2001 directive is a 30 % share of energy from renewable sources in gross final consumption in 2020, an increase of 13 percentage from 2005 numbers., while the United Kingdom has a target of 15 % share, an increase on 13,7 percentage from 2005 numbers, see Directive 2018/2011 Annex 1

<sup>4</sup> Lov 4 Juni 2010 nr. 21 om fornybar energiproduksjon til havs (havenergiloven) (The Offshore Renewable Energy Act) (Offshore Energy Act)

possible areas for offshore wind exploitation were published<sup>5</sup>, yet no areas have been opened up for activity, hence no windfarms have been authorised or started operations. The Act grants the authority to the Ministry of Petroleum and Energy to create several regulations, but this opportunity has only been used to a small degree.<sup>6</sup> Furthermore, albeit enacted, the Offshore Energy Act is not a very detailed piece of legislation, which warrants further legal research and legislation if energy production from offshore wind is to be set in motion in Norway.

Lack of interest and political and public will can be attributed to the fact that Norway already has a substantial production of renewable energy, namely through the exploitation of hydropower.<sup>7</sup> Relatively low electricity prices at home and the lack of sufficient infrastructure to export electricity from offshore wind farms, are also arguments against developing the Norwegian Offshore wind energy industry. The country objectively has all the clean electricity it needs, something its export numbers is evidence of<sup>8</sup>, and do not see the benefits of investing in something reckoned to be a rather expensive way of producing electricity.

There seem however to be an upswing in the interest among politicians as well as the public. This may attributed to the increase in conflicts regarding *onshore* wind energy production<sup>9</sup>, as well as research developments like Hywind from Equinor, with Norwegian scientists in

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<sup>5</sup> See The Norwegian Water Resource and Energy Directorates report on offshore wind 'Havvind: Forslag til utredningsområder' (2010) <http://publikasjoner.nve.no/diverse/2010/havvind2010.pdf> (Accessed 10 May 2019)

<sup>6</sup> See The Offshore Energy Act § 2-1, § 2-2, § 3-3, § 3-4, § 3-5, § 4-1, § 5-1, § 5-2, § 6-1 and § 7-1 ; Two regulations have been adopted, see *Overføring av myndighet til Samferdselsdepartementet etter § 5-2 i lov om fornybarenergiproduksjon til havs (havenergilova)* (FOR-2014-06-20-791) and *Forskrift om marking av og etablering av sikkerhetssoner tilknyttet innretning for fornybar energiproduksjon* (FOR-2016-09-15-1066).

<sup>7</sup> Over 90 % of the electricity in Norway is made from the exploitation of hydropower, see <https://energifaktanorge.no/en/norsk-energiforsyning/kraftproduksjon/> (Accessed 10 May 2019)

<sup>8</sup> Norway exported 2 272 TWh of 2 487 TWh produced energy, see Statistics Norway: Production and consumption of energy, energy balance <https://www.ssb.no/en/energi-og-industri/statistikker/energibalanse> (Accessed 10 May 2019)

<sup>9</sup> For examples see amongst other <https://www.tu.no/artikler/vindkraft-er-unodvendig-i-norge/276721> , <https://www.bt.no/btmeneringer/debatt/i/b5mgOd/Den-norske-motstanden-mot-vindkraft-skader-klimaet> (Accessed 10 May 2019)

front, getting more attention.<sup>10</sup> Another important element is the financial aspect. Established offshore wind nations are now presenting prospects of subsidy-free parks in the near future.<sup>11</sup>

Furthermore, the Minister of Petroleum and Energy announced earlier this spring that work has been set in motion to open up areas for electricity production from offshore wind.<sup>12</sup> Last year, the Parliament asked the Government to start the groundwork for a regulation on opening up areas for offshore wind farms and.<sup>13</sup>

For Norway this might soon be an actual industry. An industry that needs appropriate and sufficient regulations in order to become successful, and being able to collect the commercial potential and other benefits it might carry.

### 1.3 Research question and limitations

There is a multitude of elements of the legal framework for offshore wind electricity production that would be interesting to examine. Since Norway is in its (pre) starting position, this thesis focuses at the *pre-upstream activity*, to borrow an expression from the petroleum sector.<sup>14</sup> The pre-upstream activity here relates to rules and regulations on the permission to produce energy at sea: the authorisation regime.

This thesis will analyse the licence rules in relation to the beginning of the process of exploiting wind offshore. In doing so it will explore two research questions central to this study. First, the thesis inquires as to which licenses are required to produce electricity through

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<sup>10</sup> See amongst other <https://energiogklima.no/kommentar/hywind-tampen-equinor-i-rute-mot-konkurransedyktig-flytende-havvind/>, <https://www.equinor.com/no/what-we-do/hywind-where-the-wind-takes-us.html>, <https://www.uib.no/matnat/117151/finn-gunnar-nielsen-f%C3%A5r-internasjonalt-energi-pris>, <https://forskning.no/miljoteknologi/norsk-havvind-drukner-i-billig-vannkraft/396949>, [https://www.aftenposten.no/meninger/kronikk/i/4q3Rag/Vi-kan-ga-glipp-av-et-nytt-industrieventyr--Nielsen - Froysa-og-Furevik](https://www.aftenposten.no/meninger/kronikk/i/4q3Rag/Vi-kan-ga-glipp-av-et-nytt-industrieventyr--Nielsen-Froysa-og-Furevik) (Accessed 10 May 2019)

<sup>11</sup> The Maritime Executive 'Dutch to Get World's First Subsidy-Free Offshore Wind Park (19 March 2018) <https://www.maritime-executive.com/article/dutch-to-get-world-s-first-subsidy-free-offshore-wind-farm> (Accessed 10 May 2019)

<sup>12</sup> Minister of Petroleum and Energy Kjell-Bjørge Freiberg: Et nytt kapittel for vindkraften (29.03.19) <https://www.regjeringen.no/no/aktuelt/et-nytt-kapittel-for-vindkraften/id2638978/> (Accessed 10 May 2019)

<sup>13</sup> Dokument 8:182 S (2017-2018), Innst. 322 S (2017-2018), vedtak 824, <https://www.stortinget.no/no/Saker-og-publikasjoner/Vedtak/Vedtak/Sak/?p=71701>.

<sup>14</sup> Upstream activity is a term used in the petroleum industry and refers to the activities and regulation ahead of and in connection to the extraction of the petroleum resources. Licensing, action taken ahead of the actual activity (the extraction, or in this case the exploitation of energy resources) considered to be part of the upstream activity. Transport, distribution and sales are parts of the midstream or downstream activity.

offshore wind. Second, how to attain those licences and what is the procedure leading to the grant of them.

The thesis will not look at regulation ahead of opening up areas, such as rules in relation to environmental impact assessments (EIAs), or regulation on the process once electricity production has commenced, such as rules on network, transport, distribution or any other part of the life span for offshore wind farms producing electricity.

Due to the scope, and from the comparative perspective, this thesis has chosen to focus on Denmark and the United Kingdom in a comparative analysis to the legislation in Norway.

There are several reasons for focusing the comparison on Denmark and the UK vis-à-vis Norway. Denmark is one of the eldest players on the scene, with the world's first offshore wind turbine in 1991, and is now a rather experienced veteran.<sup>15</sup> The UK is today one of the leading nations in the development of the offshore wind industry, with some of the biggest offshore wind farms to date.<sup>16</sup> They are both key contenders with a large amount of knowledge, and have had legislation for offshore wind in place for some time, factors that has allowed the industry to thrive.<sup>17</sup>

Lastly, all three countries are subject to EU/EEA law which sets the minimum regulatory framework for electricity and energy pursuant to the Directives and Regulation mentioned under section 3.2 in this thesis.<sup>18</sup>

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<sup>15</sup> The world's first offshore wind farm Vindeby was connected to the grid in 1991, and consisted of 11 turbines. The windfarm got decommissioned in 2017, for more information: <https://orsted.com/en/Media/Newsroom/News/2017/03/The-worlds-first-offshore-wind-farm-is-retiring> (Accessed 10 May 2019).

<sup>16</sup> UK are home to the currently largest offshore wind farm; Hornsea One, and the second largest; the Walney Extension, both have come into operation in the last twelve months, for more information see: <https://orsted.com/en/Media/Newsroom/News/2019/02/The-worlds-biggest-offshore-wind-farm-Hornsea-one-generates-first-power> and <https://www.cnn.com/2018/09/06/the-largest-offshore-wind-farm-on-the-planet-opens.html>. (Accessed 10 May 2019).

<sup>17</sup> See for instance <https://www.bloomberg.com/news/articles/2018-06-27/queen-elizabeth-makes-millions-from-u-k-s-offshore-wind-farms> (Accessed 10 May 2019)

<sup>18</sup> This thesis is written after the United Kingdom voted to leave the European Union and evoked article 50 of the Treaty on the European Union (TEU). The 'Brexit' process is underway, but due to the latest postponing, the UK will not leave the EU in the near future. This thesis will therefore relate to the current legal situation, that the UK is still a part of the EU, and that EU law applies.



## 1.4 Structure

First, this thesis will have a short methodology chapter dealing with the legal method applied and some of the challenges of this study. Then, the thesis undertakes a substantive analysis of comparative legislation. This is done by presenting the international and regional legal framework for offshore wind energy production, and then a small chapter on the need for authorisation of energy exploitation in general.

The first research question is addressed by analysing the Danish law on the subject and then the British law relevant for the question. Then, the differences between these ‘experienced’ nations and Norway are analysed through a presentation and discussion of the Norwegian rules. The same procedure is done for the second research question.

The thesis finishes with a section on the road ahead for Norwegian legislation for offshore wind energy production, asking whether Norway can and should one adopt or several solutions from its North Sea neighbours, or whether it should develop rules on the basis of its current adjacent legislation to offshore wind.

## 2 Methodology

### 2.1 A comparative analysis

As briefly mentioned, the current offshore wind regime in Norway seems unfinished.<sup>19</sup> In an attempt to suggest how to develop the regulation forward, a comparative perspective from other regimes with a more mature offshore wind energy industry and legislation is important, both to learn from their success and avoid their pitfalls.

The aim of this thesis is to do a comparative analysis of three different jurisdictions, namely of the established rules and regulation in Denmark and the UK versus what currently exist of legislation for offshore wind energy production in Norway. A thesis of this scope does not manage to go through every detail of the legislation in all of the countries, but rather tries to present the legal framework in each jurisdiction and analyse the similarities and differences. A pitfall when writing comparative law is that the thesis might become descriptive or the

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<sup>19</sup> The Ministry of Petroleum and Energy states that due to flexibility the Act needs to be complemented with regulations, and that changes and edits also may be necessary, due to technological changes and changes when it comes to knowledge and international relations. The department is not blind to the fact that the Act needs complementation and also revision sooner rather than later. See Ot.prp.nr.107 (2008-2009) om lov om fornybar energiproduksjon til havs, 53.

analysis becomes disconnected from the description. Therefore, and to limit this as much as possible, this thesis is structured in a way that the legal framework and rules from Denmark and the UK are presented first separately, and then the comparative analysis is done when discussing the Norwegian rules.

A way to achieve a more detailed analysis would be to have done a comparative analysis of only two jurisdictions, i.e. Denmark and Norway. I have however chosen to include both Denmark and the UK. At the risk of not being able to go too much in-depth on the research questions, the bigger source material may offer a broader spectrum of legislation and regulation. I have found this spectrum of value, since it may be beneficial to look not just to one successful offshore wind industry, but two, in order to say something worthwhile about what Norway can or should adopt of solutions.

## 2.2 Common law versus civil law

Another methodological challenge in this thesis is writing on several jurisdictions, as well as on legislation from both civil law and common law countries. Denmark and Norway are both part of the civil law tradition, whereas the UK belongs to the common law tradition.<sup>20</sup> Traditionally these two traditions have represented different teachings and methods of law.<sup>21</sup>

In the field of energy law, and in particular for the relevant legislation for this thesis, one may argue that the differences are not that vast, due to the fact that most of the law is in writing either in Acts, regulations or statutory instruments.

This thesis, although aiming to be a comparative analysis, will undeniably have some traces of the traditional legal method used in Norway, all the time it is written through a Norwegian lens.<sup>22</sup> In relation the Danish material is this considered not to be too problematic since there are similar teachings and traditions in Norwegian and Danish legal methods.<sup>23</sup> This is not the case for the legal method of the UK and common law. This is however not considered to too

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<sup>20</sup> Julian Juergensmeyer and Ellen Margrethe Basse "Civil Law and Common Law Systems" in Helle Tegner Anker, Birgitte Egelund Olsen and Anita Rønne, *Legal Systems and Wind Energy: A Comparative Perspective* (DJØF publishing 2008) 25.

<sup>21</sup> For more on civil and common law systems see Juergensmeyer and Basse 'Civil Law and Common Law systems' (n 23)

<sup>22</sup> For more on the Norwegian legal method see for instance Erik Magnus Boe *Innføring i juss: Juridisk tenkning og rettskildelære* (Universitetsforlaget 3<sup>rd</sup> edition 2010)

<sup>23</sup> Since they are both part of the civil law tradition and having close historical *and* legal ties with Norway being under Danish rule for over 400 years.

much of an issue for this thesis all the time Acts are recognised as primary legal sources in all three countries. Another helping hand is given by the British material itself. The material, in particular the Acts, often contain sections on how the different terms should be understood, something that makes the interpretation easier.

The UK, some due to its common law roots, has a higher level of fragmented and spread legislation in general and for offshore wind than Denmark and Norway, shown in the substantial analysis. However, as this thesis will show, the fragmented tendencies also appear in Denmark and Norway.

When it comes to Britain several UK Public General acts are relevant for regulating offshore wind energy production, namely the Crown Estate Act of 1961, the Electricity Act of 1989, the Energy Act of 2004, the Planning Act of 2008 and the Marine and Coastal Access Act of 2009. Orders for the wind farms, and any amendments or correction to the orders, given as statutory instruments, are also relevant.<sup>24</sup>

The relevant Danish legislation is the Promotion of Renewable Energy Act (RE-act), the Energy Supply Act and the Environmental Impact Assessment of Plans, Programmes and Project Act.<sup>25</sup> The Danish authorities do not use the same method as England with statutory instruments for the closer detailed regulation of offshore wind farms, rather they rely on classical contracts and administrative decisions.

The relevant Norwegian legislation is the Offshore Energy Act. Due to the fact that is still somewhat unfinished, it may be of interest to inspect adjacent legislation such as the Norwegian Energy Act and the Petroleum Act.<sup>26</sup>

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<sup>24</sup> An English statutory instrument has the legal weight equivalent to Norwegian and Danish Regulations

<sup>25</sup> 'Lov om fremme af vedvarende energi' jf. Lovbekendtgørelse nr. 1194 af 28 september 2018, (Published in Lovtiende A 22 January 2019) (Promotion of Renewable Energy Act) (RE Act) ; Lov om elforsyning' jf. lovbekendtgørelse nr. 1009 af 27.juni 2018, (Published in Lovtiende A 22 January 2019) (Electricity Supply Act) ;

'Lov om miljøvurdering af planer og programmer af konkrete projekter (VVM) jf. lovbekendtgørelse nr. 448 af 10.maj 2007 (published in Lovtiende A 26 October 2018)

<sup>26</sup> Lov 29 Juni 1990 nr. 50 om produksjon, omforming, overføring, omsetning, fordeling og bruk av energi m.m' (The Energy Act) and 'Lov 29 November 1996 nr. 72 om petroleumsvirksomhet' (The Petroleum Act)

### **2.3 The primary sources**

Due to the fact that this is still a relatively new field of law, and that it can be challenging to write about several jurisdictions, this thesis focuses on the primary sources of legislation, meaning that the focus first and foremost will be on the acts dealing expressly with offshore wind activity.

This will be complemented by regulations and statutory instruments, and the contracts or agreements between the private companies and the government. Searches for relevant court cases in the different jurisdictions have been performed. Due to the fact that few to none cases that were directly applicable for this thesis came up, the priority of this thesis has been on the Acts on the expense of court cases and administrative practice.

Preparatory works as well as theory have different standings in the different jurisdictions as sources of law. Preparatory works have only to a small degree been used.

This thesis has relied upon some legal theory. Even though it does not carry too much substantial weight, it is being used as a source to help interpretation and to fill the gaps where needed. Another challenge regarding the use of legal theory here is that the regulation of offshore wind energy production is still a relatively young field of law, something that can be reflected in the theory. For instance, due to new knowledge and experience the regulation may change quite rapidly, making some legal theory outdated.

Where relevant the thesis will refer to Orders for offshore wind farms in UK and contracts and agreements for offshore wind farms in Denmark. Even though only material on a few offshore wind farms will be referred to or presented, the references should to a large degree still represent the current legislation and practice in the different countries. Both the Danish and British material seem to follow its respective patterns. The aim has been to present offshore wind farms either in operation or under development of newer age so that the material presented represent the current and applicable regulations.

### **2.4 Translations and legal analysis**

When writing on several jurisdictions, the issue of translating the legislative works arise. It is not only about translating the legislation, but also about interpreting the law, and making sure that the interpretation represent the original meaning of the translated material. In this thesis

the legislation stems from three different jurisdictions and languages, entailing that the non-English material had to be translated into English where necessary.

There are no official translations of the Danish legal material. Therefore, the translation has been carried out on the basis of the authors understanding of the Danish and English language and the Danish legal method, with the support from English literature on Danish law. Fortunately, both the Norwegian and Danish language and legal method share a history, and a lot of the same principles through the civil law tradition. The translation and interpretation is therefore reckoned to be accurate and represent the acts and regulations original meaning.

When translating the Norwegian material this thesis has relied upon, in addition to traditional Norwegian legal methodology, the translation of the Energy Act issued by the Ministry of Petroleum and Energy, as well as the English Summary of the preparatory works for the Offshore Ocean Energy Act.<sup>27</sup>

For instance, the Offshore Energy Act in Norwegian uses the term “konesjon”, which can be directly translated to *concession*, when stating what authorisation is needed. The (un)official translation and the summary of the preparatory works do however translate “konsejson” to *licence*. This has to do with the fact that concession in Norwegian is used differently than concession in English speaking jurisdictions, including the EU. A Norwegian ‘konesjon’ has to a large extent the same meaning as ‘licence’.<sup>28</sup> Since the government has chosen to use the term licence in relation to the Offshore Energy Act this thesis will do the same.

## 3 International Law

### 3.1 United Nations Law of the Sea Convention

#### 3.1.1 *A legal order of the seas*

To produce electricity from offshore wind turbines is to operate in an area that is not necessarily only governed by national law, but also under the regulation of Public

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<sup>27</sup> See [https://www.regjeringen.no/globalassets/upload/oed/vedlegg/lover-og-reglement/act\\_no\\_50\\_of\\_29\\_june\\_1990.pdf](https://www.regjeringen.no/globalassets/upload/oed/vedlegg/lover-og-reglement/act_no_50_of_29_june_1990.pdf), and Concerning an Act on Offshore Renewable Energy Production (the Offshore Energy Act) Summary in English: Proposition No. 107 (2008-2009) to the Storting

<sup>28</sup> Ernst Nordtveit argues that the Norwegian concept of concessions and licence, in relation to the exploitation of natural resources, have the same meaning, and that licence can be used as a substitute. See Ernst Nordtveit ‘Regulation of the Norwegian upstream petroleum sector’ in Tina Hunter (ed) *Regulation of the Upstream Petroleum Sector: A Comparative Study of Licensing and Concession Systems* (Edward Elgar Publishing 2015) 143.

International Law, in particular the Law of the Sea, governed by the United Nations Convention on Law of the Sea.<sup>29</sup>

The Law of the Sea Convention (LOSC) builds on, *inter alia*, the idea that the resources at sea is “the common heritage of mankind”.<sup>30</sup> According to its preamble, the Convention recognises the need to establish a legal order for the seas, promoting peaceful use of the sea and oceans and equitable and efficient use of its resources and at the same time protect and preserve the marine environment.<sup>31</sup> Denmark, the United Kingdom and Norway have all ratified LOSC.<sup>32</sup>

### **3.1.2 The different zones**

The convention establishes four different zones at sea; the territorial waters, the exclusive economic zone, the continental shelf and the high seas. Most relevant for this thesis is the exclusive economic zone (EEZ) as this is typically the best suited, and commonly used area for placing offshore wind turbines. The EEZ stretches out to 200 nautical miles from the baseline of the coastal state.<sup>33</sup> The baseline is the “low-water line along the coast as marked on a large-scale charts officially recognized by the coastal state”.<sup>34</sup>

### **3.1.3 The rights within the EEZ<sup>35</sup>**

It follows from Article 56 of the LOSC that the coastal state has “sovereign rights” when it comes to the economic exploration and exploitation of this zone “such as the production of energy from the water, currents and *winds*” (italics added). Article 60 further states that the coastal state has “exclusive right” to “construct and to authorize and regulate the construction,

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<sup>29</sup> For more general literature on the LOSC see amongst other Hugo Caminos (ed.) *Law of the Sea* (Ashgate Dartmouth 2001) and Jill Barrett and Richard Barnes (eds.) *Law of the Sea: UNCLOS as a Living Treaty* (British Institute of International and Comparative Law 2016)

<sup>30</sup> Martin Tsamenyi and Max Herriman ‘Ocean Energy and the Law of the Sea: The Need for a Protocol’ (Ocean Development & International Law 1998) 3.

<sup>31</sup> Law of the Sea Convention of 10 December 1982 (LOSC), preamble.

<sup>32</sup> List of LOSC ratifications

[https://www.un.org/Depts/los/reference\\_files/chronological\\_lists\\_of\\_ratifications.htm](https://www.un.org/Depts/los/reference_files/chronological_lists_of_ratifications.htm) (Accessed 10 May 2019).

<sup>33</sup> LOSC Article 55 and Article 57.

<sup>34</sup> LOSC Article 5.

<sup>35</sup> To enjoy the rights in an EEZ the coastal state has to claim its EEZ, see Karen N Scott ‘Tilting at offshore windmills: Regulating wind farm development within the renewable energy zone’ (Journal of Environmental Law Vol 18 No 1 2005), 95. Norway and Denmark declared its respective EEZ in 1996, see LOV-1976-12-17-91 Lov om Norges økonomiske zone (Economic zone Act) and for the Denmark Act No. 411 of 22 May 1996 on Exclusive Economic zone

[https://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK\\_1996\\_Act.pdf](https://www.un.org/Depts/los/LEGISLATIONANDTREATIES/PDFFILES/DNK_1996_Act.pdf). The UK claimed its EEZ in 2009, see Hannah Katerina Müller, *A Legal Framework for a Transnational Offshore Grid in the North Sea*, (Intersentia 2016), 178, see also the Marine and Coastal Access Act 2009 Section 41.

operation and use of (...) installations and structures for the purposes provided for in article 65 and other economic purposes”. The meaning of sovereign rights and exclusive right above is that the mentioned activity can only be performed by the state, or by another state with *explicit* approval from the coastal state.<sup>36</sup>

The legal framework laid down by the LOSC establishes that the coastal state has an exclusive right to construct, authorize and regulate offshore wind farms (“installations and structures”<sup>37</sup>) for offshore wind energy production (“such as the production of energy from (...) winds”<sup>38</sup>). This entails that it is up to the states themselves to adopt a closer legislative framework on authorization types and procedures as they see fit.

## 3.2 EU/EEA-law

### 3.2.1 *Relevant law from Brussels*

In addition to LOSC, EU/EEA-law sets up a framework for the production of energy from offshore wind.

The Treaty on the Functioning of the European Union (TFEU) states that union policy on energy shall aim to promote the development of new and renewable forms of energy.<sup>39</sup> Furthermore, on the basis of Article 194 TFEU as well as the internal market rules, a substantial amount of EU secondary legislation has been adopted in relation to energy. In the following some of the most relevant legislative works for this thesis will be presented in short as these rules bound the studied national regulations for offshore wind electricity activity. Due to this thesis scope, are there several relevant directives that will not be dealt with, such as the Directive 2014/98/EU of 23 July 2014 establishing a framework for maritime spatial planning [2014] OJ L257/135 (Directive 2014/98/EU) and the legislation on impact assessment and concession contracts.

All of the relevant EU-law has either already been made into EEA-law in accordance with the EEA agreement, and adopted properly into Norwegian legislation, or is expected to be.<sup>40</sup> Even

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<sup>36</sup> See for instance A. A. Kovalev *Contemporary Issues of the Law of the Sea: Modern Russian Approaches* (edited and translated by W. E. Butler) (Eleven International Publishing 2004) 56.

<sup>37</sup> LOSC Article 60 (1) (b).

<sup>38</sup> LOSC Article 56 (1) (a).

<sup>39</sup> The Treaty on the Functioning of the European Union (TFEU) Article 194 (1) (c).

<sup>40</sup> It is worth noting that the adaptation of the third energy package, including Directive 2009/28/EC on the promotion of energy from renewable sources took nine years, and brought with it a massive debate about

though energy-related legislation may not be in the heart of the EEA-agreement, the Norwegian Government has stated that they, as the EU, interpret that energy falls within the scope of the agreement, entailing that relevant directives shall become EEA-law.<sup>41</sup>

### ***3.2.2 The fourth renewable energy directive***

Directive 2018/2001 on the promotion of the use of energy from renewable sources is the fourth energy directive on renewable energy, and is part of the Clean Energy Package from 2018.<sup>42</sup> This Directive continues the focus and attention to promote energy from renewable sources from the previous renewable energy directives, and contains the overall target and national targets for the share of energy from renewable sources in gross final energy consumption in 2030. The binding overall target for the union is to reach at least 32 %.<sup>43</sup> One way of reaching this goal is to look to at the offshore wind energy production.

The Directive is of interest to this thesis because of its focus on the importance of the transparency and coherent rules for the authorization process and bodies in order to actually foster renewable energy development, including offshore wind operations. Article 15 of the Directive demands that the Member States take the appropriate measures to ensure that administrative procedures are “streamlined” and have “predictable timeframes”.<sup>44</sup> The authorization procedures should be “simplified and less burdensome”<sup>45</sup>. Long and complicated procedures are not something that encourages developers to bet on renewable energy. The Member states must also do what they can to make sure that the rules concerning licensing are “objective, transparent and proportionate”.<sup>46</sup>

Article 16 of the Directive sets forth certain minimum standards in relation to the organisation and duration of the permit-granting process. First, Member States must create one or more contact points, which job is to help the applicants through the process of permit

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Acer, see <https://www.nrk.no/norge/dette-er-striden-om-acer-1.13961802> (Accessed 10 May 2019). The fourth energy directive is yet not transformed into Norwegian law, and it is likely that this process will take some time.

<sup>41</sup> White Paper on Norway’s energy policy: Power for change (Meld. St. 25, 2015-2016) 83-88, 215.

<sup>42</sup> Directive (EU) 2018/2001 of 11 December 2018 on the promotion of the use of energy from renewable sources [2018] OJ L328/82 (Directive 2018/2001).

<sup>43</sup> Directive 2018/2001, Article 3 (1).

<sup>44</sup> Directive 2018/2001, Article 15 (1) (a).

<sup>45</sup> Directive 2018/2001, Article 15 (1) (d), see also recital 50 and 51.

<sup>46</sup> Directive 2018/2001, Article 15 (1) b).



application and granting process.<sup>47</sup> Furthermore it sets deadlines for how long a permit-granting process for new and existing power plants can take<sup>48</sup>

### **3.2.3 *The electricity directive***

Directive 2009/72/EC concerning common rules for the internal market in electricity is relevant for its regulation of the authorization procedures for new generation capacity and for its articles on unbundling.<sup>49</sup>

Like many of the other directives, the Electricity directive lays down what must be recognised as minimum standards or legal guidelines for given activities.

According to article 7 of the Electricity Directive Member States must adopt an authorization procedure which shall be conducted in accordance with “objective, transparent and non-discriminatory criteria”.<sup>50</sup> The article continues with a list of considerations that must be taken into account when deciding the appropriate criteria for the authorization procedures, amongst other safety and security measurements and technical, economic and financial capabilities of the applicants.<sup>51</sup>

Accordingly, the Member States are under no obligation to choose one authorisation system over another, as long as the minimum requirements of the Directive are met.

Article 8 of the Electricity Directive sets out the minimum requirements for the tendering procedure for new capacity. While still giving the Member States the freedom to choose, the article establishes more concrete demands in relation to the tender, compared to the authorization after article 7. For instance, the possibility for providing new capacity must take place through a tendering procedure or any procedure equivalent in terms of transparency and non-discrimination, on the basis of published criteria.<sup>52</sup>

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<sup>47</sup> Directive 2018/2001, Article 16 (1).

<sup>48</sup> Directive 2018/2001, Article 16 (4), Article 16 (5), Article 16 (6). Article 15 and 16 of Directive 2018/2001 is a further development of Directive 2009/28/EC Article 13.

<sup>49</sup> Directive 2009/72/EU of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC [2009] OJ L211/55 (Directive 2009/72/EU)

<sup>50</sup> Directive 2009/72/EC, Article 7 (1).

<sup>51</sup> Directive 2009/72/EC, Article 7 (2) (a)-(k).

<sup>52</sup> Directive 2009/72/EC, Article 8 (1).

Minimum, albeit detailed, standards on what kind of information the Member States need to supply and where, in relation to the tender are also set forth in Article 8. The Directive reads that “the tender specifications shall be made available to any interested undertaking established in the territory of a Member State so that it has sufficient time in which to submit a tender”.<sup>53</sup>

Last, the Electricity Directive also offers several rules in relation to unbundling<sup>54</sup>, such as rules on unbundling of transmission system operators and of distribution system operators.<sup>55</sup> These rules may be of importance because they can influence the Member States’ choice on how many activities to demand authorisation for. If the desired form of unbundling is ownership unbundling, the same company cannot own the production facility and the network facility. In such a situation one option could be to create separate licences for the two facilities.

## 4 Why a licence?

### 4.1 Ownership rights

In a thesis on the authorisations of an industry it may also be interesting to look briefly at some of the reasons for why such authorisation is needed.

Exploiting wind in order to produce energy, is one of many, many ways humans have exploited natural resources through time. As with most forms of exploitation of natural resources an authorisation is necessary in order for the exploitation to take place.

One reason for the authorisation is that a man (or company) cannot take advantage of another man’s property without his consent. The rights to the land tend to follow the owner of the land. Therefore it is of no surprise that companies, either national or foreign, that want to establish an offshore wind farm need a consent from the coastal state in question. This, since most sea-territories are not private property, but belongs to the state’s property.

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<sup>53</sup> Directive 2009/72/EC, Article 8 (3) second paragraph.

<sup>54</sup> For more on the concept of unbundling see Ignacio Herrera Anchustegui , ‘Transmission Networks in Electricity Competition: Third-Party Access and Unbundling – A Transatlantic perspective, (2018) [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3159458](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3159458) (Accessed 10 May 2019) and Kim Talus *Introduction to EU Energy Law* (1<sup>st</sup> edition, Oxford University Press, 2016) 24.

<sup>55</sup> Directive 2009/72/EC art 9 and following, Directive 2009/72/EC art 26 and following.

Onshore, where not all land belong to the state, the situation is different. Some common law countries, such as the US, have traditionally presumed that ownership of surface equals ownership of rights in relation to the surface, subsurface and the airspace above it.<sup>56</sup> Civil law countries have similar principle of ownership, but with one important difference. Pereria writes that civil law countries, but also UK, “vests ownership of subsoil resources in the surface landowner, whilst an exception is usually made for energy resources as oil, gas and coal, which are subject to state ownership”.<sup>57</sup> After the common law system a private landowner do not need any permission to exploit any natural resource that occur on his land. After the civil law system where an exception is made for energy resource, a private land owner *cannot* do as she or he pleases.

The scope of this thesis does not allow a thorough discussion on why some countries have chosen to make exemptions for energy resources. The ability to control the resource and to manage the exploitation, as well as the state’s interest in the resource, may be good guesses for such a solution. Natural resources are important not only in themselves, but also for what they generate of jobs, revenue and other benefits for a country.

Even though the authorisation schemes traditionally have been used in relation to minerals, oil and gas, and the theory on the systems of concession and licences usually focuses on these non-renewable resources, the system and theory are also relevant for the exploitation of renewable energy resources. It is in all cases a question of the *exploitation of natural resources*. Resources that need to be managed in a certain way, through *inter alia* law, so that they can be taken advantage of in the most beneficial way for the state, its inhabitants, the resource itself and the next generation.

## 4.2 Different forms of authorisation

There exist several forms of authorisations through one form or another of contract law between the parties. The early days of the oil era was filled with what Likosky calls ‘traditional concessions’.<sup>58</sup> This type of authorisation often consisted of an uneven financial

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<sup>56</sup> Nicholas J. Campell Jr, ‘Principle of mineral ownership in the civil law and common law systems’[1956] [https://www.jstor.org/stable/25744324?casa\\_token=lfzKCeI3kd0AAAAA:ijqe913M1opjntxlqCoQKpPvXfTkfqWEAAqB5Drl9s6UO3fh1wnEDdHIFOvldDApdmaRaw0fbndZgx1kYA0LSCEIQx\\_4F20weRA19SQgkp7SsnS&seq=1#metadata\\_info\\_tab\\_contents](https://www.jstor.org/stable/25744324?casa_token=lfzKCeI3kd0AAAAA:ijqe913M1opjntxlqCoQKpPvXfTkfqWEAAqB5Drl9s6UO3fh1wnEDdHIFOvldDApdmaRaw0fbndZgx1kYA0LSCEIQx_4F20weRA19SQgkp7SsnS&seq=1#metadata_info_tab_contents) (Accessed 10 May 2019), 38.

<sup>57</sup> Ricardo Pereira ‘The Exploration and Exploitation of Energy Resources in International Law’ in Karen E. Makuch and Ricardo Pereira, *Environmental and Energy Law* (Wiley-Blackwell 2013), 205.

<sup>58</sup> Michael Likosky ‘Contracting and regulatory issues in the oil and gas and metallic minerals industries’ (2009) *Transnational Corporations* Volume 18 No 1, 2.

bargain, diverging interest between state (owner of resource) and the company (concessionaire), and were quite broad, both in terms of period of time and geographical area.<sup>59</sup> These concessions were arguably more in the favour of the extractor than the owner. Foreign companies typically gained access to the, except for the natural resource, otherwise poor states, and could exploit the resource to little or no compensation to the state. Over time the concessions changed into what is now called modern-day concessions.<sup>60</sup> They are no longer just permits but offers protection to both parties; for the company through a more or less stable licence, and for the state through work-programmes or such, that the company must operate after.<sup>61</sup>

Today, authorisations are given through different forms of contracts such as modern-day concessions, licences, product sharing agreements or joint venture operations to name a few. Likosky argues that it is the contract clauses that are of most importance, not which type of contract is chosen.<sup>62</sup> An important point is that licences, as this thesis will show as the preferred option for authorising offshore wind farm activity, offer a lot of control to the state. The state maintains ownership rights and control through its regulatory powers while benefiting compensation from the licensee<sup>63</sup>, who also carries the financial risk for the project. Both the scope of duration and physical area are now more precise, and in general smaller, entailing that the state is more protected against unfair exploitation.

## 5 Research Question One: What Requires an Authorisation?

### 5.1 Freedom to choose desired options

According to LOSC and EU/EEA law exists no guidelines or instructions on what or how to authorise offshore wind farms. The states are free to choose what they see fit for their needs and conditions, be it concessions, licences or other forms of authorisation.

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<sup>59</sup> Likosky (n 58) 2.

<sup>60</sup> Likosky (n 58) 7.

<sup>61</sup> Pereira (n 57) 210.

<sup>62</sup> Likosky (n 58) 4.

<sup>63</sup> i.e. through taxation or a royalty system.

## 5.2 Denmark: Concessions and licences

### 5.2.1 *The licence regime under the RE-act*

For offshore wind energy production in Denmark a system requiring both concessions and licences is chosen, and most of it is regulated under the Promotion of Renewable Energy Act (RE-Act), or in connection to this act.

What a concession and licence regime means is that the government enters into a concession contract with the project developer, then named the concessionaire, after that developer has won the competition for the given offshore wind farm.<sup>64</sup> The competition is organised as a government-led tender and will be dealt with further under chapter 6.2. The concessionaire is awarded one concession and then several licences, dependable on what type of activities the concessionaire has applied for.

That the concession and licences are needed, is stated by the RE-Act § 22 stk.1 which reads “the access to exploit energy from wind from the sea-territory and in the exclusive economic zone lies exclusively with the Danish state”.<sup>65</sup> “Preliminary investigations and trailing exploitation of energy can only take place after permission from the Minister of Energy, Supply and Climate.”<sup>66</sup> Hence, *no* activity can take place without a concession and the necessary licences.

Several licences are needed in order to be able to exploit energy from wind offshore in Denmark; a preliminary licence, a construct licence, an exploration licence and a supply licence. All of the licences are usually presented as model-licence in the tender material published ahead of the tender, giving the applicants an opportunity to make themselves acquainted with this before entering the tender. There are however warnings that content and terms may change, often due to the fact that the environmental impact assessments are not finished at the time of the publication of the tender.<sup>67</sup>

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<sup>64</sup> See ‘Aftale om forpligtelse til at etablere og nettilslutte et elproduktionsanlæg, Anholt Havmøllepark, i Kattegat’ (2 July 2010) [https://ens.dk/sites/ens.dk/files/Vindenergi/anholt\\_koncessionsaftale\\_2\\_juli\\_2010.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/anholt_koncessionsaftale_2_juli_2010.pdf) (Anholt concession agreement) (Accessed 8 May 2019) and ‘Agreement regarding obligation to construct and connect to the grid an electricity production plant, Kriegers Flak, in the Baltic Sea’ (22 December 2016). [https://ens.dk/sites/ens.dk/files/Vindenergi/concession\\_agreement\\_kriegers\\_flak.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/concession_agreement_kriegers_flak.pdf) (Kriegers Flak concession agreement) (Accessed 10 May 2019).

<sup>65</sup> RE-Act § 22.

<sup>66</sup> RE-Act § 22.

<sup>67</sup> See for instance ‘Betingelser for offentlig udbud om Anholt havmøllepark’ (30 April 2009) [https://ens.dk/sites/ens.dk/files/Vindenergi/udbudsbetingelser\\_anholt\\_30\\_april09\\_endelig.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/udbudsbetingelser_anholt_30_april09_endelig.pdf) (Anholt tender conditions) (Accessed 10 May 2019), section 3.

### 5.2.2 Preliminary licences

First, a licence is required to carry out preliminary investigations.<sup>68</sup> According to § 22 stk. 7 a preliminary licence will be given to areas in which the Minister of Energy, Supply and Climate finds that “exploitation of energy can be relevant”. A licence cannot be acquired unless the Minister has considered and found the actual area possibly fit for offshore wind energy production.<sup>69</sup> The licence is given as a sole right for the concessionaire and will be specified for a given geographical area and time period.<sup>70</sup> The area in question can be smaller than what was originally opened up for activity.<sup>71</sup>

This licence is for any *additional* preliminary investigations the concessionaire would like to do, in relation to the planning procedure for the upcoming wind farm. Initial preliminary investigations that are carried out in connection with the opening of an area or designating that area for a future tender procedure, is a licence given directly from the Minister to Energinett who will perform these investigations.<sup>72</sup> In the event that a licence is granted after the RE-Act § 25, for an area where Energinett has performed preliminary investigations, the awardee of the licence has to bear the expenses for those investigations.<sup>73</sup>

The licence for preliminary investigations can be given under further terms, set by the minister in charge. This can be terms for the “relations that are being examined, for how to report on the examinations and investigations, terms in relation to the passage on the investigations and the minister’s access to use the preliminary investigations results”.<sup>74</sup> In other words, an access to set terms for how the concessionaire should perform its preliminary investigations, both procedural and material. Environmental and safety requirements are also among important elements that can be given terms on.<sup>75</sup>

In the tender-documents a model-licence for the preliminary investigations is attached. For example, for the Anholt wind farm this model-licence contained terms concerning the actual area the investigations could and should take place, terms stating that the concessionaire at all

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<sup>68</sup> RE-Act § 22.

<sup>69</sup> RE-Act § 22 stk. 7.

<sup>70</sup> RE-Act § 22 stk. 7.

<sup>71</sup> See for instance Anholt tender conditions , Appendix 1, 15.

<sup>72</sup> RE-Act § 23 stk. 3.

<sup>73</sup> RE-Act § 23 stk. 3.

<sup>74</sup> RE-Act § 22 stk. 8.

<sup>75</sup> RE-Act § 22 stk. 8.

times had to give relevant authorities access to witness the investigations, what kind of costs the concessionaire had to cover for the investigations and matter related to them.<sup>76</sup>

Another important point, that also follows from the Act itself, is that all findings from the preliminary investigations are to be made public.<sup>77</sup> This could arguably lead to a free rider problem for trailing developers. On the other side this can also be viewed as an incentive to do thorough investigations, especially since opponents of such projects may come at a later time raising critical questions and halting the process of establishing the wind farm.

When awarding the licence, the Minister has access to set additional terms.<sup>78</sup>

The scope of these terms could arguably be viewed as too wide. This is however in relation to activities taking place on state property, and the government has an interest of maintaining control throughout the process. This is in line with the purpose behind the act to take advantage of the renewable sources in line with environmental, socio-economic interests.<sup>79</sup>

Regardless, when the terms typically are given in the model-licences, the companies competing for concession are given the opportunity to become familiar with them ahead of committing to the tender-competition.

In order to continue the process, the report from the preliminary investigation has to be approved.<sup>80</sup> This set of order requirements continues through the entire process of establishing an offshore wind farm.

The licence for preliminary investigations is given together with the licence to construct the wind farm, in the concession given to the concessionaire.<sup>81</sup> Both enter into force immediately.<sup>82</sup>

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<sup>76</sup> Anholt tender conditions, Appendix 1.

<sup>77</sup> RE-Act § 23 stk. 3.

<sup>78</sup> RE-Act § 22.

<sup>79</sup> RE-Act § 1.

<sup>80</sup> RE-Act § 24.

<sup>81</sup> See among other Anholt tender conditions, section 3, and Anholt concession agreement, section 1.

<sup>82</sup> Anholt tender conditions, section 3.

### 5.2.3 Construction licence

Second, a project developer of an offshore wind farm needs a licence for establishing the infrastructure; i.e.: the “production facility”.<sup>83</sup> This licence covers both the establishment in the sense of the actual construction as well as connecting the wind farm to the grid, through transmission lines.

Also for this licence the Minister holds a relatively comprehensive access to set terms for the licence.

The Minister can condition the approval of the facilities that falls within the scope of the construction licence after § 25 stk. 1, on terms regarding demands to “construction, device, installations, alignment, operations, disassembly, and collateral for disassembly of facility, and economic, technical, safety- and environmental considerations associated with establishment and operations, including stay and habitation”.<sup>84</sup>

Additional terms may be placed on the licence due to considerations for the environment. If the “facility, in itself or in relation to other projects”, influence international nature protection areas’ integrity in a “significant” manner, terms may be applied to the licence.<sup>85</sup>

A certain level of influence is required, smaller or insignificantly impacts do not grant the opportunity to set terms. It further listed in the RE-Act that a construction licence may be granted only after a hearing of affected parties is held, and as long as the wind farm do not harm an international nature protection areas integrity, *or* significantly community interests, of societal or economic art, makes it imperative to complete the wind farm because no alternative solution exists.<sup>86</sup>

The project developer cannot obtain a construction licence pursuant § 25 unless the terms governing environmental concerns and protection of nature after § 27 are fulfilled.<sup>87</sup>

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<sup>83</sup> RE-Act § 25.

<sup>84</sup> RE-Act § 25 stk. 3.

<sup>85</sup> RE-Act § 27.

<sup>86</sup> RE-Act § 27 stk. 2 (1) (2).

<sup>87</sup> RE-Act § 27 stk. 2.



According to the examples of concession agreements for Anholt, Horns Rev 3 and Kriegers Flak, this is not a long-term licence, but a permit that ceases to exist the moment the wind farm is connected to the grid and ready to produce electricity.<sup>88</sup>

#### **5.2.4 Exploitation licence**

Finally, there are licences required for the actual exploitation of the wind energy; the production of electricity. One licence is required after the RE-Act § 29 and one licence is required after the Danish Electricity Supply Act § 10.

A facility that benefits of a licence issued pursuant § 25 licence, may only start operating after a licence to exploit energy after RE-Act § 29 is given. The licence for exploitation of energy is given for 25 years, and the time period may be prolonged.<sup>89</sup> The RE-Act sets no boundaries for how many times the licence can be prolonged or the maximum time period for the licence.

As for the other licences, the exploitation licence is also conditioned for additional terms, in relation to technical and economic aspects.<sup>90</sup>

Applicants are eligible for the licence when they can be documented that terms made in relation to, amongst other the preliminary investigations, the tender procedure, the preliminary investigations report, the establishing of the production facility and environmental and nature considerations at the scene, are fulfilled.<sup>91</sup> Terms set forth in the Environmental Impact Assessment of Plans, Programmes and Projects Act, and terms in an any tender contract, must also be fulfilled.<sup>92</sup>

Although licences for exploitation and supply are also presented in ‘model-form’ in the tender documents, the concessionaire does not receive them automatically. The concessionaire has to follow a given procedure when applying for the licences.<sup>93</sup> However, one may assume that an

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<sup>88</sup> Concession agreement Anholt section 2, ‘Tilladelse til etablering af elproduktionsanlægget Horns Rev 3 samt internt ledningsnet’ (21 May 2015) [https://ens.dk/sites/ens.dk/files/Vindenergi/hr\\_3\\_etableringstilladelse.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/hr_3_etableringstilladelse.pdf) (Horns Rev 3 construction licence) (Accessed 10 May 2019), section 1.2 and ‘Tilladelse til etablering af elproduktionsanlægget Kriegers Flak samt internt ledningsnet’ (22 December 2016) [https://ens.dk/sites/ens.dk/files/Vindenergi/etableringstilladelse\\_kriegers\\_flak.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/etableringstilladelse_kriegers_flak.pdf) (Kriegers Flak construction licence) (Accessed 10 May 2019), section 1.2.

<sup>89</sup> RE-Act § 29 stk. 1.

<sup>90</sup> RE-Act § 29 stk. 3.

<sup>91</sup> The RE-Act §§ 22-25, § 27 and § 28 has to be fulfilled pursuant to RE-Act § 29 stk. 3.

<sup>92</sup> RE-Act § 29 stk. 2.

<sup>93</sup> As an example see Horns Rev 3 construction licence, especially section 1.2 and 1.10.

applicant who has obtained the other licences based on the application, most likely will be given the licence when applying for one.

### **5.2.5 Supply licence**

A licence for supply after the Electricity Supply Act § 10 is required for any facility with a electricity production “capacity at over 25 MW”.<sup>94</sup> This means that only very small wind farms do not have to apply for a licence, which today in Denmark constitutes of nearly no one.<sup>95</sup> Whereas the licence after the RE-act § 29 applies for 25 years, the licence after the supply act is given for 20 years minimum.<sup>96</sup> In order to obtain this licence the applicant has to “document” that they have the necessary technical and financial capacity.<sup>97</sup> The concessionaire has to provide proof that the company is able to deliver on what it has agreed upon in contract made with Energinett, acting on behalf of the government.

The licence after the Electricity Supply Act may also be *object* to further provisions or terms.<sup>98</sup>

The difference between the exploration licence and the supply licence is that the exploration licence applies to the facility as a whole, while the supply licence only concerns the production of energy. The actual differences between the two might be insignificant.

## **5.3 United Kingdom: Licences and consents**

### **5.3.1 Rights belonging to the Queen**

Where Danish legislators have aspired to gather all the legislation on offshore wind farms in one act, the British legislation shows clear tendencies to UKs’ common law tradition with several acts covering the same or adjacent subjects of matter.

As the situation is for Denmark, large parts of the British Sea territory belong to the government, in United Kingdom placed under the property of Her Majesty the Queen.

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<sup>94</sup> Electricity Supply Act § 10 stk. 1.

<sup>95</sup> For an overview over Danish Wind farms see Danish Energy Agency “Danish Experiences from Offshore Wind Development” (March 2017)

[https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore\\_wind\\_development\\_0.pdf](https://ens.dk/sites/ens.dk/files/Globalcooperation/offshore_wind_development_0.pdf) (Accessed 10 May 2019) (DEA report 2017), 7.

<sup>96</sup> Electricity Supply Act § 10 stk. 2.

<sup>97</sup> Electricity Supply Act § 10 stk. 3.

<sup>98</sup> Electricity Supply Act § 10 stk. 4.

It follows from section 84 of the Energy Act 2004 that this piece of legislation applies to “exploration of areas outside the territorial sea for energy production” and that “the rights to which this section applies shall have effect as rights belonging to Her Majesty by virtue of this section”.<sup>99</sup>

The area in which rights apply to is what has been named the “Renewable Energy Zone”.<sup>100</sup> The “Renewable Energy Zone” covers the same area as what is regarded the exclusive economic zone after UN Law of the Sea Convention article 55 and 57, unless otherwise has been declared by the Queen in council.<sup>101</sup>

The rules for activities outside the ‘Renewable Energy zone’ will not be dealt with here since most new wind turbines of interest are being constructed or planned inside the zone.<sup>102</sup>

“Exploration” should be understood as “the doing of anything (whether by way of investigations, trials or feasibility studies or otherwise) with a view to ascertaining whether the exploration of an area is, in particular case, practicable or commercially viable, or both”.<sup>103</sup>

Hence, the given activities cannot be performed at sea without a permit from the government. In the UK the permit is either a licence or a consent.<sup>104</sup> There is no good explanation for when a licence is used instead of a consent and vice versa. Both forms of permits seem to be of equal magnitude and legal value.

Lastly, the permits are awarded to project developers after leasing rounds hosted by an independent public body. The leasing rounds will be discussed under chapter 6.3.

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<sup>99</sup> Energy Act 2004, s 84 (1).

<sup>100</sup> Energy Act 2004, s 84 (4).

<sup>101</sup> Energy Act 2004, s 84 (a) (b).

<sup>102</sup> The Crown Estate ‘Offshore wind operational report’ (January – December 2018)

<https://www.thecrownestate.co.uk/media/2950/offshore-wind-operational-report-2018.pdf>

(Accessed 10 May 2019), 5.

<sup>103</sup> Energy Act 2004, s 84 (7).

<sup>104</sup> For a construction permit the term consent is used, see Planning Act 2008 section 31, whereas the term licence is used both in the Marine and Coastal Access Act, see section 65-66, and in the Electricity Act, see s 4 and s 6.

### 5.3.2 *Licences for activities offshore*

Activities offshore for energy production requires a licence after the Electricity Act 1989.<sup>105</sup> According to the Electricity Act 1989 section 4 (1)(a) a person should be guilty of an offence if that person “generates electricity for the purpose of giving supply to any premises or enabling a supply to be given” “unless he is authorised to do so by a licence”. The same also applies to supply, transmission and distribution of electricity.<sup>106</sup> Thus the licensing permit is created in a negative way compared to Denmark, which could likely be due to common law influences and rule of land use and ownership.

“Generate” is to be understood as generating electricity at a “relevant place”.<sup>107</sup> A “relevant place” means among others the Renewable Energy Zone.<sup>108</sup> Hence, it is clear that the prohibition after section 4 (1) (a) applies for any person wanting to produce electricity through an offshore wind farm in British waters in the Renewable Energy Zone.

The project developer must either be granted a licence after the Electricity Act section 6, or an exemption after section 5, in order to be able to generate electricity supply, “a generation licence”.<sup>109</sup>

A generation licence after section 6 (1) (a) is “licence authorising a person to generate electricity for the purpose of giving a supply to any premises or enabling a supply to be so given”.<sup>110</sup>

An exemption from the prohibition, after section 5, can be given by the Secretary of State, as an order, to “either person or to persons of a class”, “either generally or to such extent as may be specified in the order” and “either unconditionally or subject to such conditions as may be so specified”.<sup>111</sup>

Since both an exemption and a licence gives the person or group in question the authorisation to generate electricity, the actual differences between the different authorisation methods are rather small. Of actual difference is that the exemption is most commonly used for small

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<sup>105</sup> Energy Act 2004, s 89 collated with the Electricity Act 1989, s 4.

<sup>106</sup> Electricity Act 1989, s 4 (1) (b) – (e).

<sup>107</sup> Electricity Act 2004, s 4 (4).

<sup>108</sup> Electricity Act 2004, s 4 (5).

<sup>109</sup> Electricity Act 1989, s 6 (1) (a).

<sup>110</sup> Electricity Act 1989, s 6 (1) (a).

<sup>111</sup> Electricity Act 1989, s 5 (1) (a) – (c).

generation stations, with a low capacity.<sup>112</sup> The exemptions have also been used for more special projects, for instance when the purpose has been to supply an oil platform with electricity.<sup>113</sup>

The authorities can after section 6 also grant licences for supply of electricity, transmission, distribution, interconnector and a smart meter communication service.<sup>114</sup> Each activity requires its own authorisation through a licence, or through an exemption since the exemption after section 5 may be applicable for all of the activities mentioned above.<sup>115</sup>

### **5.3.3 Construct consent**

In addition to a generation licence, a project developer would need a consent in order to construct a generating station.<sup>116</sup> The Electricity Act Section 36 (1) states that “generating station shall not be constructed at a relevant place (within the meaning of section 4), and a generating station at such a place shall not be, extended or operated except in accordance with a consent granted by the appropriate authority”. “Relevant” is referring to the Renewable Energy Zone.<sup>117</sup> A generating station must be understood the same way as before, which means that an offshore wind farm requires a construction consent before it can be built.

A licence from the Electricity act section 36 is one of two possible construction permissions for an offshore wind farm in the UK. Which permission a farm has to acquire, depends on the size. The licence after the Electricity Act section 36 is for the smaller wind farms while the bigger wind farms need a consent after the Planning Act 2008, discussed below.<sup>118</sup>

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<sup>112</sup> The Lynn and Inner Dowsing Offshore Wind Farm have been granted an exemption after Electricity Act 1989 section 5 under the condition of not being allowed to export more than 100 MW of electrical power into the grid, see The Electricity (Exemption from the Requirement for a Generation Licence) (Lynn and Inner Dowsing) (England and Wales) Order 2009, SI 2009/2344, section 4.

<sup>113</sup> The Electricity (Class Exemptions from the Requirement for a Licence) Order 2001, SI 2001/3270, Schedule 2 Class B: Offshore Generators.  
; For more information on the exemptions see Pinsent Masons guide from 2013 ‘How activity in the electricity industry is licenced’ <https://www.out-law.com/en/sectors/energy/-how-activity-in-the-electricity-industry-is-licensed/> (Accessed 10 May 2019).

<sup>114</sup> Electricity Act 1989, s 6 (1) (b) (c) (d) (e) (f).

<sup>115</sup> Electricity Act 1989, s 5 (1).

<sup>116</sup> Electricity Act 1989, s 36.

<sup>117</sup> Electricity Act 1989, s 4 (5) collated s 6.

<sup>118</sup> Electricity Act 1989, s 36 (1B), Planning Act 2008, s 33 (1) (h).

#### **5.3.4 Nationally significant infrastructure projects**

Construction consent after the Planning Act 2008 is required for the “development to the extent that the development is or forms part of” a “national significant infrastructure project”.<sup>119</sup>

A “nationally significant infrastructure project” is understood as a project that consist of “the construction or extension of a generating station”.<sup>120</sup> “Energy”<sup>121</sup> is listed as a field for such projects, and the areas for such projects are “in case of a project for the carrying out of works in the field of energy, a Renewable Energy Zone”.<sup>122</sup> This shows that offshore wind farms, since a turbine falls under the category of generating stations, can be regarded as “nationally significant infrastructure project”.

Additional terms must be met for an offshore wind farm to be regarded as a nationally significant infrastructure project. Among them; “the construction or extension of a generating station is within section 14 (1) (a) only if the generating station is (...)” “an offshore generating station” that has a capacity at “more than 100 megawatts”.<sup>123</sup> Notice that the offshore generating station must be in “a Renewable Energy Zone” to be viewed as an “offshore generating station”.<sup>124</sup>

Most of the wind farms under construction or in planning today have a capacity size at over 100 MW. Therefore, most future offshore wind farms will require constructions consent pursuant the Planning Act. Regardless, all the other mandatory licences after the Electricity Act section 6 (or exemptions after section 5) are still required.

#### **5.3.5 Marine activity licences**

In addition to the licences mentioned above, all, both small and large offshore wind farms, need one or several licences after the Marine Coastal Access Act, which relate to marine activities and functions.<sup>125</sup>

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<sup>119</sup> Planning Act 2008, s 31.

<sup>120</sup> Planning Act 2008, s 14 (1) (a).

<sup>121</sup> Planning Act 2008, s 14 (6) (a).

<sup>122</sup> Planning Act 2008, s 14 (7) (c).

<sup>123</sup> Planning Act 2008, s 15 (1) (3) (a) (b).

<sup>124</sup> Planning Act 2008, s 15 (4) (b).

<sup>125</sup> Marine and Coastal Access Act 2009, preamble.

Section 65 of the Act states that no person may carry on a “licensable marine activity” except in accordance with a marine licence granted by the appropriate licensing authority. An example of “a licensable marine activity” is “to construct, alter or improve any works within the UK marine licensing area either (a) in or over the sea, or (b) on or under the sea bed”.<sup>126</sup> Section 66 lists several other activities that falls under offshore operations.<sup>127</sup>

One licence covering all these different permits is given per wind farm area. In the case of the Hornsea One Wind Farm, for instance, this means that there has been awarded 4 licences after the Marine and Coastal Access Act section 66 (1).<sup>128</sup> The licence contains detailed terms and conditions. For each Order however, the different licences after section 66(1) do not vary that much.<sup>129</sup>

## 5.4 Norway

### 5.4.1 *Another licence jurisdiction*

Norway has the same starting point as its North Sea neighbours: the sea territory is part of the states’ property, and the state has exclusive right to energy production at sea.<sup>130</sup> A licence is needed in order to exploit wind for energy production at sea.<sup>131</sup>

Whereas the activities or infrastructure requiring authorisations after Danish or British law are split up into different sections and acts, the Norwegian licence rules are collected together in the Offshore Energy Act. Where Denmark and England operate with 3-4 different licences of varying content and scope, only two types of licences exist in the Offshore Energy Act.<sup>132</sup>

The licence system is not a foreign concept in Norway, rather it is the norm for exploitation of petroleum, the aquaculture industry and different forms of energy production such as energy

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<sup>126</sup> Marine and Coastal Access Act 2009, s 66 (1) (7).

<sup>127</sup> The order, i.e. the Order for Hornsea One, gives a licence for almost all of the different possibilities of marine licensing activities after section 66 (1), see Hornsea One Wind Farm Order 2014, SI 2014/3331, Schedule 8-11.

<sup>128</sup> Hornsea One Wind Farm Order Schedule 8-11.

<sup>129</sup> This applies both to the different marine licences awarded in the Order, and between different Orders for different wind farms see Hornsea One Wind Farm Order Schedule 1-12, The Triton Knoll Offshore Wind Farm Order 2013, SI 2013/1734, schedule 2 and The Rampion Offshore Wind Farm Order 2014, SI 2014/1873, schedule 13-14. This does not apply to Orders given ahead of the adaptation of the Marine and Coastal Access Act in 2009.

<sup>130</sup> Offshore Energy Act § 1-3. See also the RE-act § 22 and the Energy Act 2004 section 84.

<sup>131</sup> Offshore Energy Act § 3-1.

<sup>132</sup> Offshore Energy Act §§ 3-1 – 3-2.

production through hydropower and onshore wind.<sup>133</sup> They all share some of the same features, namely being quite wide.

#### **5.4.2 Licence for production facility**

The Offshore Energy Act § 3-1 states that production facilities (i.e. the wind turbines) for offshore wind cannot be “built, owned or operated without consent from the ministry”.<sup>134</sup> The same applies for reconstruction or expansion of existing facilities.<sup>135</sup> A licence after § 3-1 does not only allow the actual establishment and construction of a wind farm, but also the “operation” of it, i.e. the exploitation of wind through the wind turbines; the production of energy in form of electricity.

A Norwegian offshore wind farm does not need separate licences for construction or for electricity supply, like the Danish or British farms. The one size fits all approach entails that an offshore wind farm in Norwegian waters that has been awarded a licence, and has met all the terms in the licence, can start the construction and production of energy without further ado.

One reason for this is, that unlike in Denmark and the UK, Norway has no separate electricity act. The Energy Act regulates general electricity matters, as well as the licence regime for hydropower and onshore wind turbines.

Since no preliminary licence in Norway exist, the features of this licence are equally non-existing, such as making the applicant pay for investigations that government bodies have performed in advance of the licence being awarded.<sup>136</sup> It is likely however that such terms might appear either in one of the many regulations that the Offshore Energy Act opens up for adopting<sup>137</sup>, or in the licence contract between the government and the company looking to establish and run an offshore wind farm. This has to do with the Norwegian “Vilkårslære” (access to set terms when granting permits). This Norwegian teaching, created and developed

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<sup>133</sup> See the different licence rules: the Petroleum Act § 2-1 and § 3-3, the Aqua culture act § 4, the Energy act § 3-1, § 3-2.

<sup>134</sup> Offshore Energy Act § 3-1

<sup>135</sup> Offshore Energy Act § 3-1.

<sup>136</sup> Like the regulation is after Danish law, see RE-Act § 23 stk. 3.

<sup>137</sup> See for instance the Offshore Energy Act § 3-4.



by the courts over time, grants the administrative branch the right to set terms in relation to handing out permits, licences and such.<sup>138</sup>

The licence system in Norway for offshore wind farms does not take into consideration issues concerning marine activity like England does with its comprehensive marine licence rules after the Marine and Coastal Access. Current legislation does not appear to have addressed possible issues relating to the different use and earmarking of the sea for offshore wind energy production.

One possible reason for the lack of rules concerning marine and coastal issues is that these will be solved at an earlier stage in the process. Such as solving area conflicts ahead of opening up areas and awarding licences for offshore wind farms. Marine spatial planning is one field of law important to keep in mind here.<sup>139</sup>

#### **5.4.3 Licence for network facility**

The other licence needed, is the licence for building, owning and operating a network facility.<sup>140</sup> The licence is quite similar to the scope of the production facility, as it covers close to everything in relation to a *network* facility. A network facility is understood as any part of the grid/ the physical construction that the electricity grid constitutes of.

The separation of the different facilities into two separate licences does not truly resemble the divide that exist after Danish or British law. The licences in the two countries covers different periods of the process as much as it covers different physical elements. Licences after the Offshore Energy Act only differ in that one is for the production of energy and the other is for the transmission of energy.

One reason for the division into these two licences is connected to the rules on unbundling. Norway, in line with the third energy directive, has altered its regulation to meet the

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<sup>138</sup> For more on the Norwegian “Villkårslære” see *inter alia* Hans Petter Graver *Alminnelig forvaltningsrett* (Universitetsforlaget 3<sup>rd</sup> edition 2007) 292, and Torstein Eckhoff and Eivind Smith *Forvaltningsrett* (Universitetsforlaget 10<sup>th</sup> edition 2010) 436.

<sup>139</sup> For more on marine spatial planning see Sigrid Eskeland Schütz and Ingunn Elise Myklebust ‘Coastal zone management – between politics and law: new guidelines for differentiated management of the shore zone in Norway [2016] *Local Environment* Vol. 21 No 2 2016, and Sigrid Schütz ‘Marine Spatial Planning – Prospects for the Arctic’ [2018] *Artic Review on Law and Politics* Vol. 9 2018.

<sup>140</sup> Offshore Energy Act § 3-2.

unbundling requirements, and has chosen the system of ownership unbundling.<sup>141</sup> It is worth noting that the Energy act, which arguably have modelled for parts of the Offshore Energy act, does not separate production facilities and network facilities. In order to fulfil the unbundling requirements, separate rules address the issue.<sup>142</sup>

#### **5.4.4 The challenge with overlapping legislation**

As mentioned, the Offshore Energy Act applies to the Norwegian Sea territory. The physical sea inside the baseline is however not recognised as the sea territory, and falls within the scope of the Energy Act.<sup>143</sup> This raises a number of questions in relation to offshore wind farms and their connection to the mainland. The Norwegian test-parks that exist today are all licenced under the Energy Act, and steer clear of the challenges with overlapping legislation. There are provisions in both the Energy Act and the Offshore Energy Act stating that the King and the Ministry can make regulations that gives the Offshore Energy Act application both inside and outside baseline.<sup>144</sup> The legal situation today is however unclear on how the transmission of electricity from offshore wind farms is regulated, and whether this is something that falls within the scope of the Offshore Energy Act's network licence. In Denmark this is solved by giving the RE-Act application to both land and sea-territory<sup>145</sup>, whereas all the electricity activities in the UK are regulated by the Electricity Act.<sup>146</sup>

## **6 Research Question Two: How Are Authorizations Awarded?**

### **6.1 Introduction**

As presented under chapter 3.2.4 there are certain criteria after EU-law that have to be met when conducting an award procedure. Of special importance is that the procedure must be carried out on the basis of "objective, transparent and non-discriminatory criteria".<sup>147</sup> Criteria has to be published, and also made available to any interested party.<sup>148</sup> Beyond that, it is up to the countries themselves to decide what kind of procedure they would like for awarding the licences.

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<sup>141</sup> Norway has chosen the system of ownership unbundling see the Energy Act § 4-6, as well as Ot.prp. nr.61 (2005-2006) om lov om endringer i lov 29.juni 1990 nr. 50 om produksjon, omforming, overføring, omsetning, fordeling og bruk av energi m.m, section 5.

<sup>142</sup> Energy Act § 4-6, § 4-7.

<sup>143</sup> Energy Act § 1-1.

<sup>144</sup> Offshore Energy Act § 1-2 sixth paragraph, Energy Act § 1-1 third paragraph.

<sup>145</sup> RE-Act § 3.

<sup>146</sup> Electricity Act 1989 s 6.

<sup>147</sup> Directive 2009/72/EC, Article 7.

<sup>148</sup> Directive 2009/72/EC, Article 8 (1), Article 8 (3) second paragraph.

## 6.2 Denmark

### 6.2.1 *Two procedures*

In Denmark exist two different ways of attaining the licences discussed in chapter 5.2; through the government-led tender or through the open-door procedure.<sup>149</sup>

The Minister of Energy-, Supply- and Climate has the opportunity to designate areas to be reserved for governmental tenders for large offshore wind farms and close-to-shore wind farms.<sup>150</sup> When an area is designated for a public tender, the decision shall be made public.<sup>151</sup> It is after this publication that the tender procedure begins.

### 6.2.2 *Government-led tender procedure*

The government-led tender procedure is typically used for the bigger offshore wind farms. This takes place after a political decision has been reached allowing a new offshore wind farm to be.<sup>152</sup> According to the Danish Energy Agency latest report on Danish Experiences form Offshore Wind the agency “announces a tender for an offshore turbine project of specific size, e.g. 600 MW, within a special defined geographical area”.<sup>153</sup> The government-led tender procedure consists of 5 steps.

First there is dialogue between the Energy Agency and interested participants in the tender.<sup>154</sup> This takes place after an area has been publicly designated for a larger offshore wind farm, mentioned above.

Secondly, the contract notice, notifying the market that the agency wants to take part in a concession contract with the future concessionaire and the full tender specifications are published.<sup>155</sup> Criteria for the pre-qualification of tenders are also made available.

The third step consist of a negotiation between the Energy Agency and the pre-qualified tenders<sup>156</sup>. The negotiation happens based on the previous published tenders, and the aim

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<sup>149</sup> DEA report 2017 (n 95) 19.

<sup>150</sup> RE-Act § 22 stk. 3.

<sup>151</sup> RE-Act § 22 stk. 4.

<sup>152</sup> DEA report 2017 (n 95) 20.

<sup>153</sup> DEA report 2017 (n 95) 20.

<sup>154</sup> DEA report 2017 (n 95) 24.

<sup>155</sup> DEA report 2017 (n 95) 24.

<sup>156</sup> DEA report 2017 (n 95) 24.

behind these negotiations is that Agency is looking to improve the final tender documents; such as make the necessary clarifications and adjustments to technical, financial and other physical details.<sup>157</sup>

The fourth step is the final call for tenders.<sup>158</sup> This is the competition rounds where the participants hand in their final tender. The final tenders are legally binding for the participants.<sup>159</sup>

The fifth and final step for the government-led tender procedure is selecting a winner of the tender, and drafting a contract.<sup>160</sup> To win a tender, the applicant has to meet the criteria set forth in the tender documents. The applicant who meets the criteria and offers the lowest bid wins.<sup>161</sup> The Minister has the power to specify particular affairs and terms that should be taken into account when considering the different tender (applications).<sup>162</sup>

As mentioned under 5.2, the winner of the tender enters into a concession contract with the Danish Energy Agency, on behalf of the government, and is awarded licences for preliminary investigations and construction of the offshore wind farm.<sup>163</sup>

### **6.2.3 Open-door procedure**

The open-door procedure is used for obtaining the necessary licences where the applicant gets in touch with the government, on the basis of the applicant's initiative.<sup>164</sup> This procedure is designed for the establishment of smaller offshore wind farms closer to shore. Farms that will cost less to build, but that are dependent on local support due to the fact that the wind turbines

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<sup>157</sup> DEA report 2017 (n 95) 24.

<sup>158</sup> DEA report 2017 (n 95), 24.

<sup>159</sup> See Tender conditions for Kriegers Flak Offshore Wind Farm (8 July 2016)

[https://ens.dk/sites/ens.dk/files/Vindenergi/kriegers\\_flak\\_-\\_final\\_tender\\_conditions\\_draft.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/kriegers_flak_-_final_tender_conditions_draft.pdf)

(Kriegers Flak tender conditions) (Accessed 10 May 2019) section 11

and 'Betingelser for udbud af etablering af havmølleparken Horns Rev 3' (6 February 2015)

[https://ens.dk/sites/ens.dk/files/Vindenergi/hr\\_3\\_udbudsmateriale\\_final\\_feb15.pdf](https://ens.dk/sites/ens.dk/files/Vindenergi/hr_3_udbudsmateriale_final_feb15.pdf)

(Horns Rev 3 tender conditions) (Accessed 10 May 2019), section 11.

<sup>160</sup> DEA report 2017 (n 95) 24.

<sup>161</sup> See the Anholt tender conditions section 5, Horns Rev 3 tender conditions section 5, and Kriegers Flak tender conditions section 11. See also DEA report 2017 (n 95), 20.

<sup>162</sup> RE-Act § 23 stk. 1.

<sup>163</sup> DEA report 2017 (n 95), 24.

<sup>164</sup> DEA report 2017 (n 95), 20.

will be visible from the shore.<sup>165</sup> An open-door procedure cannot be used to award a location that has already been designated for government-led tenders.<sup>166</sup>

Since there is no arranged competition, like the tender procedure, the principle adopted to designate the party awarded the permit has been a first come - first serve principle. The licence(s) are given to the applicant who first sends in an application where it documents that it meets the needed requirements.<sup>167</sup>

So far no licences have been awarded on the basis of the open-door procedure.<sup>168</sup> The open door procedure can arguably be viewed as a more effective way to establish small, close to shore renewable energy production. It must however not be downplayed that such a procedure might lack the necessary elements of transparency and a sufficient knowledge base to make a decision.

## **6.3 United Kingdom**

### ***6.3.1 Introduction***

In order to attain the necessary licences for exploitation of offshore wind for electricity in the United Kingdom the applicants have to participate in a licensing round.

### ***6.3.2 The Crown Estate***

These rounds are managed by the independent business body the Crown Estate.<sup>169</sup> The Crown Estate has a mandate to manage all of the property and its associated rights belonging to the Crown.<sup>170</sup> Hence the Crown Estate has the authority to manage the sea-territory designated for offshore wind farms, and hold rounds for applicants interested in acquiring authorisations rights for potential said offshore wind farms.

### ***6.3.3 Leasing rounds***

So far three commercial rounds for offshore wind farms have taken place in the UK. These rounds differ greatly from the tender procedure that takes place in Denmark. In Denmark the

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<sup>165</sup> DEA report 2017 (n 95), 25.

<sup>166</sup> RE-Act § 22 stk. 5.

<sup>167</sup> RE-Act § 23 stk. 4.

<sup>168</sup> DEA report 2017 (n 95), 20.

<sup>169</sup> Hannah Katerina Müller, *A Legal Framework for a Transnational Offshore Grid in the North Sea*, (Intersentia 2016) 177.

<sup>170</sup> The Crown Estate Act 1961 s 1.

rounds are quite similar to one another, one given area is being developed at the time based on the desire to establish a wind farm producing x MW worth of energy. In the UK, the rounds seem more pragmatic, they do not have a procedure set in stone and have been subject to rather encompassing changes.<sup>171</sup>

The first round, launched in 2000, consisted of 18 sites in England and Wales from which developers could choose freely.<sup>172</sup> Before the second round in 2003 the government had identified several strategic areas for wind development. These strategic areas became the main element of the second round. The developers could still choose an area freely, but only inside one of the three strategic designated areas.<sup>173</sup> For the third round The Crown Estate chose not to continue with the individual sites, but rather chose a zone approach.<sup>174</sup>

The changes in the rounds may be attributed to the experience earned in the previous procedures as well as the fact that the placing of the wind farms continued to move away from shore and grow, in terms of capacity.<sup>175</sup> In this sense, Müller writes that “the reason for change is that a project-by-project approach, used in the previous rounds, was not considered likely to generate the required capacity”.<sup>176</sup> Change may also be attributed to the fact that the UK declared an EEZ in 2009, and the establishment of the Renewable Energy Zone with the Energy Act of 2004, making it possible to open up for offshore wind farms in these areas.<sup>177</sup>

The rounds, which are the starting point for the awarding of licences and consents, are called both licence rounds and leasing rounds, by the Crown Estate and in the literature.<sup>178</sup> The most accurate label for these procedures would be ‘leasing rounds’ since what a project developer achieves after a leasing round is a five-year lease, a period to acquire the necessary licences and consents from the government.<sup>179</sup> The Crown Estate itself has no power to award the

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<sup>171</sup> Meaning that the change in accordance with technological and legal development and feedback from the rounds. See for instance Emma Gibson and Peter Howsam *The legal framework for offshore wind farms: A critical analysis of the consents process* (2010) Energy Policy Volume 38 Issue 8.

<sup>172</sup> Müller (n 169) 177.

<sup>173</sup> Müller (n 169) 178

<sup>174</sup> The Crown Estate “UK Offshore Wind Report 2012” <https://www.scribd.com/document/156017452/UK-Offshore-Wind-Report-2012> (Accessed 10 May 2019), 10-11.

<sup>175</sup> An overview over offshore wind farms in operation and under development can be found in The Crown Estate ‘Offshore wind operational report’ (January – December 2018) (n 102).

<sup>176</sup> Müller (n 169) 179.

<sup>177</sup> Müller (n 169) 178-179.

<sup>178</sup> Müller refers to the rounds as licence rounds, while Peter Howsam and Emma Gibson, and the Crown Estate itself refer to it as leasing rounds.

<sup>179</sup> Müller (n 169) 179.

necessary licences and consents after the Electricity Act, the Planning Act or the Marine and Coastal Access Act.<sup>180</sup> The licences and consents are awarded in the end by an Order by the Secretary of State.<sup>181</sup> The leases are awarded based on bids that the developers have entered.<sup>182</sup>

Here the differences from the Danish legislation and system becomes quite clear. While there can be only one winner of a tender in Denmark, more than one project developer at a time can get a lease from the Crown Estate in the UK. This due to the fact that the leasing rounds, so far, have consisted of several areas to award out leases for.

Furthermore, and perhaps more interesting is that, as mentioned under chapter 5.2.3 certain licenses are given immediate to the concessionaire in Denmark<sup>183</sup>, while in the UK the developers have to continue applying for the necessary permits from the Government *after* being awarded a lease.

## 6.4 Norway

### 6.4.1 *An undecided affair*

The Norwegian Offshore Energy Act sets forth the rules for what is needed to attain a licence, as discussed in chapter 5.4. For the procedure of awarding these licences the act offers little guidance.

According to the Act § 3-5 first paragraph a licence “is given to a legal person which is established subject to Norwegian legislation and is registered in *Foretaksregisteret*<sup>184</sup> when otherwise does not follow from international agreements”.<sup>185</sup> Unless otherwise stated in an

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<sup>180</sup>The Crown Estate “Offshore Wind Potential New Leasing. Market Engagement Event 25<sup>th</sup> July 2018” <https://www.thecrownestate.co.uk/media/2647/20180725-the-crown-estate-offshore-wind-potential-new-leasing-market-engagement-event.pdf> (Accessed 10 May 2019)

<sup>181</sup> See for instance The Hornsea One offshore Wind Farm Order 2014, SI 2014/3331, preamble and explanatory note.

<sup>182</sup> The Crown Estate “Offshore Wind Potential New Leasing. Market Engagement Event 25<sup>th</sup> July 2018” (n 180) ; For more information about the suggested bidding criteria and more for leasing round 4 see The Crown Estate ‘Offshore Wind Leasing Webinar Update 29 April 2019’, <https://www.thecrownestate.co.uk/media/2988/20190429-osw-new-leasing-market-webinar-update-published.pdf> (Accessed 10 May 2019).

; For more on bids and awarding of licences see Tina Hunter ‘Access to petroleum under the licensing and concession system’ in Tina Hunter (ed.) *Regulation of the Upstream Petroleum Sector: A Comparative Study of Licensing and Concession Systems* (Edward Elgar publishing 2015) 44.

<sup>183</sup> See for instance Kriegers Flak tender conditions, section 3.

<sup>184</sup> Norwegian Company Register.

<sup>185</sup> Offshore Energy Act § 3-5

international agreement, only legal persons, i.e. companies, may be awarded a licence. This distinction is not found in the Danish RE-Act or the UK Electricity Act.

Beyond that, there are there no rules stating whether there will be a public tender or another form of granting awards. There is no current regulation of the (potential) situation where more than one applicant is applying for a concession for the same area. The problem does not seem to be dealt with in the preparatory works to the Act either.

Thus, in comparison to the other jurisdictions the awarding of licences in Norway seems undecided and underregulated. Beyond the fact that all of the award procedures have to be line with EU/EEA law, which they are since the relevant electricity directive has been implemented into Norwegian law, there are close to no similarities.

There have neither been given any good indications on whether it is the system after the Energy Act, or the system after the Petroleum Act that will be chosen for awarding Offshore Energy Act licences.

#### **6.4.2 Procedures after the adjacent Norwegian legislation**

The Energy Act regulates, together with the Regulation on the Energy Act, the awarding of licences for *inter alia* onshore wind energy production. In detail, the Act regulates detailed terms for the application and the hearing procedure of said application but does not offer much guidance on how a to actually attain a licence. The awarding procedure is managed by the Norwegian Water Resource and Energy Directorate (NVE). The procedure lead by NVE consists of six steps, including a hearing and an appeal round in addition to the application and decision itself.<sup>186</sup>

At a first glance the procedure seems to have elements of the Danish open-door procedure since it does not openly address the possible situation of more than one applicant.

An awarding procedure more accustomed to competition is the awarding of survey and production licences for oil and gas after the Petroleum Act.<sup>187</sup> The criteria for this procedure has to be published in advance and the awarding of the licences must in addition happen

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<sup>186</sup> For more on the procedure of attaining an onshore wind licence see NVE 'Konsesjonsbehandling av Vindkraftutbygging' <https://www.nve.no/konsesjonssaker/konsesjonsbehandling-av-vindkraftutbygging/?ref=mainmenu> (Accessed 10 May 2019).

<sup>187</sup> Petroleum Act § 2-1, § 3-5.



based on “factual and objective criteria”.<sup>188</sup> Criteria that are familiar from the Electricity and Renewables directives from EU. The actual procedure for awarding is discretionary method, where licence allocations are based on “administrative or politically created criteria”.<sup>189</sup>

## 7 The Road Ahead for Norwegian Legislators: Lessons to be learned?

### 7.1 Arguments against cherry-picking from adjacent national legislation

In Norway no areas have been opened up for offshore wind activity nor have any licences been awarded on the basis of regulation in the Offshore Energy Act. It is therefore difficult to say whether or not the Offshore Energy Act, with potential regulations, will be a sufficient piece of legislation that will contribute to achieving the Act’s purpose<sup>190</sup> as well as developing the sector in a successful way.

As an energy producing nation Norway is rather familiar with regulatory activities concerning energy production, both from renewable and non-renewable energy resources, such as. That in itself can be held as an argument that the legislators should, when continuing its work on the Offshore Energy Act, only look to the adjacent Norwegian legislation for inspiration for the licensing and operation of offshore wind farms.

Taking advantage of the Energy Act and NVE knowledge and administrative practice and power is a likely option for the legislators to work with. Producing energy from offshore wind is however not the same as producing it onshore. The resource itself may not differ that much, but it seems rather obvious that an offshore wind turbine, either it is fixed to the seabed or floating, raises different challenges than its onshore counterparts. Challenges that perhaps should be reflected in the legislation.

Norway as an “oil-nation” is also rather experienced when it comes to offshore activities. An argument for the legislators to look to the Norwegian Petroleum Act for inspiration. I would however argue that are certain distinctive differences between petroleum and offshore wind activities, namely that the first one constitutes of extracting something while the second is

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<sup>188</sup> Petroleum Act § 3-5.

<sup>189</sup> Hunter (n 182) 52.

<sup>190</sup> The purpose being “facilitating for an exploitation of renewable resource at sea in accordance with societal goals and that other relevant considerations are taken care of”, see Offshore Energy Act § 1-1.

about exploiting a recurring source. It is therefore not given that legislation that are designed for petroleum operations would fit or be beneficial for offshore wind energy production.

## 7.2 The licences

The way Norway has chosen to licence offshore wind activity is arguably closely linked to its pragmatic way of regulating, proved by the similar ways of regulating similar activities.<sup>191</sup> An argument against this way of licensing is that it is *too* pragmatic, and perhaps also not transparent enough.

A batch of licences and consents like Denmark and the UK operate after could offer some benefits, in contrast with the Norwegian system. First, these split-up licences could arguably be easier to transfer to a new project developer, making it easier to engage several bodies into the process. In a growing industry, like the offshore wind energy production, the financial risks are big and companies might not survive the entire process and this possibility of splitting up projects could prove handy as risk is split and investment need not to be so large. Also, in facilitating the transfer of licences (in that there are several), investment and new knowledge might come easier in.

Secondly, this way of licensing *can* be a way of involving several relevant authorities and parties, such as both planning and marine authorities in the United Kingdom. Through this the licences can contribute to better and closer cooperation, ensuring that questions and disputes are dealt with in a timely manner by a competent authority.

## 7.3 The award procedure

Whereas there might be limited inspiration to draw on in relation to the licences, since it may be unrealistic for Norway to move away from its tradition of pragmatic and somewhat wide licences, it might be more beneficial to look to the solutions Denmark and the UK have chosen for their awarding procedure.

This thesis argues that one of the most important elements of the awarding procedures in both Denmark and the UK is that they take into account the element of competition. There might be more than one contender that has met all the set criteria, and there needs to be a way to award one winner, or several in the UK case.

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<sup>191</sup> See for instance the regulation in the Energy Act, the Petroleum Act.

Today's awarding of licences after the Energy Act, through NVE, the administrative body in charge, does not really give any good answers to how to handle a competition scenario. Since it is NVE that have been charge for the offshore licences after the Energy Act, is it possible that they also would handle offshore licensing after the Offshore Energy Act. Whether or not competition for onshore wind licences so far has been a subject, it is something that needs focus now. The North sea is naturally a great place to exploit wind for energy production. It is therefore not unlikely that both national and foreign companies would be interested in acquiring licences for production of energy.

Will offshore wind farms be handed licences based on a first come first serve principle, or will it resemble the discretionary method for petroleum licensing? Without stating that this is a problem today, it can be argued that neither of the solutions is the best answer to a procedure that shall be both transparent, objective and non-discriminatory. I would argue that something in the likes of a first come first serve solution might not be discriminatory to non-Norwegian competitors, but that it at the same time neither foster competition. Competition here is important in order to attain the best knowledge and expertise in order to develop and have a most successful offshore wind industry.

Both the Danish government-led tender and the UK leasing rounds facilitates for and supports competition. This thesis argues that something in the style of a government-led tender would be most beneficial to adopt for Norway.

The lease round has several positive aspects, such as that more than one project developer can acquire a lease, making it easier to commence several offshore wind farms simultaneously. Second, it has a safety function in that it is only a lease that is awarded, not licences straight away. Still I would argue that the government-led tender offer a better solution for Norway since the country is in its starting position. The Danish procedure seem to offer a more comprehensive procedure since it only involves awarding one company authorisation. It is likely that only one or two areas will be open up for starters in Norway, and it is important that the process is as thorough as possible, as well as transparent and objective, for it to be successful. When there only is one area and one "winner" it would be easier for a rookie nation to make the sure that the before, during and after of the awarding of licences are according to the legislations as well as any additional set terms, and also maintain the trust and confidence of the interested parties and the public in general.

To be characteristic pragmatic and to cherry pick from both the Danes and Brits here is also possible. While a government led tender have beneficial elements, does the idea of not awarding the licences straight away from the UK leasing rounds also a smart move. Delaying the awarding somewhat could offer an awarding of the licences based on better and more informed knowledge.

In this thesis the aim has been to present and analyse selected parts of the licence regime in Denmark, the UK and Norway. While I do not suggest that Norwegian legislators should pay no attention to its nations licensing traditions, I would argue that it would be not only wise but also necessary to look abroad, if only for inspiration. The inspiration from, or possible influence of regulation from these nations with thriving offshore wind energy industries could be the key to how to make the offshore wind energy industry an industrial and environmental success in Norway.

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