Department for
Business, Energy
& Industrial Strategy

DECOMMISSIONING OF OFFSHORE RENEWABLE ENERGY INSTALLATIONS UNDER THE ENERGY ACT 2004

Guidance notes for industry (England and Wales)

March 2019

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1. Introduction

1.1 Sections 105 to 114 of the Energy Act 2004 ("the Act", as amended by the Energy Act 2008[1] and the Scotland Act 2016[2]) contain the statutory decommissioning scheme for offshore wind and marine energy installations[3] and their related electric lines (collectively, Offshore Renewable Energy Installations – "OREIs"). Under the terms of the Act, the Secretary of State may require a person who is responsible for one of these OREIs to submit (and eventually carry out) a decommissioning programme.

1.2 BEIS has developed this guidance to assist developers/owners in understanding their obligations under the decommissioning scheme. The guidance covers a number of matters, including:

1.2.1 **the scope of the decommissioning scheme** – the geographical scope of the scheme and the categories of installation/lines included within the scheme;

1.2.2 **the process** – the processes for submitting, getting approval for, reviewing and modifying a decommissioning programme submitted under the scheme;

1.2.3 **the content of decommissioning programmes** – what is to be covered in a decommissioning programme submitted under the scheme;

1.2.4 **decommissioning standards** – the general requirement to remove OREIs and any exceptions from this general requirement; how they are to be removed; how waste is to be dealt with; notification and marking of any remains; and monitoring, maintenance and management of the site after decommissioning (for example where any measures need to be taken to assess whether buried infrastructure remains safe);

1.2.5 **financial security** – the need for financial security and the forms of financial security which are acceptable;

1.2.6 **residual liability** – the residual liability which remains with the developers/owners following decommissioning;

1.2.7 **industry cooperation and collaboration** – the value of industry cooperation and collaboration at the decommissioning stage.

1.3 The guidance should be followed by those who construct, extend, operate or use an offshore installation or related electric line as defined in the Act. The guidance may also be of interest to other stakeholders, including environmental organisations, navigational interests, the fishing industry and other users of the marine environment.

1.4 Copies of this guidance may be made without seeking permission.

[1] https://www.legislation.gov.uk/ukpga/2004/20/contents - see sections 104 to 114.
[2] http://www.legislation.gov.uk/ukpga/2016/11/section/62/enacted.
[3] See 4.2 for full description of "installation".

1.5 The decommissioning guidance was originally published in December 2006 and was reviewed and updated in 2011 and a revised version consulted on in 2018. This revised guidance is intended to help the sector meet its obligations and will be regularly reviewed, with future updates being provided as necessary. Any comments on the content of the guidance, including suggestions for improving it, should be sent to:

Offshore Renewables Decommissioning Team

Department for Business, Energy and Industrial Strategy

1 Victoria Street

London

SW1A 0ET

Email: OREIDecommissioning@beis.gov.uk

1.6 This revision takes into account those provisions of the Scotland Act 2016 relating to the decommissioning of OREIs which came into force on 1 April 2017. Section 62 of the Scotland Act 2016 transferred responsibility for considering decommissioning cases in Scottish waters to the Scottish Ministers. Marine Scotland, on behalf of Scottish Ministers, will be issuing its own guidance to developers/owners seeking to deploy renewable energy devices in Scottish waters.

1.7 The Scotland Act 2016 also transferred responsibility for The Crown Estate's offshore assets in Scotland to a new body, Crown Estate Scotland, which has taken on the functions of The Crown Estate in relation to OREIs in Scottish waters. The transfer of functions came into effect on 1 April 2017[4].

1.8 This guidance note refers to the Secretary of State's powers under the the Act and references to 'The Secretary of State' or 'the Government' should be read in that context.

[4] BEIS remains responsible for a number of projects within Scottish waters in that the Secretary of State shall exercise Energy Act functions (i.e. functions under Part 2, chapter 3 of the Energy Act 2004) where existing infrastructure was partly or fully constructed at 01 April 2017 and is due to be decommissioned before 01 January 2023. The Secretary of State also exercises these functions for projects which were partly or fully constructed but are due to decommission on or after 01 January 2023 - unless these projects have an approved decommissioning programme and associated financial security in place, at which point those functions for that site will pass to the Scottish Ministers.

2. How to use this guidance

2.1 This guidance has been prepared to explain the decommissioning obligations under the statutory decommissioning scheme in the Act and to help developers/owners compile decommissioning programmes. Those who have previously had their decommissioning programme approved should amend their programme where relevant in line with this revised guidance at the point of their next review of the programme.

2.2 The guidance can be used to:

a) decide whether or not a particular installation is included within the scope of the scheme. Chapter 4 ("Scope of the decommissioning scheme") sets out which installations are included. For those installations which are not included in the scheme, this guidance is not directly relevant. However, developers/owners of these installations can still expect to have decommissioning obligations, for example in the terms of any lease with The Crown Estate or other relevant landowner;

b) understand the processes which must be followed for the submission, approval and review of decommissioning programmes (as set out in Chapter 5 – "Submission, approval and review of decommissioning programmes");

c) understand what must be included in a decommissioning programme submitted under the scheme. Chapter 6 ("Content of decommissioning programmes") summarises content requirements and Annex C sets out a model framework for decommissioning programmes. The measures proposed in the decommissioning programme should be in line with the standards set out in Chapter 7 ("Environmental considerations"). Costs of decommissioning should be set out as in Chapter 8 ("Cost estimates") and the financial security proposed in the programme should be in line with the principles set out in Chapter 9 ("Financial securities").

3. Policy and legislative framework

3.1 Rationale for decommissioning scheme

3.1.1 The decommissioning provisions in the Act are given effect in a way which reflects the Government's view – taking into account our international obligations – that a person who constructs, extends, operates or uses an installation or related electric line should be responsible for ensuring that it is decommissioned at the end of its useful life, and should be responsible for meeting the costs of decommissioning (the "polluter pays" principle).

3.1.2 BEIS' policy is to ensure the costs of decommissioning OREIs are considered at the earliest stage possible in the development cycle of a relevant project. By imposing a legal obligation on the responsible persons to prepare and carry out a decommissioning programme, and to ensure financial security is in place, BEIS is taking action to ensure decommissioning obligations are taken seriously, It is BEIS' view that the decommissioning provisions in the Act reduce the risk of companies defaulting on their decommissioning liabilities and ensure taxpayers are protected against having to organise and fund decommissioning in the event of a default by a company.

3.2 Policy approach

3.2.1 The Government's approach is to seek decommissioning solutions which are consistent with relevant international obligations, as well as UK legislation, and which have a proper regard for safety, the environment, other legitimate uses of the sea and economic considerations including protection of the taxpayer from liabilities relating to decommissioning. The Government will act in line with the principles of sustainable development.

3.2.2 BEIS aims to ensure that interested parties are given clear information on the operation of the decommissioning scheme. We intend that processes for approving decommissioning programmes should be fair, open and transparent, and that decisions should be taken in an efficient manner, placing only a proportionate administrative burden on the parties involved.

3.2.3 BEIS does not (as at the time of the publication of this guidance) charge administrative fees for the processing of decommissioning programmes. The Act grants the Secretary of State a power to put in place charges in respect of decommissioning through secondary legislation and this may be considered in the future.

3.3 International obligations

3.3.1 The United Kingdom's international obligations to decommission disused installations have their origins in the United Nations Convention on the Law of the Sea (UNCLOS), 1982. This requires abandoned or disused installations or structures

to be removed, to ensure safety of navigation, taking into account generally accepted international standards. International Maritime Organization (IMO) standards were adopted in 1989[5].

3.3.2 Relevant work has also been undertaken under the OSPAR Convention, which guides international cooperation on the protection of the marine environment of the North-East Atlantic. OSPAR Guidance on Environmental Consideration for Offshore Wind Farm development (2008)[6] incorporates ideas on the decommissioning of wind farms in the marine environment.

3.3.3 The Act provides for decommissioning requirements to apply in territorial and internal waters, as well as to the UK Renewable Energy Zone (REZ) and continental shelf, to which the international conventions under UNCLOS and OSPAR apply. ("Internal waters" refers to waters around estuaries and islands, which may be classified as 'internal'[7].) **The International Maritime Organisation's standards set out that any infrastructure placed in the marine environment should be designed with full removal in mind, and full removal will be the default position for OREIs unless there are strong reasons for any exception.**

3.4 Decommissioning provisions in the Act

The key decommissioning provisions in the Act (sections 105 to 114) are explained in Annex A. Broadly speaking, the Secretary of State may require a person who is responsible for an OREI to prepare a costed decommissioning programme and ensure that it is acted upon. The Secretary of State can approve, modify or reject a programme, including any financial security provisions which the responsible person proposes to provide. The Secretary of State is required to review the programme from time to time.

3.5 Role of The Crown Estate

3.5.1 BEIS and The Crown Estate (which issues leases and licences for OREIs) work together to avoid duplicating decommissioning requirements imposed on developers/owners. The Secretary of State has agreed with The Crown Estate that developers/owners covered by the statutory decommissioning scheme under the Act will only need to prepare one decommissioning programme, which will be submitted to BEIS.

3.5.2 Developers/owners of projects covered by this scheme should provide financial security for the main decommissioning requirements to BEIS. However, where the approved decommissioning programme provides for infrastructure to be left in situ, BEIS may require financial arrangements to be put in place between the developer/owner and The Crown Estate to cover (i) the potential for future works during or at the end of the post-decommissioning monitoring period and (ii) to cover

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[5] Removal of Offshore Installations and Structures on the Continental Shelf and in the Exclusive Economic Zone, IMO, 19 October 1989.
[6] http://www.ospar.org/documents?d=32631.
[7] See this map of internal / territorial waters.

any potential residual liability issues, such as third-party claims and consequential loss (see Chapter 9).

3.5.3 BEIS will consult with The Crown Estate on decommissioning programmes submitted by developers/owners, and on any final review of the decommissioning programme prior to the actual decommissioning. BEIS will also consult The Crown Estate on in-operation reviews of and modifications to the approved programme if there are substantial changes to a previous version.

3.6 Compliance with other relevant legislation

3.6.1 Decommissioning activities will need to comply with all relevant UK legislation at the time they are undertaken.

3.6.2. Developers/owners should note that they are responsible for verifying their decommissioning programmes against current legislation.

4. Scope of the decommissioning scheme

4.1 Geographical scope

The Act applies to waters in or adjacent to England, Scotland and Wales between the mean low water mark and the seaward limits of the territorial sea, (thereby including internal coastal waters and territorial waters) and to waters in the Renewable Energy Zone (including the area adjacent to Northern Ireland territorial waters). The Act does not apply to the territorial or internal coastal waters of Northern Ireland. As indicated above, the Scotland Act 2016 devolved the Secretary of State's powers under the Act to Scottish Ministers. Therefore, this guidance does not apply to installations in Scottish waters constructed on or after 1 April 2017.

4.2 Categories of installation included in the scope

4.2.1 The decommissioning scheme, as set out in the Act, applies to OREIs. The precise definition is set out in section 104 of the Act. In essence, an OREI is an offshore installation (i.e. floating island, structure or device, including the related electricity lines) that:

1. is used (or will be used or has been used) for purposes connected with the production of energy;
2. permanently rests on, or is permanently attached to, the bed of the waters; and
3. is not connected with dry land by a permanent structure providing access at all times for all purposes. (Developers/owners of tidal lagoons above 100 MW and connected to land should note the guidance in Annex D.)

4.2.2 Subject to paragraph 4.4 below, the guidance applies to all OREIs in England and Wales, (and to certain ones in Scotland - see paragraph 4.1) which fall within the definition above (whatever their generating capacity and whether they are commercial or demonstration devices). This includes:

a) wind farms consented, under section 36 of the Electricity Act 1989 or the Transport and Works Act 1992 *after June 2006*; and

b) all wave and tidal energy installations which fall within the definition above and which were consented or became operational *after June 2006*.

4.2.3 The guidance does not apply to installations which were consented, under section 36 of the Electricity Act 1989 or under the Transport and Works Act 1992, prior to June 2006 (when a public consultation on the operation of the statutory

scheme under the Act was launched). In addition, the scheme does not apply to installations which were put into operation prior to June 2006 but which did not require an Electricity Act or Transport and Works Act consent.

4.3 Inter-tidal zone

The scheme, as set out in the Act, does not cover the inter-tidal zone (the area of the shore between the high and low tide water marks). However, decommissioning of any infrastructure in this zone should be carried out in accordance with any removal conditions attached to a Marine Licence issued under the Marine and Coastal Access Act 2009.

4.4 Test Centres

4.4.1 For the purposes of this guidance, an 'offshore renewable energy test centre' is a discrete location where third-party owners of demonstration OREIs can plug their devices to central infrastructure (normally including a berth, cables, data centre, and in some cases a grid connection to the shore) in order to evaluate their technical capabilities.

4.4.2 BEIS requires offshore renewable energy test centres in England and Wales to take responsibility for any central infrastructure and for the decommissioning of their tenants' infrastructure. Test centre owners are required to ensure that this is undertaken in line with all relevant legislation, licences and permits.

4.4.3 The onus is therefore on test centre owners to put in place robust arrangements to ensure responsible decommissioning of their tenants' devices and associated infrastructure. It is expected that test centres will make their own decommissioning arrangements with their tenants, including appropriate financial and contractual arrangements to ensure the timely and safe removal of assets.

4.4.4 Tenants wishing to deploy their assets at a test centre should engage with the test centre on this matter. BEIS will not have a role in approving tenant decommissioning programmes. Where financial security has not been taken and an operator/developer of a test device fails to decommission, BEIS expects the owner of the test centre to pay for the removal of any assets on its site at the end of the operation period.

4.4.5 Owners of test centres should submit decommissioning programmes to BEIS for their central infrastructure. This should also set out how they will ensure that the overall site is returned to its natural state at the end of its operational life (including removal of any remaining tenant infrastructure) and how they will manage decommissioning or repowering of their tenants' devices. BEIS will require appropriate financial securities from test centre operators to cover centrally-owned infrastructure and could require securities to cover the possibility of tenant infrastructure being abandoned in situ (if the owner of the test centre has not made suitable arrangements to prevent the tenant abandoning unsecured assets).

4.4.6 Test centres should bi-annually send BEIS updates on tenants at the site and the measures in place to prevent them leaving behind unsecured decommissioning liabilities.

5. Submission, approval and review of decommissioning programmes

5.1 Overall approach

5.1.1 Our intention is that the process leading to the approval of a decommissioning programme should be fair and transparent. The process should also take account of the need for modification and review, given the potential for considerable time to have elapsed between the initial approval of the decommissioning programme and the approval of a final version of the programme modified shortly before decommissioning to reflect the final arrangements being carried out. Relevant bodies and the public concerned should be consulted before a decommissioning programme can be approved.

5.1.2 As far as possible, the intention is, for BEIS to provide a "one stop shop" in relation to decommissioning of OREIs. However, there may be occasions when developers/owners will need to enter into a separate dialogue with individual Government Departments or their Agencies or with other bodies (for example, The Crown Estate and appropriate nature conservation agencies) if specific matters relating to their areas of responsibility arise. The Secretary of State reserves the right to request independent technical advice on the draft decommissioning programme. Where this happens, BEIS will ensure measures to protect the confidentiality of sensitive information are in place.

5.1.3 The **decommissioning programme process** in a typical case is:

Stage 1	Stage 2	Stage 3	Stage 4
Preliminary discussion between BEIS and the developer	Issue of s105 notice by Secretary of State requiring a decommissioning programme be submitted within a specified timescale	Detailed discussions; submission and consideration of a draft programme (including proposed financial security measures)	Consultation with interested parties
Stage 5	Stage 6	Stage 7	Stage 8
Formal submission of a decommissioning programme and approval under section 106 of the Act	In operation updates: Reviews and modifications of the approved decommissioning programme (and any financial security) leading up to Secretary of State accepting/requiring any relevant modifications to the final pre-decommissioning version; changes in timeline or ownership	Execution of the final version of the approved decommissioning programme	Submission of successful post-decommissioning report and conclusion of the Energy Act process

5.1.4 A flowchart is included at Annex B, setting out how the process of obtaining an approved decommissioning programme operates in practice.

5.2 Stage 1: preliminary discussions

5.2.1 Developers/owners should include an indication of their decommissioning proposals in the consultations they conduct as part of the process of securing statutory consents (or the process of their appointment as owner of offshore transmission assets or “OFTO”) so that the feasibility of removing the infrastructure can be considered as part of the consent application process. Developers/owners are encouraged to contact BEIS for informal discussions on decommissioning at this point. However, this process does not remove the need for decommissioning programmes submitted in response to section 105 notices to provide full

consideration of environmental and other factors for the Secretary of State to analyse.

5.2.2 Please note that **BEIS expects that final drafts of decommissioning programmes should be submitted for approval no later than 6 months in advance of the start of construction**, and that first drafts should be submitted no later than 12 months in advance. Developers/owners are strongly encouraged to enter into early discussions with BEIS on decommissioning proposals well in advance of these dates to ensure that they understand their decommissioning obligations and can take account of them from an early stage. Details of when Energy Act powers may be taken to help ensure these timelines are met are set out in Annex A, paragraph 1.2.

5.2.3 Please note that consents for some OREI projects may be granted with a condition attached that construction cannot begin until a decommissioning programme has been **submitted** in accordance with a notice served under section 105(2) of the Act. However, in some cases (for example pre-commercial projects without a reliable source of grant funding or revenue, and/or projects with novel technology), consents may also include a condition which requires that a decommissioning programme should be **approved** before construction and/or deployment of the development in question can take place.

5.2.4 Developers/owners should during preliminary discussions submit an e-mail explaining their corporate structure or split of ownership. (BEIS may issue a notice under section 112A of the Act formally requiring this information, if it has not already been received). This information will help BEIS understand which parties should be held liable for decommissioning. (Please note that the definition of the 'owner' of a device under the Act can in certain circumstances cover associated bodies in addition to the organisation leading the project[8].) BEIS should also be notified directly if there is a subsequent change in the corporate structure or split of ownership (see also Annex A, paragraph 1.3).

5.2.5 Participants in Ofgem's tender rounds for OFTOs should contact BEIS on their appointment as preferred bidder.

5.2.6 For decommissioning contacts in BEIS please refer to paragraph 1.5.

5.3 Stage 2: issue of a decommissioning notice by the Secretary of State

5.3.1 A section 105 notice is a notice served by the Secretary of State in accordance with section 105 of the Act. This notice places an obligation on its recipient to submit a decommissioning programme for an OREI for approval by the Secretary of State. The section 105 notice will set a deadline for the submission of the draft decommissioning programme and also set out any consultation requirement.

5.3.2 While the Secretary of State may issue a section 105 notice under the Act when a consent has been applied for and is likely to be issued, in practice, it is unlikely that a notice requiring the developer/owner to submit a decommissioning

[8] See section 105(2)(b) and section 105A of the Energy Act 2004.

programme will be issued until at least one of the relevant statutory consents has been granted. Nevertheless, we would encourage the developer/owner to start discussing decommissioning requirements with BEIS as early as possible as per paragraphs 5.2.1 - 5.2.6 above.

5.3.3 The requirement to submit a decommissioning programme through service of a section 105 notice may be placed on multiple parties involved in a project. In some instances, the Secretary of State may also place liability on an associated corporate body who has control of the 'main' developer/owner of the site[9].

5.4 Stage 3: detailed discussions leading to submission of draft decommissioning programme

5.4.1 The developer/owner should prepare a draft decommissioning programme, including proposed financial security provisions, using the model framework in Annex C as a guide. The measures proposed in the decommissioning programme should be in line with the conditions set out in Chapter 7; the estimated decommissioning costs should be set out in line with Chapter 8; and the financial security proposed in the programme should be in line with the principles set out in Chapter 9. The programme should be informed by an appropriate Environmental Impact Assessment ("EIA") (which might utilise the analysis already undertaken for the wider EIA done prior to consent of the installation or the results of bespoke investigations) as set out in Chapter 6 and Annex C.

5.4.2 Where the requirement to submit a decommissioning programme has been imposed on more than one person by the Secretary of State, a joint programme should be submitted.

5.5 Stage 4: consultation with interested parties

5.5.1 As a general principle, the process of preparing a decommissioning programme should be open and transparent. The developer/owner must ensure that members of the public are able to participate in the process by making draft decommissioning programmes publicly available and undertaking consultations with statutory consultees and other interested parties where appropriate. Details of the relevant statutory consultees will be specified to companies in receipt of a decommissioning notice. The extent of these consultations will be determined by the particular circumstances of the project in question.

5.5.2 In all cases, the developer/owner should consult with key representatives of parties who may be affected by the decommissioning proposals, such as the fishing industry and other users of the sea. We would expect other consultees to include: the Joint Nature Conservation Committee (where appropriate); Natural England; Natural Resources Wales; the Environment Agency; Historic England; Cadw; the Maritime and Coastguard Agency; the General Lighthouse Authority; and the relevant harbour authority (if any). Consultees should normally be given 30 days in

[9] Annex A paras 1.2.1-1.2.2 set out how associated corporate bodies can also be held liable for decommissioning under the terms of the Energy Act 2004.

which to comment. Please note that BEIS may agree an exception to the requirement to consult for owners of OFTOs if the proposed decommissioning methods for the OFTO are the same as those already consulted on by the wind farm owner and there have been no significant changes to local circumstances or available technologies since the original wind farm consultation.

5.5.3 The developer/owner should take account of the comments received from BEIS, as well as comments received during their own consultations, in updating the draft decommissioning programme. A table should be included in the decommissioning programme setting out the comments that have been received from each consultee (including ‘nil returns’). There should also be an explanation (where relevant) of how the comments have been reflected in any updated drafting. The developer/owner should ensure that each consultee named in the section 105 notice issued for the project in question provides at least an acknowledgment of receipt of the consultation document. The developer/owner should send a further draft of the programme to BEIS.

5.5.4 Once the developer/owner has provided a post-consultation updated draft decommissioning programme, BEIS will consult with relevant Government Departments, the Devolved Administrations (where appropriate), the relevant marine licensing authority, The Crown Estate, and the UK Hydrographic Office. BEIS will then send the developer/owner written comments on the final draft decommissioning programme. The draft programme should then be updated in line with any feedback received. (This may be the formal version submitted for approval as in stage 5.)

5.6 Stage 5: formal submission and approval of decommissioning programme

5.6.1 Once the programme has been updated to take into account any comments from interested parties (see 5.5.3 above), the developer/owner should submit it for approval to the Offshore Renewables Decommissioning team’s mailbox at:

OREIDecommissioning@beis.gov.uk

5.6.2 The Secretary of State may:

a) approve the submitted programme as it stands;

b) approve the programme with modifications and/or conditions. (For example, the Secretary of State may alter the level of financial securities or amend the decommissioning date.) Before formal approval takes place, the Secretary of State will inform the developer/owner of any proposed modifications or conditions to the programme which the Secretary of State considers should be put in place on approval of the programme. The developer/owner will be given an opportunity to make representations. The Secretary of State will then consider any representations before determining whether the decommissioning programme can be approved and, in the event it is, whether it should be approved subject to any conditions;

c) reject the programme and require a new one; or

d) prepare a decommissioning programme himself and recover the expenditure incurred from the owner/developer. Recovered costs may include payments made to a third party to draft the decommissioning programme, or any payments made to a specialist contractor to provide a quotation for decommissioning costs.

5.6.3 Where more than one person has submitted a programme, different conditions (for example, in relation to financial security) may be imposed upon each of the different persons.

5.6.4 Once the programme has approval, the responsible person should make it publicly available (for example, on the internet). Commercially confidential sections on costs and securities may be redacted. Any comments that are submitted subsequently by interested parties should be considered when the programme is next reviewed.

5.6.5 Please note that the approved decommissioning programme is expected to be reviewed and if necessary, modified throughout the course of the project. The final version of the approved programme, as modified from time to time, will be the version produced 12-18 months before authorisation (see stage 6).

5.7 Stage 6: In operation updates and reviews

Interim and final reviews

5.7.1 Our intention is to provide developers/owners with as clear and stable a regulatory environment as possible to minimise uncertainty. At the same time, the process needs to allow for appropriate reviews to take place and modifications to be made to decommissioning programmes. This is important given the potential, in certain circumstances, for significant time to elapse between approval of programmes and the actual decommissioning activity itself. The provisions in the Act (discussed in more detail in Annex A) require the Secretary of State to review approved decommissioning programmes as appropriate. The Secretary of State will usually discharge this obligation by requesting that developers/owners review the approved decommissioning programme and resubmit it for consideration.

5.7.2 It is in developers'/owners' interests to review their decommissioning programmes at regular intervals and consider whether the likely costs, removal methods or the environmental impacts of decommissioning have changed since the decommissioning programme received approval. Developers/owners should, where relevant, modify their programmes, to take into account:

- information gathered during the course of construction and operation;
- changes in market conditions, international standards, the regulatory regime;
- knowledge of environmental impacts, including any sediment shift since construction, or new species entering the area;
- new technology;

- any relevant changes in nearby infrastructure or navigational routes;
- the latest cost estimates and the robustness of the financial security arrangements.

5.7.3 Developers/owners may be formally required by the Secretary of State to modify their financial provision for decommissioning if reviews suggest that the amount of security is insufficient to meet their decommissioning liabilities or the risk of default.

5.7.4 For long-term projects (e.g. with asset lives ≥15 years) the following review points should be assumed as standard:

- post-construction report to be sent to BEIS within 1 year of completion of construction. This should involve sending BEIS any reports, studies, summaries etc of issues raised during construction which may impact on the eventual decommissioning methods and costs;
- a comprehensive review 12 - 18 months before the first security provision is due to identify any changes in assumptions on costs and risks where these might affect the size or timings of financial securities;
- from payment of the first security onward, the developer/owner should review its decommissioning programme annually to make sure the financial security provision is on track to meet the expected cost of decommissioning. Any revisions to a decommissioning programme resulting from changes in costs, securities or environmental or safety matters must be submitted to the Secretary of State for approval. In all circumstances, written confirmation should be sent to BEIS each year advising that a high-level review has been undertaken, even if no changes are deemed necessary;
- a developer/owner should start the consultation on the environmental impact assessment that will inform the actual decommissioning three years in advance of when the decommissioning is due to start. A final and comprehensive review of the decommissioning programme should begin two years ahead of the start. This early timing allows for environmental and other studies to inform the developer/owner's proposal to be submitted to the Secretary of State to modify the decommissioning programme to its final version prior to decommissioning. Within the two-year period, the Secretary of State will need to consider and consult on the proposal and any iterations to it thereafter (including in relation to the suitability of proposed modifications to financial securities provisions). It is possible the Secretary of State or another relevant body will have to undertake Appropriate Assessments or similar analysis to comply with any environmental legislation in place at the time. Separately, consideration should be given to the timing of any application for a Marine Licence that might be needed to permit the removal of the infrastructure in question. Late submission of such a proposal could result in the Secretary of State seeking to modify the approved programme and charging the developer for the cost of doing so.

5.7.5 Review periods for **shorter term projects** (i.e. less <15 years and typically demonstrator projects) will be considered on a case by case basis. However, for all projects exceeding 12 months duration, BEIS envisages, as a minimum, a report or summary of issues discovered during construction which might impact on decommissioning (this should be provided within 6 months of construction), and a review prior to submission of the final proposal for modification of the approved decommissioning programme before decommissioning covering the scope set out in the final bullet point of 5.7.2 above.

5.7.6 For all projects, BEIS reserves the right to require reviews if significant unexpected events occur (for example changes to the timings of financial securities might be required in the event of a significant failure in performance of the infrastructure, a change in ownership, or a significant change in the financial position of the company). Following the review, BEIS may propose its own modifications or new conditions.

Changes in ownership

5.7.7 From time to time, owners may decide to divest all or part of their asset and seek a transfer of decommissioning liabilities to the new owner. Developers/owners should note that, under the Act there is no automatic change in liability on transfer of ownership and the obligation to decommission remains with them. The Secretary of State would need to approve any change in liability and, in considering whether to do so, would, for example, take account of any potential increase in the risk of default on decommissioning liabilities that might arise from such a change.

5.7.8 The Secretary of State has powers under the Act to require the new developer/owner to decommission the installation in accordance with an approved decommissioning programme already in place and/or to comply with any new conditions deemed appropriate by the Secretary of State. It is important to note that the original developer/owner will remain liable for decommissioning until:

- the Secretary of State has approved a variation to the decommissioning programme (or has approved a new decommissioning programme if the old operator did not have an approved version) which places the obligation to provide securities on the new operator(s) of the project in question, and;
- the new operator has provided equivalent security to that already in place, and;
- written confirmation has been provided by the Secretary of State to confirm that the old operator no longer has any obligations under the decommissioning process set out in the Act.

5.7.9 The Secretary of State retains the right to keep the original developer/owner liable for decommissioning until the required securities have been fully accrued.

5.7.10 Where a change in ownership has arisen because the developer/owner has been voluntarily wound up, BEIS will seek in the first instance to make an associated corporate body such as any parent company liable for the decommissioning programme, if they had not previously been made jointly liable.

Early asset decommissioning

5.7.11 There may be situations where some infrastructure becomes damaged, faulty or commercially unviable prior to the end of the operational life of the whole project. In this event, it would be for the developer/owner and their landlord to decide whether to temporarily remove, replace or leave the faulty or damaged asset in situ in the period before the final decommissioning of the full project. The Secretary of State remains open to discussions on phased decommissioning, as long as plans are in place for eventual removal. The priority for BEIS would be to ensure that any damaged asset is regularly inspected and remains safe i.e. doesn't pose a risk to the safety of other marine users. BEIS expects to be notified of any early removal of infrastructure and for decommissioning programmes to be updated in the event of any significant changes.

Deferral of decommissioning or repowering

5.7.12 In line with relevant international obligations, BEIS will seek to ensure that the decommissioning of installations, or redundant parts of them, will be carried out as soon as reasonably practicable, and no later than the expiry date of the Marine Licence or relevant consent. BEIS does however recognise that, in certain circumstances where operations have ended, there are likely to be good reasons for the deferral of decommissioning activity to a later date (still within the Marine Licence or consented period).

5.7.13 The timing of decommissioning may be influenced by a range of factors including but not limited to: environmental impacts; market and commercial factors; vessel availability; phasing; synergy and co-ordination with other offshore work; and weather windows. In general, though, BEIS will not expect decommissioning to be delayed unless a robust case demonstrates definite re-use opportunities or justifiable reasons for deferring. It may for example be appropriate to defer the decommissioning of electricity transmission infrastructure to align it with the decommissioning timetable of the related generation asset.

5.7.14 BEIS requires owners to follow the principle that any deferral from an agreed programme should not materially increase the risk of costs falling to the Government or the taxpayer. Additional timescales should be short enough to avoid significantly adding to the risk of corrosion or deterioration of infrastructure that could make removal more onerous. Any deferral would need to be approved by the Secretary of State. Amongst the factors to be taken into account in considering the case for deferral will be the condition of the installation, the presence of any hazards, the environmental impact and the impact on other users of the sea.

5.7.15 It is possible that, in future, certain projects may be repowered (subject to the necessary regulatory consents). We will consider any amendment of decommissioning programmes as a result of a proposed repowering on a case by case basis. Early engagement with BEIS on such matters is advised.

Preparation for post-decommissioning monitoring requirements

5.7.16 Any redundant infrastructure permanently deposited or buried by exception as part of the decommissioning risks creating residual liabilities. The final version of the approved decommissioning programme should therefore set out the arrangement,

made by the developer/owner with their landlord as to how any residual liabilities will be managed in the long-term, in the event that a request for leaving infrastructure in place is successful. This may for example involve the developer/owner:

- conducting a survey to confirm that no previously buried infrastructure has become exposed (and removing any such exposed sections);
- putting appropriate legal and commercial arrangements in place with their landlord for an extended period of time post-decommissioning and after any post-decommissioning monitoring period. A landlord may, for example, require financial security or participation in an insurance scheme. This would be separate to and distinct from the need to provide financial security to the Secretary of State as part of any approved decommissioning programme.

5.8 Stage 7: execution of the final version of the approved decommissioning programme

5.8.1 At the end of the installation's operating life (which should coincide with the expiry date of the final Marine Licence or other relevant consent), the developer/owner is expected to remove the relevant infrastructure in accordance with the final version of the approved decommissioning programme.

5.8.2 In instances where the project has been operated by a Special Purpose Vehicle (SPV) or other legal arrangement that is intended to be dissolved following decommissioning then BEIS should be notified in advance about which party or parties will become responsible for the monitoring of the site.

5.9 Stage 8 - Submission of successful post decommissioning report and conclusion of the Energy Act process

5.9.1 Once the decommissioning activity is complete, a post-decommissioning report should be submitted to BEIS. The purpose of this is to ensure that the site and surrounding area has been cleared in line with the approved decommissioning programme, to demonstrate that suitable provision has been made with landlords for any remaining infrastructure, and to confirm that appropriate bodies have been notified of removal or the presence of any remains and any appropriate aids to navigation have been installed. This report should generally be submitted within four months of completion of the decommissioning work.

5.9.2 The report should include:

- evidence (e.g. photographic evidence of infrastructure out of the water, or survey footage of the seabed) that all infrastructure that was due to be removed according to the decommissioning programme, has been removed;

- independent verification that decommissioning took place in accordance with the approved decommissioning programme and a statement of any variations from that programme with reasons;
- any side-scan sonar surveys which may be required to enable the identification and subsequent recovery of any debris located on the sea-bed which may have arisen from the owner's/developer's activities and which may pose a risk to navigation, other users of the sea or the marine environment. These should cover the site and an appropriate buffer zone to allow a comparison with the environment prior to construction;
- a compliance statement setting out how relevant regulations (environment, health and safety) have been complied with together with any instances of non-compliance);
- a cost breakdown to enable BEIS to understand the actual cost of decommissioning compared to the predicted cost and to gain a better understanding of the potential accuracy of new decommissioning programmes;
- if infrastructure is left in situ, evidence that it has been cut off, buried, or otherwise made safe and treated in accordance with the decommissioning programme.

5.9.3 The Secretary of State will consult on and review the post-decommissioning report with the local landlord and the relevant marine licensing body and decide whether to accept it as satisfactory evidence that the decommissioning has been carried out in accordance with the approved decommissioning programme and that arrangements are in place for any post decommissioning monitoring. Once the Secretary of State is content that all obligations have been fulfilled, he will write to the developer/operator to confirm he is content that the decommissioning process required under the Act is complete and that any remaining securities held in respect of decommissioning will be released.

5.9.4 Please note that completion of the Energy Act process does not necessarily mean the developer/owner has no further obligations in relation to the decommissioning. Where infrastructure is permanently left in situ then any residual liability is expected to remain with the developer/owner in perpetuity, and the developer/owner may (depending on the arrangements that have been put in place by the landlord) need to make arrangements to protect itself against any claims for compensation by third parties arising from damage caused by any remaining infrastructure.

5.10 Failure to follow the requirements of the Act

Where a developer/owner fails to submit a decommissioning programme within the required timescale or does not follow the approved financial security programme or fails to decommission, the Secretary of State has powers to take remedial action and (where relevant) recover any expenditure incurred (see Annex A). Ultimately, failure to follow the requirements of an approved decommissioning programme could lead to the incurring of a criminal offence.

6. Content of decommissioning programmes

6.1 Model framework for decommissioning programmes

The precise contents of a decommissioning programme may vary according to the circumstances. However, we suggest that the programme should follow the model framework set out at Annex C:

- the content of the programme should be in line with the detailed guidance on decommissioning standards and financial security set out in the following two chapters of this guidance; and
- BEIS expects that the detail provided under each heading in a decommissioning programme will reflect the level of uncertainty for that particular issue. For example, prior to construction, it should be possible to provide a detailed description of items to be decommissioned, but the precise time schedule for decommissioning may be subject to some uncertainty. That said, the programme should be sufficiently detailed, from the outset, to demonstrate that decommissioning has been fully considered and factored into design decisions and that a viable decommissioning strategy has been developed.

7. Environmental and safety considerations

7.1 Overall approach

7.1.1 This chapter covers: the default requirement for full removal of installations, statutory notifications, environmental information and role of the landlord with regard to residual liabilities. It does not contain a prescriptive set of technical requirements for decommissioning, as these will vary according to the installation and location, with best practice in methods expected to develop over time.

7.1.2 Decommissioning programmes should set out the extent of infrastructure to be removed, methods and processes. **They should include a base case of all infrastructure being removed**, alongside any alternatives that the operator proposes, backed up by evidence and reasoning for the preferred option.

7.1.3 It is accepted that for projects with a long operational life, early decommissioning programmes may not be able to make reliably detailed predictions on future environmental sensitivities, technological advances and costs. However, best endeavours should be made to do so, incorporating precautionary assumptions where necessary. Operators should be aware that decommissioning programmes will be subject to review during the operational period and this will provide an opportunity to incorporate new information and challenge previous assumptions.

7.2 Presumption for full removal

7.2.1 It is expected that all installations and structures will be fully removed at the end of their operational life to minimise residual liabilities and that approval of decommissioning programmes will be based on this assumption.

7.2.2 The standards for the removal of offshore installations should not fall below those set by the International Maritime Organisation (IMO) in 1989[10] (or successor standards). BEIS will consider exceptions from full removal in line with those standards, only on presentation of compelling evidence that removal would create unacceptable risks to personnel or to the marine environment, be technically unfeasible or involve extreme costs. Operators should note that in certain circumstances, such as in proximity to navigational routes, the IMO does not grant exceptions. IMO guideline 3.13 states that nothing should go in the water unless it has been designed for full removal. The Secretary of State endorses the principle that OREI infrastructure should be designed and constructed to facilitate full removal.

7.2.3 Exceptions will be considered on a case by case basis prior to decommissioning, taking on board environmental conditions, the balance of risk, cost

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[10] IMO Guidelines and standards for the removal of offshore installations and structures on the continental shelf and in the exclusive economic zone.

and technological capabilities at that time. This is likely to be subject to third party verification.

7.2.4 In all cases, evidence should be presented in decommissioning programmes to allow a costed evaluation of decommissioning options, including full removal, and advice sought from the relevant statutory bodies.

7.2.5 If making arguments for exceptions to full decommissioning, developers/owners should take the following points into account:

- arguments should be tailored to the individual site and should set out whether the risks of buried cables etc are equal across all parts of the site (for example, are some areas of the site more prone to sediment shift?);
- arguments should be relative to the effect of conducting the activity during construction;
- the IMO exception for 'extreme cost' is not normally expected to be accepted where it is the sole reason being cited for partial decommissioning;
- where safety concerns are being cited, this is likely to be given greater weight if written evidence from a third party (such as the Health and Safety Executive or a known decommissioning contractor) can be provided;
- the developer/owner is encouraged to consider using the 'Comparative Assessment Framework' set out in decommissioning guidance for the Oil and Gas sector when determining and setting out their position[11].

7.2.6 Where less than full decommissioning is proposed, developers/owners will need to engage with other regulators (such as the Marine Management Organisation and Natural Resources Wales in respect of Marine Licences and Maritime and Coastguard Agency and the General Lighthouse Authority in connection with navigational risk) and their landlord on the acceptability of the proposals. They should also ensure compliance with the terms of their lease and make suitable arrangements with their landlord for any post-decommissioning monitoring and management in respect of any infrastructure to be left in situ (if this is permitted) - see paragraph 5.7.16 above.

7.3 Risks to Mariners and Notifications

7.3.1 At least six weeks in advance of the start of decommissioning, notification of the proposed change in status of the installation including the position, depth and dimensions of any remains should be provided to the United Kingdom Hydrographic

[11] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/760560/Decom_Guidance_Notes_November_2018.pdf.

Office (UKHO)[12] and to the Kingfisher Information Service[13], to enable information to be communicated to mariners and to the fishing industry.

7.3.2 Where it is agreed that any part of an installation located in the Renewable Energy Zone (REZ) or the UK continental shelf will remain in place, the IMO[14] should be notified. BEIS will wish to see copies of any relevant notifications provided by developers/operators.

7.3.3 Appropriate navigational marking and aids to navigation should be used during the removal process and assets left in situ may also need to be marked, depending on risk to mariners. Advice on marking may be sought from the relevant General Lighthouse Authority[15]. The developer/owner is responsible for ensuring the maintenance of any such aids to navigation.

7.4 Environmental Surveys and Assessment – prior to decommissioning

7.4.1 The first iteration of a decommissioning programme should be prepared as a draft prior to construction or operation. Where appropriate, that is, where information is still relevant, it may draw from existing environmental information assembled to inform the consent for the project and should set out environmental impacts expected to occur as a consequence of full removal and any other feasible options and mitigation measures. As set out in Chapter 5, decommissioning programmes will be subject to periodic review and new information and further assessments may be required.

7.4.2 It is likely that the developer/owner will have to carry out underwater surveys prior to decommissioning to inform the final version of the approved decommissioning programme. These surveys should provide an assessment of the condition of the infrastructure, the state of the environment and any safety considerations to inform decisions on removal options and any proposals for end of life asset management and repowering. BEIS will consider this information and advice from its advisors, other regulators and interested parties to agree the decommissioning methodology, using third party verification, as appropriate. Operators are advised to begin consultation on survey requirements well in advance of the intended decommissioning date to allow sufficient time for the works, analysis and assessment of options.

7.4.3 Environmental assessments should be proportionate to the scale of the decommissioning operations and the potential risks to the environment. For major infrastructure projects towards the end of their operational life, new surveys and assessments would be expected to inform the process of approving the final version of the approved decommissioning programme and the developer/owner conducting the decommissioning activity. The final programme will need to ensure compliance with the relevant legislation and take into account best practice, technological capabilities and costs at that time. The surveys should be used to provide an

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[12] https://www.gov.uk/government/organisations/uk-hydrographic-office.
[13] http://www.seafish.org/contact-us/.
[14] http://www.imo.org.
[15] https://www.trinityhouse.co.uk/.

assessment of the condition of the infrastructure, the state of the environment and any safety considerations to inform decisions on the best practicable environmental option (BPEO) and any proposals for end of life asset management and repowering. BEIS will rely on this information and advice from its advisors, other regulators and interested parties to agree a BPEO prior to decommissioning. For long-term projects (e.g. with asset lives ≥15 years), operators are advised to begin consultation on the final environmental assessment at least three years prior to the intended decommissioning date.

7.5 On-land management of waste

Waste from decommissioning should be reused, recycled or incinerated with energy recovery in line with the waste hierarchy, with disposal on land as the last option. BEIS does not consider disposal of waste at sea to be acceptable. Waste management must be carried out in accordance with all relevant legislation at the time, including control of any hazardous wastes.

8. Cost estimates

8.1 The draft decommissioning programme should set out a comprehensive breakdown of estimated decommissioning cost by category. A suggested format is set out at Annex E. If your contractor has not provided figures broken down in the format of the costs section of Annex E, you should confirm which of the cost items are included and provide explanations where such costs are not included.

8.1.1 The programme should explain who provided the costings, and how the accuracy of the figures has been assessed (for example via third party verification or an internal assurance process).

8.1.2 Costs should be calculated according to present day methods and technologies and should not include any learning rate assumptions. (Developers/owners may propose to modify the programme at a later date where methods and expected costs have changed over time.)

8.1.3 Developers/owners of OREIs should ensure that they take account of the most up to date evidence in framing their estimates for the costs of decommissioning their devices.

8.1.4 Please note that the estimated decommissioning costs will inform the financial security levels that are required to be made available to the Secretary of State. The purpose of the financial security is to enable BEIS to decommission should the owner fail to do so and where there are no other parties liable for decommissioning. This means that the cost estimate and financial security levels will need to cover the amount it would cost BEIS to organise and fund decommissioning. This may not necessarily be the same cost that the developer/owner would pay. For example, an owner of an OREI may be planning on reducing costs through use of their own vessel or via preferential rates from an existing commercial relationship but those options would not be available to BEIS. Developers/owners are encouraged to speak to BEIS about what to include or exclude from financial securities and what assumptions can be made.

8.1.5 The following sections provide advice on how to calculate or set out costs.

8.2 Contingency

All decommissioning programmes should include a contingency sum (for example to cover bad weather and/or extra costs arising from corrosion of infrastructure) unless you can provide evidence that this is already factored into existing cost estimates (for example where a contractor has incorporated contingency into a fixed price contract). Where the calculation is not provided by a third party, you should explain why the assumptions made on weather down-time or corrosion etc are specific to your project.

8.3 Re-use of infrastructure

We do not expect the default position in the decommissioning programme submitted at the start of the project to be that infrastructure will be re-used. BEIS would not be able to re-use infrastructure in the event that decommissioning fell to the Secretary of State, and to date it has not been common practice to re-use infrastructure after a project ends. Cost estimates should therefore include any recycling or disposal costs. Should it later be confirmed that the project is to be refitted and extended, a proposal can be made to BEIS under section 108 of the Act to revise the decommissioning programme and financial security levels to reflect this. Where the project is being sold, please refer to paras 5.7.7 - 5.7.10, which sets out when BEIS would confirm that the original owner no longer has a role under the Act.

8.4 Vessels and lifting equipment

Rates should be based on equipment which is currently available and should not make assumptions on savings that might occur as a result of future improvements in design. However, developers/owners can write to BEIS under section 108 of the Act proposing a review of the costs as and when changes in technology have reached the stage of commercial viability.

8.5 Value Added Tax

8.5.1 BEIS (formerly DECC) has since 2006 requested financial securities from the owners of OREIs (windfarms, wave and tidal generation devices) so that in the event they fail to decommission their project, the Secretary of State has funds to remove the infrastructure, as required by international conventions covering the laws of the sea. Unlike the developers/owners, BEIS has no ability to recover VAT in a situation where it has to decommission an OREI. Therefore, to allow for the possibility of BEIS having to decommission infrastructure in internal waters and/or the UK territorial sea, VAT must be factored into financial securities where necessary.

8.5.2 Please note that the VAT regime only applies within internal waters and the UK territorial sea (i.e. up to 12 nautical miles from the shore baseline). Therefore:

- where all the OREI infrastructure is within 12 nautical miles of the shore baseline, VAT on all decommissioning elements should be factored into financial securities to be provided to BEIS;
- for sites fully outside of 12 nautical miles of the shore baseline (i.e. relevant offshore windfarms which have sold off their transmission network), no VAT should be factored into financial securities to BEIS;
- Some projects (such as tidal arrays or OFTOs) may be partially or primarily based outside 12 nautical miles of the shore baseline but would need to conduct a portion of decommissioning within 12 nautical miles (for example to remove export cabling). In such cases, VAT should be factored into financial securities for all

decommissioning activity that takes place within 12 nautical miles of the shore baseline and excluded from all decommissioning activity that takes place outside 12 nautical miles of the shore baseline.

8.5.3 Any changes to VAT rates or their application to decommissioning activities should be picked up in any reviews of decommissioning programmes that are required throughout the life of the project.

8.6 Inflation

8.6.1 Developers/owners should ensure that the estimated cost of decommissioning an OREI includes an appropriate rate for inflation over the lifetime of the project in question. The rate at which inflation should be assessed is the Office for Budget Responsibility's ("OBR") forecast for inflation as measured by the Consumer Price Index (CPI). This should be done in several stages:

1. the cost of decommissioning should be calculated in the present day value;
2. when submitting the pre-construction decommissioning programme, developers/owners should forecast inflation up to the end of any subsidy period, using the CPI inflation rate;
3. if the current OBR forecast does not go up to the end of any subsidy period then an average inflation figure should be assumed for the years not yet covered by OBR forecasts;
4. after the end of any subsidy period, developers/owners should continue to review on an annual basis whether estimated decommissioning costs have changed (see also para 5.7.2 final bullet, regarding timings of reviews of approved decommissioning programmes). This may require modifications to the level of securities provided so that the total decommissioning fund matches the revised costs.

8.7 Scrappage

Developers/owners should not offset scrappage value from their total cost assumptions. BEIS does not consider that it is appropriate to rely on estimates of scrap value as a form of security because the value can fluctuate substantially and therefore is not reliable. Whilst BEIS understands that developers may wish to rely on an assumption of scrappage reducing net commissioning costs for their internal rate of return calculations etc, this is a private matter for the company and not a relevant consideration in respect of decommissioning costs that might fall to Government.

8.8 OFTOs

This guidance applies the same rules on calculating the level of costs and securities to each technology. OFTO owners should therefore take care in early discussions with Ofgem to check that any agreements on revenue streams will take into account the full costs of decommissioning as required by any approved decommissioning programme.

8.9 Independent Audit

Independent audit of estimated decommissioning costs (and of the financial security proposed or available to meet them) may be required, either directly of developers/owners or by BEIS appointing independent third-party experts. The need for, timing and frequency of such audits will be determined on a case by case basis.

9. Financial Securities:

9.1 Overall approach

9.1.1 The decommissioning provisions in the Act reflect BEIS' view – taking into account our international obligations – that the application of the Act is broad and can apply to a person who constructs, extends, operates or uses an installation or related electric line, and that these persons should be responsible for ensuring that it is decommissioned at the end of its useful life, and should be responsible for meeting the costs of decommissioning (the "polluter pays" principle).

9.1.2 Despite the broad application of the Act, in practice, BEIS will usually pursue the developer/owner of the project (and its associated corporate bodies) as they are the persons responsible for the installation and are best placed to manage and mitigate the costs and risks associated with decommissioning. The developer/owner should be considering decommissioning issues from the outset of the project, from the concept and design stage through to the contractual arrangements and warranties associated with construction and operation.

9.1.3 BEIS aims to make sure that developers/owners are planning for their decommissioning liabilities at the beginning of their projects and will make adequate provision to ensure that sufficient funds are available to meet their liabilities in line with the international obligations to decommission appropriately.

9.1.4 BEIS also seeks to reduce, to an acceptable level, the risk of liabilities falling to the public purse in the event of default by developers/owners by requiring appropriate financial security to be in place. Our prime objective with regards to the provision of financial security is to ensure the Government and the taxpayer are insulated as far as possible against the cost of having to step in if all other relevant parties fail to decommission.

9.2 Risk to the State

9.2.1 There is a risk of costs falling to the taxpayer if a developer/owner fails to organise decommissioning. The Secretary of State is the decommissioner of last resort and will (where it is absolutely necessary) step in to meet any outstanding costs of decommissioning offshore renewable projects. This does not automatically mean that the Secretary of State will be the first port of call should the owner fail to decommission. Taxpayer intervention will be in exceptional cases only and BEIS will always explore where an associated corporate body such as a parent company, the landlord or administrator (or others) may potentially be in line to decommission before the risk passes to government and the taxpayer.

9.2.2 To mitigate against the risk to the State materialising developer/owners are required to:

- Include details in their decommissioning programme of how they intend to finance their proposed approach to decommissioning; and

- Put in place acceptable financial security arrangements to protect the taxpayer against the possibility of having to pay for decommissioning in the event the developer/owner defaults on their obligations.

9.2.3 How a company chooses to finance its approach to decommissioning is primarily a matter for the company. BEIS will however only consider the developer/owner's financing arrangements to be an acceptable form of security if the money being reserved is ring-fenced for decommissioning and is not available to other parties that may have a financial interest in the project. The Secretary of State must be made the sole beneficiary of any financial security arrangement for it to be acceptable.

9.2.4 As stated above, this guidance is not intended to be prescriptive as to how a developer/owner reserves or pays for the cost of decommissioning. There are many different ways for a company to ensure the necessary money is made available at the appropriate time. The preferred approach of the developer/owner should be clearly set out in the draft decommissioning programme. This will provide reassurance to the Government that the industry is financially well prepared to decommission an OREI at the end of its operational life, and that the funds will be available should BEIS ultimately need to decommission.

9.2.5 For any security to be acceptable, appropriate arrangements must be in place to assure BEIS that such funds will be available to the Government if needed. This may be through a funding deed which ring-fences funds, a trust arrangement or other mechanisms depending on the type of security. If this cannot be confirmed we will not accept the arrangement. If the preferred form of security is cash (either upfront or accrued) then developers/owners need to reflect this in their annual returns, so that any potential investors are able to clearly see that money is being put aside for decommissioning and that this capital cannot be accessed for any other purpose.

9.3 Guiding principles

9.3.1 Under the Act's decommissioning provisions, it is for the responsible person to submit details of the security they propose to provide with their decommissioning programme. To guide industry, we have established some principles to provide a policy framework against which financial security decisions can be taken:

a) the premise is that developers/owners will meet the costs of decommissioning and be responsible for the liabilities they have created (the "polluter pays" principle);

b) the Government has a duty to ensure that the taxpayer is not exposed to an unacceptable risk of default in meeting costs associated with decommissioning;

c) the Secretary of State will expect to see that fair, effective and transparent arrangements are in place to ensure the performance of decommissioning obligations;

d) the Secretary of State will wish to consider the viability of recovering expenditure incurred in carrying out a decommissioning programme (if necessary under Section 110 (5) of the Act and the likely extent of the costs involved) – see Annex A on Energy Act powers.

9.4 Examples of acceptable security

There may be a number of acceptable forms of security. Proposals will be considered on a case by case basis. The type of security likely to be acceptable will depend on a number of factors, including but not limited to the maturity of the technology, the financial strength of those responsible for decommissioning and other commercial factors. The timing of security arrangements will be dependent on similar factors including revenue certainty over time and any applicable subsidy period.

9.4.1 Upfront Cash

Cash set aside up front to cover expected decommissioning liabilities would reduce the risk to BEIS to a negligible level and is, therefore, acceptable. This is likely to be the most appropriate form of security for pre-commercial deployment where the risks to the taxpayer are the greatest. This would need to be held in an account where deductions could not be made without the prior agreement of the Secretary of State, or officials on his behalf, if the owner fails to remove the asset in line with its approved programme. For example, this could include a third-party escrow account, a trust account or direct payments to BEIS. (Please note that BEIS cannot pay interest on funds held).

9.4.2 Cash Reserving

In line with the section on the timing of securities, cash reserving is an acceptable form of security provided the cash is held in an account intended only for decommissioning where deductions could not be made without the prior agreement of the Secretary of State. As set out above, this would include a third-party escrow account, or a trust account or alternatively through direct payments to BEIS. If a developer/owner simply intends to reserve cash in its own accounts, even if it is separated from the company's operating accounts, then it will not be considered an acceptable approach as the Secretary of State would not be guaranteed access to the money in the event of a default.

9.4.3 Letters of Credit/Bank Guarantees/Performance Bonds

From the perspective of BEIS, a standby letter of credit, a bank guarantee and a performance bond are all broadly similar instruments and are likely to be accepted as a form of security.

9.4.3.1 The key features expected of any proposed security include:

a) the beneficiary of the proposed security must be the Secretary of State for BEIS;

b) the security is issued by either (i) the UK branch of a bank established in an OECD country, or (ii) a UK authorised insurer (i.e. regulated by the Prudential Regulation Authority or any successor body) or European Economic Area (EEA) authorised insurer operating in the UK;

c) the issuer has a long-term rating of at least either A- or better by S&P Global Ratings (Standard & Poor's) or A3 or better by Moody's Investors Service or an equivalent rating by another recognised ratings agency. The security can be drawn in full if the issuer fails to maintain the required credit rating;

d) the security is irrevocable and payable on demand;

e) the security is for a fixed term either for the full duration of the decommissioning obligations or for a shorter term (typically 1-3 years) with a 'pay or renew' provision;

f) notwithstanding the above expected features, the security must in any case be issued by an entity acceptable to BEIS as appropriate in the circumstances.

9.4.3.2 As further guidance we would also generally expect that: (i) the payment of any demand is to be made within no more than 5 business days (where there is no ongoing query or dispute over the level of claim or on whether there will remain sufficient funds in the balance of securities to cover remaining decommissioning activities); (ii) the form of demand notice is provided; (iii) partial and multiple demands will be allowed; (iv) the expiry date and renewal provisions are clear; (v) the security amount is denominated in GBP; (vi) the security proposed is subject to the latest relevant rules[16]; (vii) the security is to be governed by and construed in accordance with the law of England and Wales; and, (viii) the parties submit to the exclusive jurisdiction of the courts of England and Wales in respect of any dispute without recourse to arbitration.

9.5 Term and renewal

9.5.1 In order to ensure continuous renewal of the security with no lapse, each security in the form of a bank guarantee, letter of credit or performance bond shall be required to be extended or replaced at least one month in advance of its expiration date.

9.5.2 Decommissioning obligations need to be discharged before the expiry date set out in the Marine Licence. Therefore, there must be a synergy between the licence, the approved decommissioning programme and the security provision. It is the owner's responsibility to ensure that these instruments are aligned.

9.5.3 As set out in paragraph 5.9 and Annex A the owner should submit a post-decommissioning report within 4 months of completion of decommissioning works.

[16] The International Standby Practices (ISP98) is a set of rules on the issuance and use of letters of credit. A Bank Guarantee will need to be a "Demand Guarantee" and governed by the International Chamber of Commerce (ICC) Uniform Rules for Demand Guarantees (URDG 758).

The Secretary of State will then review the report and decide whether to accept it as evidence that the decommissioning has been carried out in accordance with the approved decommissioning programme. Security must remain in place until the Secretary of State confirms that the decommissioning programme is accepted as being complete.

9.6 Other forms of security

9.6.1 Parent Company Guarantees (PCGs)

PCGs are not normally accepted although we reserve the right to consider them in exceptional circumstances - perhaps as a very short term form of security, or as a secondary form of security to provide BEIS with additional reassurance that the taxpayer is being suitably protected.

9.6.2 Insurance schemes

In general, we would not expect insurance to be acceptable security for decommissioning liabilities. It might be possible for an insurer to underwrite cost uncertainty in respect of a known event i.e. a decommissioning obligation defined in an approved programme, but we are cautious about the potential complexity of such proposals and the associated terms and conditions. We are, therefore, unlikely to judge that a developers/owners insurance proposal will provide sufficient certainty to the taxpayer in the event a developer/owner defaults on its decommissioning obligations.

9.7 Timing of securities

9.7.1 Not only are we concerned about the type of financial security being put in place to protect the taxpayer in the event of a default but we are also concerned that sufficient funds are being put aside by the developer/owner for eventual decommissioning. A key part of this is the timing of when securities are put aside or reserved.

9.7.2 Securities upfront of construction will generally be expected for pre-commercial projects. We believe that these projects pose a higher risk to the taxpayer than more mature deployments. The nature of pre-commercial projects can mean that there are increased technological, financial and commercial risks associated with the deployment of the asset.

9.7.3 For large scale commercial deployments that receive a predictable revenue stream (such as from a CFD or OFTO fixed term revenue stream) and involve a proven technology with low operating risk, a secure, segregated decommissioning fund that accrues early in, or during the middle of, the life of an installation is likely to be acceptable. The decommissioning fund must be able to be fully accrued by the end of the applicable subsidy period. The earlier that payments are made and completed, the better that Government is insulated from risk, since reserving would occur when there is a guaranteed revenue stream. A decommissioning fund that accrues late into the operating life of an installation **will not** be acceptable.

9.7.4 BEIS will consider the appropriate timings of securities on a case by case basis, taking into account the guiding principles set out in paragraph 9.6 above and our view of the risk profile of the individual project. Whilst the following should not be taken as a definitive list, considerations will include:

- whether there is there a reliable long term (e.g. 15 or 20 years) income stream in place for the project, such as a CFD or OFTO fixed term revenue agreement;
- whether there is evidence to suggest that the technology has a proven track record of operating reliably on a commercial, post-testing basis (to be considered in consultation with our technical advisers);
- whether the project has the necessary lease, consent and/or licence in place covering the entire period up to the proposed decommissioning date.

9.7.5 Each project will be considered according to its individual circumstances, but if the above questions cannot be answered with a 'yes', it is unlikely that mid-life accrual will be acceptable to BEIS. 'No' answers are more likely to result in a requirement for posting of securities upfront of construction of the installation, or no later than 3 months from the approval of the decommissioning programme.

9.7.6 In addition, BEIS will also take into account the financial strength of the organisations named in the decommissioning programme. Such an assessment would be on the basis of understanding risks to the taxpayer.

9.7.7 Where upfront securities are required, additional funds will be required for annual inflation. However, for shorter length demonstrator projects where deployment is less than 3 years it may be more straightforward to include projected inflation upfront (although in the majority of cases for short term projects this will be for testing centres to determine).

9.7.8 The table below summarises when a mid-life accrual of securities, if considered acceptable, should commence based on the subsidy support a particular OREI project might receive:

Subsidy support mechanism	
Renewable Obligation:	For projects with a '**renewables obligation certificate**', 'mid-life' accruals should start no later than year 10 and be completed by year 20.
Contract for Difference:	For projects with a 15 year '**contract for difference**', 'mid-life accruals should start no later than year 10 and be completed by year 15.
OFTO Revenue:	For OFTOs projects with a 20 year licence 'mid-life' accruals should start no later than year 10 of the licence and be completed by year 20.

9.7.9 Once securities are in place, they must remain in place until after the Secretary of State has reviewed the post-decommissioning report and confirmed that the programme is accepted as being complete. (The exception to this is where there is a draw down arrangement to release cash securities back to the developer/owner to pay an invoice for decommissioning – see paragraph 9.8 below.) Full security will need to be maintained if final decommissioning is deferred for whatever reason (for the avoidance of doubt this includes scenarios where there is an extension of the asset life or repowering).

9.8 Draw-down on securities for decommissioning

Where the owner of a project has provided cash as security with the Secretary of State, any withdrawal of funds to pay for the costs of decommissioning will be on the production of evidence that the funds are being utilised for decommissioning costs, and on the basis of satisfactory evidence that the remaining cash balance covers the residual cost of decommissioning remaining infrastructure (e.g. provision of invoices for draw-down, and contractor estimates setting out the remaining decommissioning costs for anything still to be removed). BEIS may hold back a limited proportion of funds pending a successful post-decommissioning report (in case further works are required) on a case by case basis according to the risks of each project.

Annex A - Summary of decommissioning provisions in the Energy Act 2004

1.0 Note

This summary is intended to provide a helpful description of the key decommissioning provisions in the Act (as amended)[17]. However, it should not be relied upon to be a comprehensive description of the legislation and developers/owners are reminded to take their own legal advice.

1.1 Introduction

The Act as amended sets out a statutory scheme for the decommissioning of OREIs. The scheme applies to territorial waters in or adjacent to England, Scotland and Wales (between the mean low water mark and the seaward limits of the territorial sea) and to waters in the Renewable Energy Zone (including that part adjacent to Northern Ireland territorial waters) and gives 'the appropriate minister" certain functions regarding decommissioning. The Secretary of State has powers under the scheme in respect of any installations in these waters that are not in Scottish territorial waters or in the Scottish part of the Renewable Energy Zone.

1.2 Requirement to prepare decommissioning programmes (section 105)

1.2.1 Under the terms of the Act, the Secretary of State may require a person (including a body corporate associated with that person – see below) who is or is proposing to construct, extend, operate or use an offshore renewable energy installation or a related electricity line, or who has started to decommission to submit a decommissioning programme for the installation. The Secretary of State must also consider how he will exercise his decommissioning powers in determining whether to give a consent for an OREI activity under section 36 of the Electricity Act 1989, when determining the effect of the activity on navigation.

1.2.2 The requirement to submit a decommissioning programme may be imposed on more than one person, in which case a joint programme must be submitted. The requirement may be imposed at any point, from the point (prior to construction) at which it is judged likely that one of the statutory consents required will be given, through to the point at which an installation has begun to be decommissioned.

[17] http://www.legislation.gov.uk/ukpga/2004/20/contents.

1.2.3 The Secretary of State may require specified consultations to be carried out before the decommissioning programme is submitted.

1.2.4 The decommissioning programme submitted must include:

a) measures to be taken for decommissioning the installation or line;

b) an estimate of the expenditure likely to be incurred in carrying out those measures;

c) provision for determining the times at which, or the periods within which, those measures will have to be taken;

d) provision about restoring the place to the condition that it was in prior to construction (where it is proposed that the installation or line will be wholly or partly removed from that place);

e) provision about continuing monitoring and maintenance (where it is proposed that the installation or line will be left in position or will not be wholly removed).

1.2.5 The Secretary of State may also require other information to be submitted with the decommissioning programme. This may include details of the (financial) security (if any) that the person proposes to provide.

1.3 Information Supplemental to section 105 notices

1.3.1 This section details the circumstances in which the Secretary of State can issue a section 105 notice to an associate company. This can only be done (where the Secretary of State has already served a notice on a person listed in section 105(2)(a) and if, having done so, the Secretary of State is not satisfied that adequate arrangements have been made by the recipient of that notice to carry out the decommissioning programme satisfactorily. A section 105 notice can also be served on an associate company if there has been a failure by the person with primary responsibility for the installation to comply with a notice served under section 105(2), or, the Secretary of State has rejected a programme submitted by such a person pursuant to such a notice.

1.3.2 The provisions in sections 105A(3) to (8) set out the test for determining whether one body corporate is associated with another. In essence, one body corporate is associated with another if one of them controls the other or if a third body corporate controls both of them. The tests for determining control in various different situations are contained in *subsections (4) to (8)*. The principal cases dealt with are where the body controlled is a company (*subsection (4)*) and where the body controlled is a limited liability partnership (*subsection (5)*). There is however a catch all definition of what ‘control’ means in *subsection 7*.

1.4 Approval of decommissioning programmes (section 106); failure to submit or rejection of decommissioning programmes (section 107)

1.4.1 The Secretary of State may: approve the programme as it stands; approve the programme with modifications and/or subject to conditions (after giving the person who submitted it an opportunity to make representations); reject the programme and require a new one; or prepare a decommissioning programme himself and recover the expenditure incurred from the person concerned.

1.4.2 The Secretary of State may approve a programme subject to a condition that the person who submitted the programme provides security in relation to the carrying out of the programme, at such time and in accordance with such requirements as the Secretary of State may specify.

1.4.3 Where more than one person has submitted a draft programme, different conditions (for example, in relation to financial security) may be imposed upon different persons.

1.4.4 The Secretary of State must act without unreasonable delay in reaching his decision as to whether to approve or reject a programme.

1.4.5 If there is a failure to comply with a section 105 notice, the Secretary of State may prepare a programme and impose it on the person concerned. That programme is then treated as if it had been submitted and approved in the usual way and can require the provision of financial security. The Secretary of State may also recover any expenditure incurred in preparing the programme from the person concerned.

1.4.6 Under section 106, the Secretary of State can reject an entire draft decommissioning programme. Where this happens, the Secretary of State may request production of a new programme by the developer or may under section 107 prepare and approve a programme to be imposed on the responsible person as in paragraph 1.4.

1.5 Reviews and revisions of decommissioning programmes (section 108)

1.5.1 The Secretary of State must, from time to time, conduct such reviews of an approved decommissioning programme as he considers appropriate. Either the Secretary of State or the party with a decommissioning obligation under the approved programme may propose modifications to it, including modifications to any conditions attached to the programme (for example, relating to financial security). The decision is made by the Secretary of State, after considering any representations made to him by the parties concerned.

1.5.2 Either the Secretary of State or the person who submitted the programme may propose to relieve a person of his duty to carry out the decommissioning programme or to impose that duty upon a new party (either in addition to or in substitution for another person).The decision is made by the Secretary of State, after considering any

representations made to him by the people concerned. When the duty is imposed upon a new party, that party may be required to provide security.

1.6 Carrying out of decommissioning programmes (section 109); default in carrying out decommissioning programmes (section 110)

1.6.1 The person who submitted the decommissioning programme (or any new person upon whom the duty has been imposed) must ensure that the programme is carried out in every respect. Where there is an approved decommissioning programme in place it is an offence for a person to take any decommissioning measures unless in accordance with the approved programme or with the agreement of the Secretary of State.

1.6.2 The Secretary of State may require remedial action if the programme is not carried out in any particular respect. If this is not done, the Secretary of State may himself secure the remedial action and recover the expenditure incurred from the person concerned.

1.7 Security for decommissioning obligations (Sections 110A and 110B)

1.7.1 Section 110A applies to any security which has been provided in relation to the carrying out of an approved decommissioning programme or for compliance with the conditions of its approval. This is designed to ensure that, in the event of the insolvency of a person responsible for decommissioning an OREI, the funds set aside for meeting those liabilities remain available for decommissioning and are not available to the general body of creditors. This protection applies where funds have been set aside in a secure way (such as a trust or other arrangement) for meeting obligations under a decommissioning programme.

1.7.2 To enable this, section 110A(3) states that the security is to be used in accordance with the trust or other arrangements under which the security has been set up. Section 110A(4) disapplies any provision of the Insolvency Act 1986, the Insolvency (Northern Ireland) Order 1989 or any other enactment or rule of law where its operation would prevent or restrict the security being used for the purpose for which it was set up (meeting decommissioning liabilities).

1.7.3 Section 110B (introduced in 2008) is intended to ensure that creditors and potential future creditors of a person responsible for a decommissioning programme are aware of any decommissioning funds protected by section 110A. The Secretary of State may direct that information regarding relevant security arrangements is published by the person responsible for the decommissioning programme (for example, in the financial pages of that person’s website). This will ensure that informed decisions can be made by creditors and potential future creditors. Section 110B(3) enables the Secretary of State, or a creditor of the person responsible for a decommissioning programme, to apply for a court order to ensure compliance with a direction and under section 110B(4), the court may order the

security provider to take steps to comply with the direction. Sections 110B(5) and (6) provide definitions of the terms “the protected assets”, “security provider”, and “the court” for the purposes of this section.

1.7.4 *Subsection (2)* widens the interpretation of security to include insurance, for the purposes of funds which will be protected from creditors in the event of insolvency.

1.8 Regulations about decommissioning (section 111)

The Secretary of State may make regulations relating to decommissioning of OREIs. Regulations may include, for example, prescribed standards for decommissioning and provision about the security that a person may be required to provide.

1.9 Duty to inform the Secretary of State (section 112)

When a person becomes responsible for an installation (or related electric line) he must notify the Secretary of State. This would happen when, for example, a person makes a proposal to construct, extend, operate or use an installation, or begins to construct, extend, operate, use or decommission an installation. (This would apply whether it was a proposal for a new installation or whether the person was acquiring an existing installation.) In the case of a new installation, notification is not required until after at least one of the statutory consents has been given or applied for.

1.10 Provision of information to the Secretary of State (section 112A)

1.10.1 The Secretary of State can require persons who are, or may in future be, subject to decommissioning obligations to provide certain information or documents to assist the Secretary of State in exercising his functions under Chapter 3 of Part 2 of the Energy Act 2004 (decommissioning of OREIs). These functions include making a judgement on the suitability and financial viability of the proposals contained in a decommissioning programme, for example financial projections, banking models and electricity generation forecasts.

1.10.2 Under section 112A(2), the Secretary of State can require information from the person on whom notice has been served, or may be served, under section 105(2)(a) those with principal responsibility for the installation, such as the developer, an associate of such a person, or a person who has been made subject to a decommissioning liability under the review procedure in section 108(3)(b).

1.10.3 *Subsection (3)* of section 112A enables the Secretary of State to require information about:

- the place where the OREI is or will be situated;

- the OREI itself or an associated electric line;
- in certain circumstances, details of an associated body corporate;
- the financial affairs of the person receiving the notice for information and, in certain circumstances, the financial affairs of an associate;
- the proposed security in relation to carrying out the decommissioning programme;
- the person receiving the notice's compliance with conditions to which the decommissioning programme has been approved;
- in certain circumstances, the name and address of any person whom the recipient of the notice believes to be an associated body corporate.

1.10.4 *Subsection (4)* of section 112A allows the Secretary of State to require information in connection with a function under section 107(1) or (4) of the Energy Act 2004. Those provisions allow the Secretary of State to prepare a decommissioning programme where one has not been submitted or has been rejected, and to require the relevant person to provide security in relation to the carrying out of the programme (see above). In this case the type of such information is not limited to the categories detailed in section 112A(3), but should be information which the Secretary of State considers is necessary or expedient for the purpose of exercising those functions.

1.10.5 Under subsections (5) and (6) of section 112A, the notice requiring the information must specify the documents or information (or the description of documents or information) to which it relates. The recipient of the notice is required to provide the information within the period specified in the notice.

1.10.6 *Subsection (8)* of section 112A makes it an offence for a person to fail to comply with the notice without a reasonable excuse. Section 113 sets out the sanctions that would apply if an offence was committed under subsection (8). These are:

- on summary conviction, a fine not exceeding the statutory maximum; or
- on conviction on indictment, imprisonment for a term not exceeding two years or an unlimited fine, or both.

1.10.7 *Subsection (9)* of section 112A makes it an offence to disclose information obtained by virtue of a notice issued under section 112A, unless the disclosure is:

- made with the consent of the person who provided the information; or
- for the purpose of a function under this Chapter of the Energy Act, the Electricity Act 1989 or Part 4 of the Petroleum Act 1998; or
- required by or under another piece of legislation.

1.11 Offences relating to decommissioning programmes (section 113)

A person guilty of an offence is liable on statutory conviction; to a fine not exceeding the statutory maximum; on conviction on indictment, to imprisonment for a term not exceeding two years or to a fine, or to both. In any proceedings against a person for default in carrying out a decommissioning programme, it would be a defence to show that he exercised due diligence to avoid the contravention in question.

1.12 Power to impose charges to fund energy functions (section 188)

The Secretary of State may make regulations requiring charges to be paid to him to fund the carrying out of his Energy Act functions (including functions relating to decommissioning of OREIs).

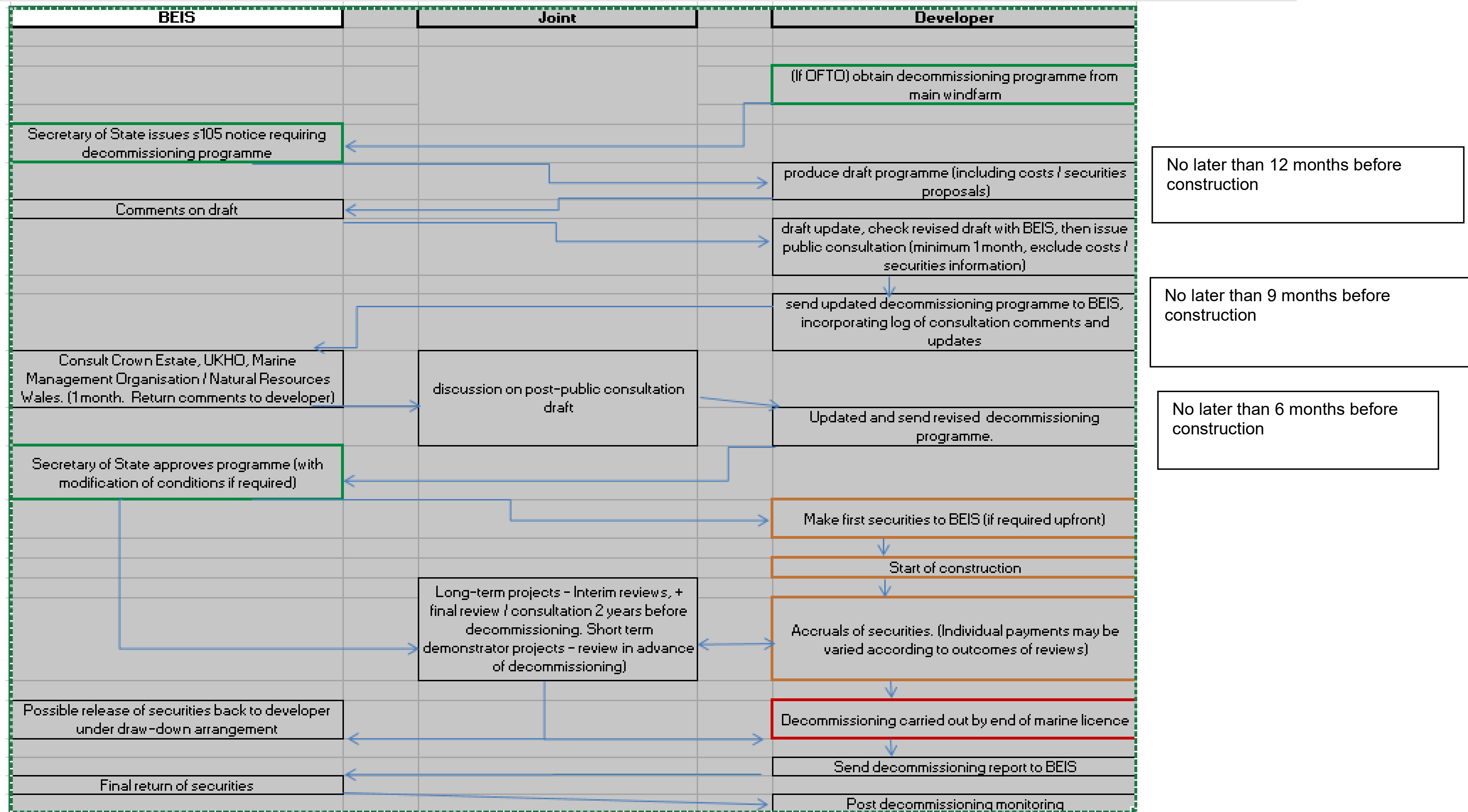
1.13 When will BEIS use the Energy Act enforcement powers?

1.13.1 BEIS expects that the final draft of a decommissioning programme should be submitted no later than 6 months before construction, and that deadlines given by BEIS will be met. Where it is likely this deadline will be missed, BEIS may consider using appropriate Energy Act powers to gather information to impose its own decommissioning programme.

1.13.2 Developers/owners are strongly encouraged to speak to BEIS informally on decommissioning requirements in good time, so that the draft decommissioning programme can be submitted in accordance with the timetable set out in the section 105 notice.

1.13.3 BEIS expects to implement a strict approach to the timely payment of required securities. Where expected payments are missed, a ‘section 110 notice’ would be sent within several weeks re-affirming the requirement to make the payment. Failure to comply with a section 110 notice can incur an offence, carrying a risk of a fine or up to 2 years imprisonment.

Annex B – Flowchart of decommissioning casework


BEIS
Joint
Developer
(If OFTO) obtain decommissioning programme from main windfarm
Secretary of State issues s105 notice requiring decommissioning programme
produce draft programme (including costs / securities proposals)
Comments on draft
draft update, check revised draft with BEIS, then issue public consultation (minimum 1 month, exclude costs / securities information)
send updated decommissioning programme to BEIS, incorporating log of consultation comments and updates
Consult Crown Estate, UKHO, Marine Management Organisation / Natural Resources Wales. (1 month. Return comments to developer)
discussion on post-public consultation draft
Updated and send revised decommissioning programme.
Secretary of State approves programme (with modification of conditions if required)
Make first securities to BEIS (if required upfront)
Start of construction
Long-term projects - Interim reviews, + final review / consultation 2 years before decommissioning. Short term demonstrator projects - review in advance of decommissioning)
Accruals of securities. (Individual payments may be varied according to outcomes of reviews)
Possible release of securities back to developer under draw-down arrangement
Decommissioning carried out by end of marine licence
Send decommissioning report to BEIS
Final return of securities
Post decommissioning monitoring
No later than 12 months before construction
No later than 9 months before construction
No later than 6 months before construction

Annex C - Model Framework for a decommissioning programme

Presentation

The programme should be presented in a form that allows ready updating and change. Each draft should be dated, and pages should be numbered.

Content

The content of the programme is likely to be based on the following model framework (which is intended as a guideline, rather than a rigid requirement).

Introduction

(Included in initial programme, updated as necessary when programme is reviewed.)

A brief introduction should be included, indicating that the decommissioning programme is being submitted for approval in accordance with the requirements of the Energy Act 2004. The introduction should state the companies that are a party to the programme and describe their ownership status.

Executive Summary

(Included in initial programme, updated as necessary when programme is reviewed.)

A summary should be provided, highlighting the essential features of the proposed decommissioning programme.

Background Information

(Included in initial programme, updated as necessary when programme is reviewed.)

Relevant background information should be provided, supported by diagrams, including:

- the layout of the facilities to be decommissioned;
- the relative location, type and status of any other adjacent facilities (e.g. telephone cables, pipelines and platforms) which would have to be taken into consideration;
- information on prevailing weather, sea states, currents, sea-bed conditions, water depths, etc, relevant to consideration of the proposed decommissioning programme;

- any fishing, shipping and other activity in the area;
- the names and locations of any Special Areas of Conservation (under the Habitats Directive) and/or Special Protection Areas (under the Birds Directive) that may be affected by the decommissioning programme;
- any other background information relevant to consideration of the draft decommissioning programme.

Description of Items to be Decommissioned

(Included in initial programme, updated as necessary when programme is reviewed.)

A full description should be provided, supported by diagrams, of all items associated with the generating station to be decommissioned, including:

a) Renewable Energy Installations

- renewable energy devices, including any foundations, support structures, towers, anchor blocks, turbines and ancillary equipment;
- offshore substations, including foundations, support structures, topside structures and ancillary equipment;
- meteorological monitoring masts;
- materials which may have been placed on the sea-bed, for example for scour protection, including rock, grout bags, sandbags, mattresses.

b) Related lines

- electric lines/cables, including inter-turbine cables, inter-substation cables and export cables.

Description of Proposed Decommissioning Measures

(Included in initial programme, with more detail added as appropriate when final review of programme takes place towards end of installation's life.)

This section should describe the proposed measures to be taken for decommissioning the installation. The level of detail provided may be improved upon over time. However, the programme should be sufficiently detailed, from the outset, to demonstrate that decommissioning has been fully considered and factored into design decisions and that a viable decommissioning strategy has been developed. This section should cover:

Any planned phasing/integration

Consideration may be given to the potential for beneficial phasing/integration of decommissioning activity between operators, e.g. within a particular geographic area or specialist type of work, in order to realise any economies of scale that may be possible.

Proposed method of removal

This should have regard to:

- Best Practicable Environmental Option (BPEO);
- safety of surface and subsurface navigation – other uses of the sea;
- health and safety considerations.

Proposed waste management solutions

This section should specify:

- which elements of the installation will be taken back to land for reuse, recycling, incineration with energy recovery or disposal;
- which (if any) materials from the installation are likely to be reused at sea.

Details of any items which may be left in situ following decommissioning

Where non-removal or partial removal is proposed, the decommissioning programme must provide justification for why this is considered to be the best option, through evaluation of the following matters (drawn from the IMO standards as set out in Chapter 7).

Predicted degradation, movement and stability of any remains

This section should be completed in line with the principles set out in Chapter 7 (Environmental Standards) of this guidance.

Environmental Impact Assessment

(Included in initial programme, with more detailed assessment undertaken, if necessary, when final review of programme takes place towards end of installation's life.)

See Chapter 7 for further details.

Consultations with Interested Parties

(Included in initial programme, updated as necessary when programme is reviewed.)

The decommissioning programme should describe the consultation process employed. It should provide a summary table of the consultations undertaken with interested parties and explain the extent to which their views have been taken into account in the programme. Relevant correspondence should be annexed to the programme.

Costs

(Included in initial programme, updated as necessary when programme is reviewed.)

The programme should include an overall cost estimate in line with Chapter 8, in £ sterling, of the proposed decommissioning measures. It should explain the basis on which the estimate is

made, including a breakdown into major component parts. All elements of the decommissioning programme should be covered in the cost estimate, including:

- removal of the installation;
- management of the waste;
- conduct of any surveys to be undertaken before or after decommissioning;
- post-decommissioning monitoring, maintenance and management of the site, where an installation is not entirely removed.

It is recognised that there may be concerns about including commercially sensitive cost data in a decommissioning programme, and placing such data in the public domain, before contracts are finalised. If this is the case, it should be possible to agree an approach that satisfies these concerns.

Financial Security

(Included in initial programme, updated as necessary when programme is reviewed.)

The programme should set out the financial security which the companies that are party to the programme propose to provide. Financial securities should follow the guidelines on inclusion of VAT, inflation and accrual timescales etc. set out in Chapter 9.

Schedule

(Outline information included in initial programme, updated as necessary when programme is reviewed.)

Details of the proposed decommissioning time-scale should be given, including a schedule showing the dates at which the various stages of the decommissioning are expected to start and finish. Final details of timing are only required towards the end of the life of the installation, when a review of the decommissioning programme is undertaken to finalise the decommissioning measures proposed, though must conclude by the end of the marine licence. The original decommissioning programme (prepared prior to construction) should set out, as far as possible, when decommissioning is expected to take place and explain how the decommissioning schedule will eventually be determined.

Project Management and Verification

(Only included when final review of programme takes place towards end of an installation's life.)

The programme should provide information on how the Developer / owner will manage the implementation of the decommissioning programme and provide verification to BEIS concerning progress and compliance. This should include a commitment to submit a report, detailing how the programme was carried out. As a guideline, this report should generally be submitted within four months of completion of the decommissioning work. This section of the decommissioning programme is only required towards the end of the life of the installation, when a review of the decommissioning programme is undertaken to finalise the decommissioning measures proposed. It need not be included in the original decommissioning programme (prepared prior to construction).

Sea-bed Clearance

(Included in initial programme, updated as necessary when programme is reviewed).

This section should set out proposals for confirming that, following decommissioning, the site has been cleared. Typically, this will involve carrying out appropriate surveys, upon completion of decommissioning.

See paragraphs 7.4.1 - 7.4.3.

Restoration of the Site

(Included in initial programme, updated as necessary when programme is reviewed.)

The programme should describe how it is proposed to restore the site, as far as possible and desirable, to the condition that it was in prior to construction of the installation.

Post-decommissioning Monitoring, Maintenance and Management of the Site

(Outline proposals included in initial programme, updated as necessary in the light of relevant data from construction, operation, decommissioning and post-decommissioning monitoring of the site.)

Where any remains are to be left in place, the programme should include a description of the proposed post-decommissioning monitoring, maintenance and management of the site. There should be a commitment to report the outcome of this work to BEIS.

Supporting Studies

(Included in initial programme, updated as necessary when programme is reviewed.)

Where supporting studies have been undertaken they should be listed within the programme.

Annex D – Tidal Lagoons

1. Tidal lagoons are structures that use an embankment to impound an area of water, incorporating turbines through which water passes during different states of tide to generate electricity. There are a number of different design approaches to constructing tidal lagoons. This guidance relates to those in coastal waters that use an embankment attached to land to enclose a tidal area of sea. The closest comparison would be the construction of a harbour.

2. The provisions for decommissioning of offshore installations in sections 105 to 114 of the Energy Act 2004 do not currently apply to tidal lagoons which are located below mean low water levels but attached to land. This annex to the existing Offshore Renewables Decommissioning Guidance has been produced to provide clarity on the applicability of this guidance to such lagoons.

3. It is BEIS' view that the deployment of tidal lagoon structures raises decommissioning (or long-term maintenance) issues that are similar in nature to those posed by OREIs. For this reason, BEIS considers that the decommissioning provisions of the Energy Act 2004 should be applied to nationally significant tidal lagoon structures which are attached to land.

4. It is our view that tidal lagoon installations attached to land, over 100MW[18] and within territorial waters adjacent to England and Wales should be subject to the decommissioning regime of the Energy Act 2004. The draft Development Consent Orders relating to such installations should be drafted to apply the decommissioning regime of the Energy Act 2004 to the whole of the offshore elements of any tidal lagoon installation defined as any part thereof which falls below the mean low water mark.

5. Under the Planning Act 2008, offshore generating stations are defined as Nationally Significant Infrastructure Projects (NSIPs) if they have a generating capacity of more than 100MW and when they are situated in waters in or adjacent to England or Wales (in both territorial waters and the Renewable Energy Zone). As NSIPs, such projects require development consent from the Secretary of State in the form of a Development Consent Order. In making such an Order, the Secretary of State has the power under section 120 of the Planning Act 2008 to impose requirements in connection with the development for which consent is granted, including requirements which apply or modify statutory provisions.

Decommissioning and / or on-going maintenance programme

6. The scope of any decommissioning programme will depend on the specific circumstances of each installation, having regard to the principles and standards set out in this guidance document. By way of example the scope could include: decommissioning in the event of developer / owner insolvency or complete removal. As the removal of tidal lagoons may impact on the local environment the scope should also consider on-going maintenance of some or all of the structure at the end of the installation's operational life.

7. The guidance on decommissioning as set out in this guidance will apply in full to tidal lagoons attached to land. However, in relation to the forms of acceptable financial securities

[18] Installations over 100MW are nationally significant infrastructure projects and are consented under the Planning Act 2008.

set out in Chapter 9, developers of tidal lagoons may wish to consider additional forms of financial security for decommissioning, such as the creation of a legacy company or a trust.

8. BEIS is keen to encourage industry cooperation and collaboration. As with OREIs it is important that developers of tidal lagoons take account of liabilities for decommissioning and/or the on-going maintenance of installations at the outset. The Secretary of State would expect any decommissioning programme submitted by virtue of the inclusion of tidal lagoon installations into the Energy Act 2004 regime to cover the whole of the installation.

Legal

9. BEIS notes that the power to apply statutory provisions in a Development Consent Order does not extend to provisions creating criminal offences (see section 120(8) of the Planning Act 2008).

10. A Development Consent Order which applies the Energy Act 2004 to tidal lagoon projects should therefore not purport to apply the criminal offence provisions of that Act. Instead, to make clear the consequences of breaching decommissioning provisions in the Development Consent Order, requirements which would otherwise be enforced by criminal sanctions under Chapter 3 of Part 2 of the Energy Act 2004 should expressly be made terms of the Development Consent Order (the breach of which would itself be a criminal offence, section 161 of the Planning Act 2008). It should therefore be made clear on the face of the Development Consent Order that a person must: decommission the project in accordance with the approved decommissioning programme or agreement of the Secretary of State (see section 109(2) of the Energy Act 2004); comply with any remedial notice given (section 110 of that Act); and comply with any duty to inform, or provide information or documents to, the Secretary of State (sections 112 and 112A of that Act).

Annex E - Cost breakdown example template

1. Cost breakdown to include the following as itemised items/sub items	
Major cost items should be justified, for example by providing quotes from marine contractors, or by providing costs for previously contracted work	
Cost items	***Example sub items***
Vessel mobilisation/demobilisation costs	multicat, AHTS, cable lay vessel
Offshore activities breakdown	lifting/towage of device, diver operations, pile cutting, equipment hire, recovery of moorings and anchors, umbilical recovery, rock bag recovery, cable jetting, guard/support vessels, fuel, crew, any other vessel costs not otherwise included
Waiting on weather contingency	
Surveys (pre and post decommissioning)	side-scan sonar, ROV
Onshore de-construction / disposal	crane hire, dry dock hire, wharf hire, dismantling crew, disposal
Management costs	
VAT in financial securities (before and after figures) [State nil cost if project is fully located within 12 nautical miles of shore]	
Base year of calculation of financial securities	
Inflation in financial securities (before and after figures)	

[only if gap exists between date of cost estimates and provision of first securities]	
[If foreign suppliers are used] assumptions on exchange rates and base rate year of exchange rate provided	
Liability insurance between project end and decommissioning (and if relevant the end of the monitoring period) - if applicable	
Estimated cost of full removal of cables (if programme proposes they remain in situ) Where the proposal is that cables remain in situ, this only needs to be a high level informal estimate and would not form part of the total decommissioning figure.	
2. Physical details and descriptions to provide confidence in estimates	
Items	Example sub items
All major dimensions	substation, tower, blades, pile diameter, turbine gravity anchor dimensions
All major masses	steelwork, concrete, mooring lines, nacelle, cables, transformer
Major lifting / securing equipment (nb – plans may be less developed for longer-term projects, but the developer / owner should know the main options).	details (drawing, location, specification, and photos) of major lifting/anchoring/securing components
Bespoke / proprietary equipment (more likely to be relevant for demonstrator projects with near-term decommissioning dates)	outline details of equipment and alternatives if not available / useable
Offshore activity details (this may be 'in principle' and plans may be less developed for longer-term projects).	vessel type, number of slack tides for operation, diver/ROV requirement

An “as deployed” list of equipment with coordinates. This list to be updated and sent to BEIS if the installed equipment changes. This is not necessary for normal O&M activities, only if there are any significant changes. (This information is only required when undergoing a review of an approved programme or the programme is being considered post-installation)	

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