

# **Decommissioning of Offshore Renewable Energy Installations in Scottish waters or in the Scottish part of the Renewable Energy Zone under The Energy Act 2004**

**Guidance notes for industry (in Scotland)**

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## 1. Introduction

1.1 Sections 105 to 114 of the Energy Act 2004 (as amended by the Energy Act 2008 and the Scotland Act 2016<sup>1</sup>) (“the Energy Act”) contain statutory requirements in relation to the decommissioning of the whole or any part of a renewable energy installation or an electric line that is or has been a related line (“relevant object”). Under the terms of the Energy Act, the Scottish Ministers may require a person who is responsible for relevant objects in Scottish waters (as defined in Section 104 of the Energy Act) or in the Scottish Renewable Energy Zone (“REZ”), to prepare (and eventually carry out) a decommissioning programme for submission to and approval by the Scottish Ministers. Where there has been a failure to submit a decommissioning programme or a decommissioning programme has been rejected, the Scottish Ministers also have powers to impose a decommissioning programme on a responsible person.

1.2 Marine Scotland, as the directorate responsible for the Marine Environment, has developed this guidance on behalf of the Scottish Ministers in order to assist developers / owners (referred to from hereon in as “the responsible person”) in understanding their obligations under the Energy Act. The guidance covers the following:

- a) The geographical **scope of the decommissioning requirements as they apply in Scotland** and the categories of offshore renewable energy installation (“OREI”) / electric lines included as relevant objects within the Energy Act;
- b) The **process** for submitting, seeking approval for, reviewing and modifying a decommissioning programme submitted in accordance with the Energy Act;
- c) The expected **content of decommissioning programmes**;
- d) **Decommissioning standards** – the general requirement to remove relevant objects 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;
- e) **Financial security** – the need for financial security and the forms of financial security which are acceptable;
- f) **Residual liability** – the residual liability which remains with the owners following decommissioning; and
- g) **Industry cooperation and collaboration** – the value of industry cooperation and collaboration at the decommissioning stage.

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<sup>1</sup> The Scotland Act 2016 amends various provisions of the Energy Act, effectively making the Scottish Ministers responsible as the ‘appropriate Minister’ (instead of the Secretary of State (of the UK Government)) for the administration of the decommissioning scheme which governs OREI installations in Scottish waters on or after 1 April 2017. This guidance applies to those installations, as well as any legacy installations which have transferred to Scottish Ministers in accordance with the Scotland Act 2016 (Commencement No. 4, Transitional and Savings) Regulations 2017. The UK Government has produced separate guidance to cover decommissioning of installations in English and Welsh waters.

1.3 This guidance should be followed by the persons responsible for relevant objects in Scottish waters or in the Scottish REZ<sup>2</sup>, to which the Energy Act applies.

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<sup>2</sup> [A map showing Scottish internal waters, territorial waters and the REZ](#)

## 2. How to use this guidance

2.1 The guidance can be used to:

- a) decide whether or not a particular offshore renewable energy installation is included within the scope of the decommissioning requirements contained within the Energy Act. [Chapter 4](#) (Scope of the Scottish decommissioning scheme) sets out which installations are included as relevant objects;
- b) understand the processes which must be followed for submission, approval and review of decommissioning programmes (as set out in [Chapter 5](#)); and
- c) understand what should be included in a decommissioning programme submitted under the scheme. [Chapter 6](#) provides an outline template for decommissioning programmes. The measures proposed in the decommissioning programme should be in line with the standards set out in [Chapter 7](#). Cost estimates of decommissioning should be as set out in [Chapter 8](#) and the financial security proposed in the decommissioning programme should be in line with the principles set out in [Chapter 9](#).

### 3. Policy and legislative framework

#### Requirement for decommissioning programmes

3.1 The UK Government introduced a legal obligation on developers and owners of relevant objects to prepare and carry out a decommissioning programme, and to put financial security in place, through the Energy Act. Changes to the Energy Act, brought about by the Scotland Act 2016, provide that the Scottish Ministers, rather than the Secretary of State (of the UK Government), exercise functions in relation to the decommissioning of relevant objects which are located either wholly in Scottish waters or in the Scottish REZ.

3.2 The Scottish Ministers wish to implement decommissioning requirements in such a way that it does not hinder the development of relevant objects, whilst at the same time ensuring that the tax payer is protected against having to organise and fund decommissioning activities.

#### International obligations

3.3 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.

3.4 International Maritime Organisation (“IMO”) guidelines and standards on the removal of offshore installations and structures on the continental shelf and in the exclusive economic zone were adopted in 1989. **The IMO’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 relevant objects unless there are strong reasons for any exception.**

3.5 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)<sup>3</sup> incorporates ideas on the decommissioning of wind farms in the marine environment.

3.6 This guidance treats the international conventions under UNCLOS and OSPAR as applying both in territorial and internal waters. (‘Internal waters’ refers to waters around estuaries and islands, which may be classified as ‘internal’)<sup>2</sup>.

3.7 The Scottish Ministers expect decommissioning programmes to provide costings based on total removal. Where, in exceptional circumstances, any infrastructure is to be left in situ, it is expected that costings are provided for both scenarios.

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<sup>3</sup> [Guidance on environmental considerations for the development of offshore wind farms](#)



## **Decommissioning provisions in the Energy Act (as amended)**

3.8 The key decommissioning provisions in the Energy Act (Sections 105 to 114), are explained in [Annex A](#). In summary, the Scottish Ministers have:

- the discretionary power to serve a notice on the responsible person requiring submission of a costed decommissioning programme
- the power to approve the decommissioning programmes with or without modifications or conditions (where the Scottish Ministers consider that these are required)
- the power to reject the decommissioning programme

3.9 Where the Scottish Ministers reject a decommissioning programme, they may prepare an alternative decommissioning programme themselves and recover the costs of preparing such programmes from the responsible person. The Scottish Ministers are required to review decommissioning programmes from time to time, and have the power to make regulations relating to the decommissioning of relevant objects.

## **Role of the Crown Estate Scotland**

3.10 The Scottish Ministers and the Crown Estate Scotland (which issues leases for offshore renewable energy developments) will work together to avoid duplicating decommissioning requirements imposed on developers / owners. The Scottish Ministers have agreed with Crown Estate Scotland that the responsible person's assets will only need to prepare one decommissioning programme, which will be submitted to the Scottish Ministers, as per the Energy Act.

3.11 Responsible persons covered by the decommissioning requirements of the Energy Act may be required to provide financial security for decommissioning to the Scottish Ministers. Crown Estate Scotland may have additional financial requirements for decommissioning for assets outside the scope of the Energy Act, residual liability issues, third party claims and consequential loss.

3.12 The Scottish Ministers will consult with Crown Estate Scotland on decommissioning programmes submitted by the responsible person and will consider Crown Estate Scotland's advice on decommissioning programmes submitted by the responsible person. The Scottish Ministers will also consult Crown Estate Scotland on in-operation reviews of and modifications to the approved programme, if there are substantial changes to a previous version.

## **Finance and Public Administration Committee**

3.13 One of the roles of the Scottish Parliament's Finance and Public Administration Committee is to scrutinise matters relating to or affecting the revenue or expenditure of the Scottish Administration. Contingent liabilities may require notification to or approval of the Finance and Public Administration Committee, in

line with the requirements of the Scottish Public Finance Manual section on contingent liabilities<sup>4</sup>.

3.14 The Committee will scrutinise whether to accept the contingent liability, as well as the due diligence undertaken. When scrutinising the contingent liabilities, the Finance and Public Administration Committee can approve the liabilities, propose an amendment to them or recommend they are rejected. In the latter case, the matter can be referred to the Parliamentary Bureau for debate and it would then be for the Parliament to decide whether to allow it to proceed.

3.15 Section 5.16 and 5.17 below provide context as to where the committee response fits into the wider Scottish Ministers decision making process.

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<sup>4</sup> [Scottish Public Finance Manual](#)

## 4. Decommissioning requirements in Scotland

### Geographical scope

4.1 The geographical scope of the decommissioning requirements, set out in the Energy Act, is between the mean low water mark and the seaward limits of the territorial sea, thereby including internal coastal waters and territorial waters) and in the Scottish REZ constructed (above the initial laying of cabling in advance of construction). However, the scope does not cover the inter-tidal zone (the area of the shore between the high and low tide water marks). Decommissioning of any infrastructure in the inter-tidal zone should be carried out in accordance with any conditions attached to a marine licence issued under the Marine (Scotland) Act 2010.

4.2 The UK Government has produced separate guidance<sup>5</sup> to cover decommissioning of relevant objects in English and Welsh waters.

4.3 Responsibility for the decommissioning of cross-border sites will generally be for the Secretary of State, unless agreement is reached for the Scottish Ministers to be responsible for the whole installation.

### Categories of installation included in the scope

4.4 The decommissioning requirements, as set out in the Energy Act, apply to “relevant objects”, which are defined in Section 105(10) of the Energy Act as including renewable energy installations and their related electric lines. The precise definition of “renewable energy installation” is set out in Section 104(3), but inter alia includes offshore installations used for purposes<sup>6</sup> connected with the production of energy from water or winds. The term “offshore installations” is defined in Section 104(4) and refers to those installations situated in waters where they:

- a) permanently rest on, or are permanently attached to, the bed of the waters; and
- b) are not connected with dry land by a permanent structure providing access at all times for all purposes.

4.5 This guidance applies to all new OREIs in Scottish waters which fall within the definition above (whatever their generating capacity and whether they are commercial or demonstration devices). For relevant objects installed in Scottish waters or the Scottish REZ before 1 April 2017, the Scottish Ministers have a concordat with BEIS<sup>7</sup>. This sets out the practical arrangements for the transfer of the Secretary of State’s functions under the Energy Act.

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<sup>5</sup> [Decommissioning of OREIs under the Energy Act 2004 Guidance Notes for Industry \(England and Wales\) – March 2019](#)

<sup>6</sup> These purposes are set out in Section 104(5) of the Energy Act 2004: (a) the transmission, distribution and supply of electricity generated using water or winds; and (b) the doing of anything (whether by way of investigations, trials or feasibility studies or otherwise) with a view to ascertaining whether the generation of electricity in that manner is, in a particular case, practicable or commercially viable, or both.

<sup>7</sup> [Decommissioning of OREIs: concordat](#)

## **Offshore renewable energy test centres**

4.6 Test centres will be required to submit decommissioning programmes for their own central infrastructure. These decommissioning programmes should be in line with [Chapter 5](#) of this guidance and set out how they will ensure that the overall site is returned to its natural state at the end of the test centres' operation. The Scottish Ministers do not expect test centre decommissioning programmes to be updated each time a project is installed / decommissioned. The Scottish Ministers will only require appropriate financial securities for test centre operators to cover centrally owned installations or infrastructure. Securities should be reviewed and updated as per [Chapter 9](#) of this guidance.

### **Test centre tenants**

4.7 The Scottish Ministers expect that tenants within offshore renewable energy test centres in Scotland will produce their own decommissioning programmes for the approval of the Scottish Ministers.

4.8 Test centre tenants must provide the Scottish Ministers with appropriate financial security to enable decommissioning of the relevant objects at the end of the operating period in line with the relevant decommissioning programme.

4.9 Responsible persons wishing to construct or operate their assets at a test centre should engage with the Scottish Ministers on this matter at the earliest possible opportunity. The Scottish Ministers would expect financial securities to be in place before the start of any deployment.

## **5. Submission, approval and review of decommissioning programmes**

5.1 The process leading to the approval of a decommissioning programme is proportionate, transparent and subject to consultation. It should also take account of the need for modification and review, particularly where considerable time is expected to pass between the time of approval of a decommissioning programme and it ultimately being carried out.

5.2 The Scottish Ministers reserve the right to request independent technical advice on the draft decommissioning programme.

5.3 For developments wholly in an area of Scottish waters or in the Scottish REZ, the process in a typical case is expected to be as set out in [Annex B](#).

### **Stage 1: Preliminary discussions**

5.4 The Scottish Ministers would encourage the responsible person to take a design to decommission approach to development and to ensure decommissioning costs are considered from the outset (particularly in relation to funding applications for more novel technologies). In addition, the responsible person should enter into early discussions with the Scottish Ministers, to ensure that they understand their decommissioning obligations and can take account of them from an early stage. An indication of the decommissioning proposals should be included as part of the statutory consenting or licensing process so that the feasibility of removing the infrastructure can be assessed as part of the application process.

5.5 The Scottish Ministers expect that decommissioning programmes should be submitted for approval no later than six months in advance of construction, and that the first drafts should be submitted about 18 months in advance.

5.6 From 1 April 2017 onwards, where consents or licences are granted they shall contain a condition that construction cannot begin until a decommissioning programme has been submitted to and approved by the Scottish Ministers.

5.7 Decommissioning programmes must cover both the OREI and the offshore transmission works. In addition, costs for decommissioning both the renewable energy installation and the offshore transmissions works must be provided. These may be provided separately to assist during the transfer of the offshore transmission assets to the Offshore Transmission Owner (“OFTO”), which must occur within 18 months of the completion of construction.

### **Stage 2: Issue of a decommissioning notice by the Scottish Ministers**

5.8 The Scottish Ministers will issue a Section 105 notice (under the Energy Act) requiring the responsible person to submit a decommissioning programme as soon as at least one of the statutory consents for installation relevant object has been issued. Nevertheless the responsible person is expected to start discussing requirements with the Scottish Ministers as early as possible. The Scottish Ministers

may issue a Section 105 notice earlier, particularly where there is a tight timescale for project development.

5.9 The requirement to submit a decommissioning programme through service of a Section 105 notice may be imposed on more than one party. In some instances, the Scottish Ministers may also require that an associated corporate body who has control of the 'main' developer / owner of the site submits a decommissioning programme<sup>8</sup>.

### **Stage 3: Draft decommissioning programme**

5.10 Having discussed the requirements with the Scottish Ministers (see [Stage 1](#)), the responsible person should prepare the draft programme, including proposed financial security provisions, using the template at [Annex C](#) as a guide. The measures proposed in the decommissioning programme should be in line with the standards 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 an appropriate environmental impact assessment, as set out in [Chapter 6](#) below.

5.11 Where the requirement to submit a decommissioning programme has been imposed on more than one person by the Scottish Ministers a joint programme should be submitted.

### **Stage 4: Consultation with interested parties**

5.12 The process of preparing a decommissioning programme should be open and transparent. The responsible person is expected to ensure that the public is able to participate in the process by making decommissioning programmes publicly available and undertaking consultations with statutory consultees and interested parties. In all cases, the responsible person should consult with key representatives of parties who may be affected by the decommissioning proposals. Current practice is for the Section 105 notice to include consultation requirements, as per Section 105(7) of the Energy Act.

5.13 The responsible person must take account of the comments received from the Scottish Ministers, as well as comments received during the responsible person's own consultations, in updating the 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 must be an explanation of how the comments have been reflected in any updated drafting. The responsible person should ensure that each consultee named in the Section 105 notice issued for the project in question provides at least an acknowledgement of the receipt of the consultation document.

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<sup>8</sup> [Annex A](#) paragraphs 7 and 8 set out how associated corporate bodies can also be held liable for decommissioning under the terms of the Energy Act 2004.

## **Stage 5: Seeking approval of decommissioning programme from the Scottish Ministers**

5.14 Once the final draft of the decommissioning programme has been agreed with the Scottish Ministers, the responsible person should formally submit it to:

Mail: Licensing Operations Team  
Marine Scotland  
375 Victoria Road  
ABERDEEN  
AB11 9DB

Email: [ms.marinerenewables@gov.scot](mailto:ms.marinerenewables@gov.scot)

5.15 Once the responsible person has provided a decommissioning programme in accordance with the Section 105 notice issued under the Energy Act, the Scottish Ministers will consult with relevant Scottish Government Departments, the UK Government (“BEIS”) (where appropriate) and the Crown Estate Scotland. The Scottish Ministers will then send the responsible person written comments on the draft decommissioning programme. The draft programme should then be updated in line with the feedback received. (This may be the final version submitted for approval as per [Stage 5](#)). Responsible persons should also note that financial agreements are also likely to be required to secure specifics around the timing and method of payment of securities.

5.16 Before granting any guarantees or indemnities, contingent liabilities may require to be notified to the Scottish Parliament’s Finance and Constitution Committee or sent to them for scrutiny as outlined in Sections 3.12 and 3.13.

5.17 The Scottish Ministers may then:

- a) approve the submitted programme as it stands;
- b) approve the programme with modifications and/or subject to conditions (after giving the responsible person an opportunity to make representations on any proposed modifications or conditions);
- c) reject the programme;
- d) reject the programme and require a new one; or
- e) reject the programme and prepare one themselves and recover the expenditure and interest incurred from the responsible person. 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.

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

5.19 If the decommissioning programme is approved, the responsible person should make it publicly available. The confidential annex on costs and securities may



be redacted. Any comments that are submitted by interested parties should be considered when the decommissioning programme is next reviewed.

## **Stage 6: In-operation updates and reviews**

5.20 The provisions of the Energy Act require the Scottish Ministers to review approved decommissioning programmes from time to time.

5.21 It is in responsible persons' interests to review their decommissioning programmes at regular intervals, to consider whether the likely costs and methods or environmental impact of decommissioning have changed since the decommissioning programme received approval. The responsible person 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 / navigational routes
- the latest cost estimates and the robustness of the financial security arrangements

5.22 The responsible person may also be formally required by the Scottish Ministers to modify their financial provision for decommissioning if reviews suggest that the financial security proposed or available is insufficient to meet their decommissioning liabilities or the risk of default by the responsible person has changed. Notification or approval of the Finance and Public Administration Committee may be required depending on whether the change is material, in line with the Scottish Public Finance Manual.

5.23 For long term projects (e.g. with asset lives  $\geq 15$  years) the following review points should be assumed as standard:

- post – construction report to be sent to the Scottish Ministers within one year of completion of construction. This should involve sending the Scottish Ministers any reports / studies / summaries of issues raised during consultation which may impact upon 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 responsible person should review their decommissioning programme annually to make sure the financial security provision, and assessed level of risk, is on track to meet the expected costs of decommissioning. Any revisions to a decommissioning programme resulting from changes in costs, risk, securities or environmental or safety



matters must be submitted for review and approval from the Scottish Ministers. In all circumstances written confirmation should be sent to the Scottish Ministers for review each year advising that a review has been undertaken, even if no changes are deemed necessary

- the appropriate person should start discussions with Marine Scotland and NatureScot about the 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 at least two years ahead of when decommissioning is due to commence. This will allow for environmental and other studies to inform the responsible person's proposal to be submitted to the Scottish Ministers to modify the decommissioning programme to its final version prior to decommissioning. Within the two-year period, the Scottish Ministers will need to consider and consult on the proposal. It is possible the Scottish Ministers 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 Scottish Ministers seeking to modify the approved programme and charging the responsible person for the cost of doing so.

5.24 Review periods for shorter term projects will be considered on a case-by-case basis. However, for all projects exceeding 12 months, the Scottish Ministers would expect a report / summary of issues discovered during construction which might impact on the decommissioning (this should be provided within six months of completion of construction for the Scottish Ministers to review), and a review prior to the actual decommissioning of the installation, to finalise the decommissioning measures envisaged.

5.25 For all projects, Scottish Ministers reserve 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, the Scottish Ministers may propose their own modifications.

### Changes in ownership

5.26 The responsible person may decide to sell all or part of their asset and seek a transfer of decommissioning liabilities to the new owner. Under the Energy Act, there is no automatic change in liability on transfer of ownership. The Scottish Ministers would need to approve any change and would, for example, take account of any potential increase in the risk of default on decommissioning liabilities that might arise from such a change.

5.27 It is important to note that the original responsible person will remain liable for decommissioning until:

- the Scottish Ministers have 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
- the new operator has put in place the required securities
- written confirmation has been provided by the Scottish Ministers to confirm that the old operator no longer has any obligations under the decommissioning process set out in the Energy Act

5.28 Changes in ownership will be treated on a case-by-case basis. The Scottish Ministers retain the right to keep the original responsible person liable for decommissioning until the required securities have been fully accrued.

5.29 Where a change in ownership has arisen because the responsible person has been voluntarily wound up, the Scottish Ministers 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.

#### Deferral of decommissioning or repowering

5.30 The Scottish Ministers will be seeking to ensure that decommissioning of installations, or redundant parts of them, will be carried out as soon as reasonably practicable, and no later than the end of the marine licence or relevant Section 36 consent. The timing of decommissioning may be influenced by a range of factors. In general, though, the Scottish Ministers will not expect decommissioning to be delayed unless a robust case demonstrates definite re-use opportunities or justifiable reasons for deferring.

5.31 The Scottish Ministers require owners to follow the principle that any deferral from an agreed programme should not materially increase risk to the Scottish Government or the tax payer. Additional timescales should be short enough to avoid significantly adding to the risk of corrosion / deterioration of infrastructure that could make removal more onerous. Any deferral from an agreed programme would need to be timeously proposed as a modification to the decommissioning programme and approved by the Scottish Ministers. 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.

5.32 In the future, it is possible that certain projects will be repowered (subject to the necessary regulatory consents). Any amendment of decommissioning programmes as a result of a proposed repowering will be considered on a case-by-case basis. Early engagement with the Scottish Ministers on such matters is advised.

#### Residual liabilities

5.33 Any redundant infrastructure permanently left on the seabed 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 responsible person with Crown Estate Scotland 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 responsible person:

- conducting ongoing surveys to confirm that no previously buried infrastructure has become exposed and taking any appropriate remedial action
- putting appropriate legal and commercial arrangements in place with Crown Estate Scotland for an extended period of time post-decommissioning and after any post-decommissioning monitoring period. Crown Estate Scotland 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 Scottish Ministers as part of any approved decommissioning programme

### **Stage 7: Undertake approved final decommissioning programme**

5.34 Where a decommissioning programme is approved by the Scottish Ministers, it shall be the duty of the person who submitted the programme to secure that it is carried out in every respect; and that all the conditions to which the approval is subject are complied with, in accordance with Section 109 of the Energy Act.

5.35 In instances where the project has been operated by a Special Purpose Vehicle (“SPV”) (for example a company set up solely to manage that wind farm) or other legal arrangement that is intended to be dissolved following decommissioning then the Scottish Ministers should be notified in advance about which party or parties will become responsible for the monitoring of the site.

### **Stage 8: Submission of successful post decommissioning report and conclusion of the Energy Act process**

5.36 The final stage requires the responsible person to implement arrangements for monitoring, maintenance and management of the decommissioned site and any remains of installations or cables that may exist. In Scotland, a post-decommissioning report will generally be required as part of a marine licence granted for the decommissioning of the development. The outcome of monitoring work should be reported to the Scottish Ministers, together with proposals for any maintenance or remedial work that may be shown to be required. Monitoring reports must (unless prior agreement provided by Marine Scotland) also be verified by a third party (for example, an independent contractor carrying out the survey for an independent observer), and published by appropriate means (for example, on the Internet). If necessary, the monitoring programme will be adapted with time. The Scottish Ministers will agree with the responsible person when the monitoring programme may cease, taking account of any environmental impacts and risks to navigation or other users of the sea which may be posed by any remaining materials.

### **Failure to comply with requirements of the Energy Act**

5.37 Where a responsible person fails to submit a decommissioning programme within the required timescale, does not follow their approved financial security

programme, or fails to decommission, the Scottish Ministers have 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

### A template for decommissioning programmes

6.1 The precise contents of a decommissioning programme may vary according to the circumstances. However, the Scottish Ministers strongly encourage that the programme should be based on the template set out at [Annex C](#).

6.2 The content of the programme should be in line with the detailed guidance on decommissioning standards, cost estimates and financial security set out in the following three chapters of this guidance.

6.3 The detail provided under each heading in a decommissioning programme should reflect the level of uncertainty for that particular issue, 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. Where an Environmental Impact Assessment has been undertaken for the project permits, the initial versions of the decommissioning programme should rely on that information. However, as the project develops updated assessments are likely to be required.

6.4 Financial models are required to be reviewed in order to assess the viability of proposed financial security arrangements. Financial information relating to decommissioning costs and financial security arrangements would be provided to SG on a confidential basis. SG follows strict internal guidelines on the handling of commercially sensitive information. However, any information provided to the Scottish Ministers may be subject to Freedom of Information (“FOI”) / Environmental Information Requests (“EIR”). Therefore the responsible person will have to identify specific information within any documents (figures, cost assumptions, information specific to their company etc.) provided which if released would be likely to cause substantial prejudice to their commercial interests and identify what that prejudice would be likely to be.

## 7. Environmental and safety considerations

### Overall approach

7.1 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.

7.2 Decommissioning programmes must set out the extent of infrastructure to be removed, methods and processes (based on current methods). Decommissioning programmes must include a base case of all infrastructure being removed, alongside any alternatives that the operator proposes, backed up by evidence and reasoning for selection of the preferred option.

7.3 Section 105(8) of the Energy Act sets out that a decommissioning programme must:

- a) set out measures to be taken for decommissioning the relevant object;
- b) contain an estimate of the expenditure likely to be incurred in carrying out those measures;
- c) make provision for the determination of the times at which, or the periods within which, those measures will have to be taken;
- d) if it proposes that the relevant object will be wholly or partly removed from a place in waters regulated under this chapter, include provision about restoring that place to the condition that it was in prior to the construction of the object; and
- e) if it proposes that the relevant object will be left in position at a place in waters regulated under this chapter or will not be wholly removed from a place in such waters, include provision about whatever continuing monitoring and maintenance of the object will be necessary.

7.4 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.

### Presumption for full removal

7.5 To minimise residual liabilities, retain value in Crown Estate Scotland assets, maximise seabed re-use and for the safety of other marine users, it is expected that all relevant objects will be fully removed at the end of their operational life. The approval of decommissioning programmes will be based on this assumption.

7.6 The standards for the removal of offshore installations should not fall below those set by the IMO in 1989<sup>9</sup> (or successor standards). the Scottish Ministers will

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<sup>9</sup> [IMO Guidelines and standards for the removal of offshore installations and structures on the continental shelf and in the exclusive economic zone.](#)

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 no installation or structure should go on the continental shelf or any exclusive economic zone unless it has been designed for full removal. The Scottish Ministers endorse the principle that relevant objects should be designed and constructed to facilitate full removal.

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

7.8 If making arguments for exceptions to full decommissioning, the responsible person should take the following points into account:

- arguments should be tailored to the individual site and should set out whether the risks are equal across all parts of the site (for buried cables 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 not fully removing a relevant object
- the responsible person is encouraged to consider using the ‘Comparative Assessment Framework’ set out in the UK Government’s decommissioning guidance for the Oil and Gas sector when determining and setting out their position<sup>10</sup>

## **Method of removal**

7.9 Removal techniques are likely to evolve as experience (including experience of removing oil and gas installations) is gained and technology advances. The following aspects should be factored into your methods of removal:

- other uses of the sea
- safety of surface and subsurface navigation
- health and safety considerations
- environmental impacts

## **Risks to mariners and notifications**

7.10 Requirements in relation to notification and marking of any remains will be contained within project specific marine licenses, as will requirements for navigational aids and marking during the removal process.

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<sup>10</sup> [BEIS Decommissioning of Offshore Oil and Gas Installations and Pipelines – Guidance Notes](#)



7.11 It will be important to ensure that where any deferral of the approved decommissioning programme for a scheme has been agreed by the Scottish Ministers, that the need to maintain any ongoing mitigation measures, such as the provision of navigational warning lighting or aviation radar mitigation schemes associated with that scheme, is taken into account to coordinate the continuation of these measures until decommissioning does occur or a new deployment commences using that infrastructure.

7.12 It is the responsibility of the responsible person to ensure that all health and safety requirements are met.

### **Sea-bed clearance**

7.13 Following decommissioning, it will be important for the responsible person to confirm that, where full removal of installed infrastructure has been stipulated, the site has been cleared, in accordance with the approved decommissioning programme, and to provide evidence that this has been achieved (see paragraphs 7.20 to 7.22).

7.14 The area covered for debris clearance will be decided on a case-by-case basis, taking account of the guidance for oil and gas installations which specifies a 500 metre radius around any installation as the minimum area to be covered for debris clearance. (It is recognised, though, that the nature and size of OREIs differs from that of oil and gas installations).

7.15 The Scottish Ministers would expect to see independent, third party involvement in providing evidence that the site has been cleared. Decommissioning programmes should set out the responsible person's proposals for achieving this. There are various forms of evidence which may be presented, examples might include over-trawling of the site or the presence of an independent observer during site clearance operations.

### **On-land management of waste**

7.16 Waste from decommissioning should be managed in line with the waste hierarchy. This gives preference to reuse, then recycling and then recovery (e.g. incineration with energy recovery) with disposal (e.g. landfill) the least preferable waste management option. The Scottish Ministers do 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.

### **Post-decommissioning survey / report**

7.17 Typically responsible persons will be required to undertake a survey following decommissioning to enable identification and subsequent recovery of any debris located on the sea-bed which may have arisen from the responsible person's activities and which may pose a risk to navigation, other users of the sea or the marine environment.



7.18 A post decommissioning report is required in the decommissioning programme and must be submitted within the agreed timescale, following completion of decommissioning works. This must be in the format proposed in the approved decommissioning programme. The report must 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
- if infrastructure is left in situ, evidence that it has been cut off / buried / otherwise treated in accordance with the decommissioning programme and references to any future monitoring, maintenance and mitigation set out in the decommissioning programme
- references to compliance with permitting (such as marine licence) obligations
- a comparative analysis of predicted and actual costs.

7.19 The Scottish Ministers will review the post-decommissioning report and decide whether to accept it as evidence that the decommissioning has been carried out in accordance with the decommissioning programme.

### **Post-decommissioning, monitoring, maintenance and management of site**

7.20 In situations where any part of an installation is not removed entirely, long term monitoring will be required. The objective of the monitoring is to identify any new or increased risks to navigation or other users of the sea which may be posed by remaining materials (for example, where cables or foundations may have become exposed due to natural sediment dynamics). Appropriate action should be taken to mitigate the risks.

7.21 If necessary, the monitoring regime may be adapted over time where agreed to by the Scottish Ministers.

7.22 The Scottish Ministers will agree with the responsible person when the monitoring programme may cease, taking account of any risks to navigation or other users of the sea which may be posed by remaining materials. Requirements would always be considered on a case-by-case basis, taking account of the specific risks posed in each case. Whether there was a need for further monitoring would be considered in the light of the results of these surveys. Monitoring arrangements for wave and tidal demonstrator projects are normally expected to be limited, or not required at all if full removal is involved and any post-decommissioning survey shows this has been achieved. Monitoring reports should be submitted to the Scottish Ministers, together with proposals for any maintenance or remedial work that may be required. The reports should also be published by appropriate means.

## **8. Cost estimates**

8.1 Decommissioning programmes must set out a comprehensive breakdown of cost by category. The standard format for this is set out in [Annex C](#).

8.2 The programme must set out 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).

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

8.4 The responsible person should ensure that they take account of the most up to date evidence in framing their estimates for the costs of decommissioning their devices.

8.5 The estimated decommissioning costs will inform the financial security levels that are required to be made available to the Scottish Ministers. The purpose of the financial security is to enable the Scottish Ministers 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 the Scottish Ministers to organise and fund decommissioning. This may not necessarily be the same cost that the responsible person 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 the Scottish Ministers.

8.6 The following sections provide advice on how to calculate / set out costs:

### **Optimism Bias**

8.7 HM Treasury Green Book guidance should be utilised in the calculation of optimism bias. Optimism bias should be applied to the full cost of security, including exchange rate and inflation rate costs. Varying optimism bias rates can be applied to the different elements of decommissioning, based on the extent to which contributory factors are mitigated.

### **Contingency**

8.8 All decommissioning programmes should include a contingency sum to account for increased costs that arise from unforeseen circumstances. Calculation of contingency should be done in line with the Treasury Green Book<sup>11</sup>.

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<sup>11</sup> [HM Treasury Guidance: The Green Book \(2022\)](#)

## Re-use of Infrastructure

8.9 The Scottish Ministers would not be able to re-use infrastructure in the event that decommissioning fell to them, and to date it has not been common practice to re-use infrastructure after a project ends. Therefore, 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. 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 the Scottish Ministers under Section 108 of the Energy Act to revise the decommissioning programme and financial security levels to reflect this. Where the project is being sold, please refer to paragraphs 5.27 to 5.30, which sets out when the Scottish Ministers would confirm that the original owner no longer has a role under the Energy Act.

## Vessels and lifting equipment

8.10 Cost assumptions must 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, the responsible person can write to the Scottish Ministers under Section 108 of the Energy Act proposing a review of the costs as and when changes in technology have reached the stage of commercial viability.

## Value Added Tax

8.11 Unlike the responsible person, the Scottish Ministers have no ability to recover Value Added Tax (“VAT”) should it fall to them to decommission. Therefore, to allow for the possibility of the Scottish Ministers having to decommission infrastructure in internal waters and/or the territorial sea, VAT will have to be factored into financial securities where the VAT regime applies.

8.12 The VAT regime only applies within territorial waters (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
- 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
- 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 must 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

8.13 Any changes to VAT rates or their application to decommissioning activities must be identified in decommissioning programme reviews throughout the life of the project.

## **Inflation**

8.14 The responsible person should ensure that inflation across the lifetime of the project is included within the security. The rate at which inflation should be assessed is the Office of Budget Responsibility's ("OBR") forecast for inflation as measured by the Consumer Price Index ("CPI"). This should be done in several stages:

- a) the cost of decommissioning should be calculated in the present day value.
- b) when submitting the pre-construction decommissioning programme, the responsible person should forecast inflation up to the expected point of decommissioning, using the CPI inflation rate.
- c) if the current OBR forecast does not go up to the expected point of decommissioning then an average inflation figure should be assumed for the years not yet covered by OBR forecasts. The average inflation rate should be calculated via the average over the years published by the OBR (starting from the current financial year). Developers will be able to seek guidance from the Scottish Government when preparing costings.
- d) after the end of any subsidy period, the responsible person should continue to review on an annual basis whether estimated decommissioning costs have changed. This may require modifications to the level of securities provided so that the total decommissioning fund matches the revised costs.

## **Scrappage**

8.15 The responsible person cannot offset scrappage value from their total cost assumptions, as the Scottish Ministers do not own it. The Scottish Ministers do not consider that it is possible to rely on estimates of scrap value as a form of security because the value can fluctuate substantially and therefore is not reliable. Whilst the Scottish Ministers understand that the responsible person may wish to rely on an assumption of scrappage reducing net commissioning costs for their internal rate of return calculations, this is a private matter for the company and not a relevant consideration in respect of decommissioning costs that might fall to the Scottish Ministers.

## **OFTOs**

8.16 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.

## **Independent audit**

8.17 Independent audit of estimated decommissioning costs (and of the financial security proposed or available to meet them) may be required, either directly of the responsible person or by the Scottish Ministers appointing independent third party experts. The need for, timing and frequency of such audits will be determined on the matters presented in individual cases.

## **9. Financial security**

### **Overall approach**

9.1 The Scottish Ministers want to make sure that the responsible person has taken account of their decommissioning liabilities at the beginning of their projects and made adequate provision to ensure that sufficient funds will be available to meet their liabilities. The Scottish Ministers general approach is that the business responsible for the installation is best placed to manage and mitigate the costs and risks associated with decommissioning. The responsible person should take account of decommissioning obligations from the outset of the project, from the concept and design stage through to the contractual arrangements and warranties associated with construction and operation.

9.2 The Scottish Ministers also wish to seek to reduce, to an acceptable level, the risk of liabilities falling to the public purse in the event of default by the responsible person by requiring, and ensuring that appropriate securities are put in place. Certain securities will require approval by the Finance and Constitution Committee of the Scottish Parliament, which will take account of the particulars of the ask and the associated risk analysis.

### **Risk to the Scottish Ministers**

9.3 Where a responsible person fails to carry out the decommissioning programme, it may fall to the Scottish Ministers as funder of last resort to decommission and (where necessary) to meet any outstanding costs of decommissioning. Taxpayer intervention will be in exceptional cases only and the Scottish Ministers 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 the Scottish Ministers and the taxpayer.

9.4 To mitigate against the risk to tax payers, the responsible person is required to:

- include details in their decommissioning programme of how they intend to finance their proposed approach to decommissioning; and
- put in place acceptable security arrangements to protect the taxpayer against the possibility of having to pay for decommissioning in the event the responsible person defaults on their obligations.

9.5 This guidance is not intended to be prescriptive as to how a responsible person reserves for or pays for the cost of decommissioning unless reserving is proposed as a form of security. There are many different ways for a company to make sure that the money is made available at the appropriate time. The preferred approach of the responsible person should be clearly set out in the decommissioning programme for review by the Scottish Ministers. This will provide reassurance to the taxpayer that the industry is financially well prepared to carry out the decommissioning programme at the end of its operational life, and that the funds will be available should the Scottish Ministers ultimately need to decommission.

9.6 For any security to be acceptable, appropriate arrangements must be in place to assure the Scottish Ministers that such funds will be available to the Scottish Government if needed. This may be through a financial agreement which ring fences funds, a trust arrangement or other mechanism depending on the type of security. The Scottish Ministers will not be able to accept securities, if there is not confirmation at the outset that funds will remain protected in the event of insolvency. If security is in the form of cash (upfront or accrual) once the cash has been put aside for securities, the responsible person needs to reflect the payment 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.

### **Financial security guiding principles**

9.7 Under the Energy 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 the Scottish Ministers have established the following principles to provide a policy framework against which financial security decisions can be taken:

- a) the responsible person is expected to meet the costs of decommissioning and be responsible for the liabilities they have created (the "polluter pays" principle).
- b) the Scottish Ministers have a duty to ensure that the taxpayer is not exposed to an unacceptable risk of default in meeting costs associated with decommissioning.
- c) the Scottish Ministers will expect to see evidence that the financial securities are in place and that effective and transparent arrangements are in place to ensure that decommissioning programmes are carried out.
- d) if decommissioning obligations are not met, the Scottish Ministers will consider the viability of recovering expenditure incurred in carrying out a decommissioning programme (see [Annex A](#) on Energy Act powers).

### **Examples of acceptable security**

9.8 There may be a number of acceptable forms of security. 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 and the financial strength of those responsible for decommissioning. The timing of security arrangements will be dependent on similar factors including revenue certainty over time and acceptable subsidy period. The undernoted securities would generally be satisfactory, however each programme will be assessed on the matters presented in individual cases.

#### **i) Upfront cash deposit**

9.9 In the case of pre-commercial projects where the risks to the taxpayer are the greatest, upfront cash security paid into an escrow account or direct to a Scottish Government account, only accessible by the Scottish Government prior to commencement of construction, is likely to be the most acceptable form of security.



## ii) Cash accrual

9.10 In the case of more established technologies, cash security paid into an escrow account only accessible by the Scottish Government is likely to be acceptable. The securities would have to be fully accrued by the end of any support mechanism subsidy period, or equivalent guaranteed income stream, subsidy period with actual amounts set aside agreed following the Scottish Ministers review of the responsible person's financial model.

9.11 Cash would need to be held in an account where deductions could not be made without the prior approval of the Scottish Ministers, or officials on their behalf (the Scottish Ministers cannot pay interest on funds held).

9.12 Where the owner of a project has provided cash (either upfront, or through accrual) as security to the Scottish Ministers, the withdrawal of funds to pay for the costs of decommissioning will be on the production of evidence that the funds are being used for decommissioning costs, and on the basis of satisfactory evidence that the remaining cash balance covers the residual cost of the (e.g. provision of invoices / signed contracts for decommissioning). The Scottish Ministers 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.

## iii) Irrevocable draw down letters of credit / bank guarantees / performance bonds

9.13 A standby letter of credit, bank guarantee or a performance bond are all broadly similar instruments, and it is the substance rather than the precise form which is relevant. These should be fully accrued by the end of the subsidy period, with actual amounts set aside agreed following the Scottish Ministers review of the financial model. The letter of credit / performance bond must be renewed annually. A number of circumstances, including for example the operator not fulfilling its liability to annually renew or the bank's rating falling below a given level, will give the Scottish Ministers the right to draw on the letter of credit / performance bond and put the guarantee amount in the bank as security for future possible liability for decommissioning.

9.14 If the letter of credit or surety bond cannot be renewed, then the Scottish Ministers will draw down all sums and hold this as a cash security against decommissioning costs.

9.15 The key features expected of any proposed security include:

- a) the beneficiary of the proposed security must be the Scottish Ministers.
- 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 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 upon demand of the Scottish Ministers.
- 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 the Scottish Ministers as appropriate in the circumstances.

9.16 As further guidance the Scottish Ministers would also generally expect (i) payment of any demand to be made within no more than five business days (ii) the form of demand notice to be provided (iii) partial and multiple demands to be allowed (iv) the expiry date and renewal provisions to be clear (v) the security amount to be denominated in GBP (vi) the security proposed is subject to the latest relevant rules<sup>12</sup>; (vii) security to be governed by and construed in accordance with the law of Scotland; (viii) the parties submit to the exclusive jurisdiction of the courts of Scotland in respect of any dispute without recourse to arbitration.

### **Term and renewal**

9.17 In order to ensure continuous renewal of the security with no lapse, each security shall be required to be extended or replaced at least one month in advance of its expiration date.

9.18 Decommissioning obligations need to be discharged before the expiry date set out in the marine licence. Therefore there is a synergy between the licence, the decommissioning programme and the security provision. It is the responsible person's responsibility to ensure that these instruments are aligned.

9.19 As set out in [Chapter 7](#), the owner should submit a post-decommissioning report within a timescale agreed with the Scottish Ministers, following completion of decommissioning works. The Scottish Ministers will then review the report and decide whether to accept it as evidence that decommissioning has been carried out in accordance with the decommissioning programme. Security must remain in place until the Scottish Ministers confirm that the decommissioning programme is accepted as being complete.

### **Timing of securities**

9.20 Securities will generally be expected to be paid up front of the commencement of construction for pre-commercial and short-term projects. Short-term projects would include parts of longer term projects which will only be constructed for a limited period of time.

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<sup>12</sup> The Uniform Customs and Practice for Documentary Credits ("UCP") is a set of rules on the issuance and use of letters of credit. A Bank Guarantee I considered a "Demand Guarantee" and as such is governed by the International Chamber of Commerce ("ICC") Uniform Rules for Demand Guarantees ("URDG").



9.21 For large scale commercial deployments that receive a predictable revenue stream (such as from a Contract for Difference (“CfD”) or OFTO fixed term revenue stream) and involve a proven technology with low operating risk, a secure, segregated decommissioning fund that accrues by the end of the subsidy period is acceptable. The earlier payments are made and completed, the better the Scottish Government is insulated from risk, since reserving would occur when there is a guaranteed revenue stream. A decommissioning programme which accrues late into the operating life of the installation will not be acceptable.

9.22 The Scottish Ministers will consider the timing of securities on the matters presented in individual cases, taking into account the guiding principles set out in paragraph 9.7 above, and the risk profile of the individual project. Whilst the following should not be taken as a definitive list, considerations will include:

- whether there is 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
- the financial strength of the company and its linked parent / group (the Scottish Ministers may require financial information to be submitted to help inform their considerations)
- whether there is evidence to suggest that technology has a proven track record of operating reliably on a commercial, post-testing basis; and
- whether the project has the necessary lease, consent and/or licence in place covering the full time period up to the proposed decommissioning date

9.23 Each project will be considered according to its individual circumstances, but if the above criteria are not met, it is unlikely that a segregated decommissioning fund that accrues during the middle of the life of a relevant object (“mid-life accrual”) will be acceptable to the Scottish Ministers. Where these criteria are not met, there is more likely to be a requirement for payment upfront of installation, or no later than three months from the approval of the decommissioning programme.

9.24 The table below summarises when a mid-life accrual of securities, if considered acceptable, should commence based on the revenue support a particular offshore renewable project might receive:

Subsidy Support Mechanism	
Renewable Obligation:	For projects with a <b>‘renewables obligation certificate’</b> , mid-life accruals should start no later than year 10 and be completed by year 20.
CfD:	For projects with a 15 year <b>‘CfD’</b> , mid-life accruals should start no later than year 10 and be completed by year 15.
OFTO Revenue:	For <b>OFTO projects</b> with a 20 year licence ‘mid-life’ accruals should start no later than year 10 of the licence and be completed by year 20.

9.25 Security covering the entire cost of decommissioning the relevant objects (“full security”) must be maintained from the end of any subsidy period until after the Scottish Ministers have reviewed the post decommissioning report and confirmed that the programme is accepted as being complete. 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).

### **Draw-down on securities for decommissioning**

9.26 Where the owner of a project has provided cash as security with the Scottish Ministers, 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). As stated above, the Scottish Ministers may hold back funds pending a successful post-decommissioning report (in case further works are required) according to the risks of each project.

### **Examples of unacceptable security**

9.27 The following would normally be unacceptable:

**i) Parent Company Guarantees (“PCGs”)**

9.28 PCGs are not normally accepted as a primary source of security. However, they may be required as a secondary form of security to provide Scottish Ministers with additional reassurance that the taxpayer is being suitably protected.

**ii) Insurance schemes**

9.29 In general, insurance will not be an acceptable security for decommissioning liabilities.

## Summary of Energy Act 2004 decommissioning provisions

### Note

1. This summary is intended to provide a helpful description of the key decommissioning provisions in the Energy Act 2004 (as amended) (the “Energy Act”), as they apply to installations in Scottish territorial waters or in the Scottish REZ. It should not be relied upon to be a comprehensive description of the legislation and the responsible person should seek their own legal advice.

### Introduction

2. The Energy Act provides 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 a REZ (including that part adjacent to Northern Ireland territorial waters) and gives the ‘appropriate minister’ certain functions regarding decommissioning. The Scottish Ministers are the ‘appropriate minister’ for the purposes of Part 2, Chapter 3 in relation to renewable energy installations and electric lines which are located in an area of Scottish waters or an area of waters in a Scottish part of a REZ. The Scottish Ministers and the Secretary of State may also agree that the Scottish Ministers are the ‘appropriate minister’ for all of a renewable energy installation that is in Scotland and England. As the ‘appropriate minister’, the Scottish Ministers have powers under the Energy Act with regard to the decommissioning of those OREIs. This summary will focus purely on those powers.

### Requirement to prepare decommissioning programmes (Section 105)

3. Section 105 of the Energy Act enables the Scottish Ministers to require, by notice, where a person who is proposing to construct, extend, operate or use an OREI (or is already doing so) (the “responsible person”) to submit a decommissioning programme for the installation.

4. Section 105(8) of the Energy Act requires that a decommissioning programme must:

- a) set out measures to be taken for decommissioning the relevant object;
- b) contain an estimate of the expenditure likely to be incurred in carrying out those measures;
- c) make provision for determination of the times at which, or the periods within which, those measures will have to be taken;
- d) if it proposes that the relevant object will be wholly or partly removed from a place in waters regulated under this chapter, include provision about restoring the place to the condition that it was in prior to the construction of the relevant object; and
- e) if it proposes that the relevant object will be left in position at a place in water regulated under this chapter or will not be wholly removed from a place in

such waters, include provision about whatever continuing monitoring and maintenance of the object will be necessary.

### **Information supplemental to Section 105 notices**

5. This section details the circumstances in which the Scottish Ministers can issue a Section 105 notice to an associate company. This can only be done (where the Scottish Ministers have already served a notice on a person listed in Section 105(2)(a) and if, having done so, the Scottish Ministers are 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 relevant object to comply with a notice served under Section 105(2), or, the Scottish Ministers have rejected a programme submitted by such a person pursuant to such a notice.

6. 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 of the Energy Act.

### **Approval of decommissioning programmes (Section 106); failure to submit or rejection of decommissioning programmes (Section 107)**

7. The Scottish Ministers may:

- approve the programme as it is (s.106(1));
- approve the programme with modifications and/or subject to conditions (s.106(3));
- reject the programme (s.106(1));
- reject the programme (s.106(1)) and require a new one (s.106(6)(b)); or
- reject the programme (s.106(1)) and prepare one themselves (s.107(1)) and recover the expenditure incurred from the person concerned (s.107(9)).

8. The Scottish Ministers may approve a programme subject to conditions, including, in particular, a condition that the person who submitted the programme (a) provides such security in relation to the carrying out of the programme, and for their compliance with the conditions (if any) of its approval, as may be specified by the Scottish Ministers; and (b) provides that security at such time, and in accordance with such requirements, as may be specified by the Scottish Ministers (s,106(4)).

9. The Scottish Ministers must act without unreasonable delay in reaching a decision as to whether to approve or reject a programme (s.106(8)).

10. If there is a failure to comply with a Section 105 notice, the Scottish Ministers may prepare a programme and impose it on the person concerned (s.107(1)). That programme is then treated as if it had been submitted and approved in the usual way (s.107(3)(b)) and can require the provision of financial security (s.107(4)(a)). The Scottish Ministers may also recover any expenditure incurred in preparing the programme (s.107 (9)), together with any applicable interest, from the person concerned (s.107(9) and (10)).

### **Reviews and revisions of decommissioning programmes (Section 108)**

11. The Scottish Ministers must, from time to time, conduct such reviews of a decommissioning programme as they consider appropriate (s.108(1)). Either the Scottish Ministers or the person who submitted the programme may propose modifications to it, including modifications to any conditions attached to the programme (s.108(2)). The decision to revise a decommissioning programme is made by the Scottish Ministers after considering any representations made to them by the recipient(s) of a s.108 notice.

12. Either the Scottish Ministers or the person who submitted the programme may propose to relieve a person of their duty to carry out the decommissioning programme or to impose that duty upon a new person (either in addition to or in substitution for another person, including in relation to a body corporate associated with a responsible person) (s.108(3)). The decision is made by the Scottish Ministers, after considering any representations. When the duty is imposed upon a new person, that person may be required to provide security (s.108(10)(a)).

### **Carrying out of decommissioning programmes (Section 109); default in carrying out decommissioning programmes (Section 110)**

13. 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 (s.109(1)). 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 Scottish Ministers (s.109(2)).

14. The Scottish Ministers may, by notice, require remedial action if the programme is not carried out in any particular respect (s.110(1)) and set a date by which the remedial action must be undertaken (s.110(2)). If this is not done, the Scottish Ministers may secure the remedial action and recover the expenditure (s.110(5)), including any interest, incurred from the person concerned (s.110(6)).

### **Security for decommissioning obligations (Sections 110A and 110B)**

15. 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. It caters for the scenario of a person responsible for decommissioning a relevant object ending up insolvent, helping to ensure that 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.

16. 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).

17. Under Section 110B the Scottish Ministers 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). Section 110B(3) enables the Scottish Ministers, or a creditor of the person responsible for a decommissioning programme, to apply for a court to ensure compliance with a direction 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.

### **Regulations about decommissioning (Section 111)**

18. The Scottish Ministers may make regulations relating to decommissioning of OREs in Scottish waters or Scottish parts of the REZ (s.111(1)). Regulations may include, in particular:

- a) provision prescribing standards in respect of decommissioning;
- b) provision prescribing standards and safety requirements in respect of anything left in place where a relevant object is not wholly removed;
- c) provision about the security that a person may be required to provide under this chapter;
- d) provision for the prevention of pollution;
- e) provision for inspections, including provision as to the payment of the costs of inspections.

### **Duty to inform the Scottish Ministers (Section 112)**

19. When a person becomes responsible for a relevant object they must notify the Scottish Ministers (s.112(1)). This would happen when, for example, a person makes a proposal to construct, extend, operate or use a relevant object, (or becomes party to such a proposal), or begins to construct, extend, operate, use or decommission a relevant object. (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, licences or approvals has been given or applied for.



## **Power of the Scottish Ministers to require information and documents (Section 112A)**

20. The Scottish Ministers can require persons who are, or may in future be, subject to decommissioning obligations to provide relevant information or documents to assist the Scottish Ministers in exercising their functions under Chapter 3 of Part 2 of the Energy Act (decommissioning of OREs). These functions include making a judgement on the sustainability and financial viability of the proposals contained in a decommissioning programme, for example financial projections, banking models and electricity generation forecasts.

21. Under Section 112A(2), the Scottish Ministers can require “relevant” information or documents to be provided by the person on whom notice to submit a decommissioning programme has been served under Section 105(2)(a) of the Energy Act (those with principal responsibility for the relevant object, such as the developer), a body corporate associated with such person, or a person who has been made subject to the duty under Section 109(1) of the Energy Act to carry out a decommissioning programme and comply with all conditions.

22. Under Section 112A(3), information or a document is “relevant” if it relates to:

- the place where the relevant object is or will be situated
- the relevant object itself
- where the recipient of a notice to submit a decommissioning programme is an associated corporate entity, details of that associated corporate entity
- the financial affairs of the person receiving the notice to submit a decommissioning programme and, where the recipient of a notice to submit a decommissioning programme is an associated corporate entity, the financial affairs of that associated corporate entity
- the proposed security in relation to the carrying out of the decommissioning programme or for the recipient's compliance with any conditions of the programme's approval
- where the recipient of a notice to submit a decommissioning programme is an associated corporate entity, the name or address of any person whom the recipient of the notice believes to be an associated body corporate

23. Section 112A(4) allows the Scottish Ministers to require the provision of additional information or documents which the Scottish Ministers consider are necessary or expedient for the purpose of exercising their functions under Sections 107(1) or (4) of the Energy Act. Those provisions allow the Scottish Ministers to prepare their own decommissioning programme where one has not been submitted or has been rejected, and to require the responsible person to provide security in relation to the carrying out of the programme.

24. Under Section 112A(5), 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 (s.112A(6)).

25. Section 112A(9) makes it an offence to disclose information obtained by virtue of a notice issued under Section 112A of the Energy Act, unless the disclosure is:

- made with the consent of the person who provided the information; or
- for the purpose of the Scottish Ministers exercising their functions under Chapter 3 of the Energy Act, the Electricity Act 1989; or
- required by or under another piece of legislation

### **Offences relating to decommissioning programmes (Section 113)**

26. A person guilty of an offence is liable: on summary 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.

### **Use of Energy Act 2004 enforcement powers**

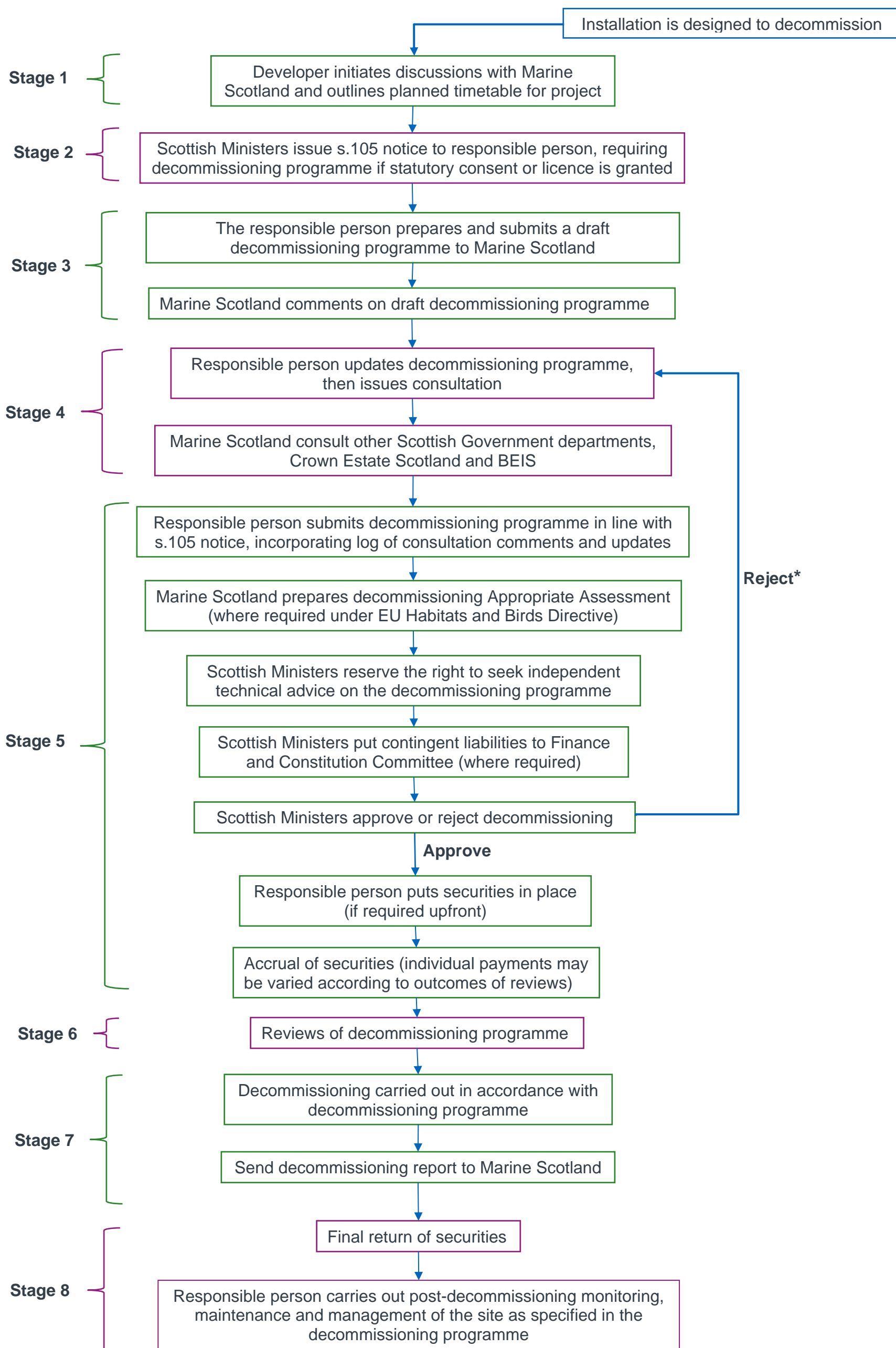
27. The Scottish Ministers expect that the final draft of a decommissioning programme should be submitted no later than six months prior to construction, and that deadlines given by the Scottish Ministers will be met. Where it is likely that this deadline will be missed the Scottish Ministers may consider using powers under the Energy Act to gather information to impose their own decommissioning programme.

28. The responsible person is strongly encouraged to speak to the Scottish Ministers informally at an early stage, so that the draft decommissioning programme can be submitted in accordance with the timetable set out in the Section 105 notice.

29. The Scottish Ministers expect to implement a strict approach to the timely payment of expected securities. Where expected payments are missed, a 'Section 110 notice' would be sent within several weeks re-affirming the requirements 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 two years imprisonment.



Flowchart of decommissioning programme process



\* (and if the Scottish Ministers do not opt to prepare their own decommissioning programme)

**Decommissioning programme template**

Version Number: 1

Date issued:

# Decommissioning Programme Template

For Offshore Renewable Energy  
Installations

### **Document control**

Insert tables of document revisions as per example below:

#### **Approvals**

	<b>Name</b>	<b>Signature</b>	<b>Date</b>
Prepared by			
Reviewed by			
Approved by			

#### **Revision Control**

<b>Revision No</b>	<b>Reference</b>	<b>Changes</b>	<b>Issue Date</b>
0	First draft		
1	...		
2	...		
...	Final Version		

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### Figures and tables

Include a table or list of Figures and Tables used in the document.

### Terms and abbreviations

Include a table of the terms and abbreviations used in the document (examples in [blue below](#)).

Term / Abbreviation	Explanation
<a href="#">CfD</a>	<a href="#">Contract for Difference</a>
<a href="#">EIA Report</a>	<a href="#">Environmental Impact Assessment Report</a>

Delete **options and brackets** where appropriate. Remove red help text throughout document and replace [blue example](#) text with actual content.

## 1. Executive summary

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

This document has been prepared by <insert name of company> and contains the decommissioning programme(s) for <insert overview of what the decommissioning programme covers>.

This decommissioning programme is being submitted for approval in accordance with the requirements of the Energy Act 2004.

In conjunction with public, stakeholder and regulatory consultation, the decommissioning programme(s) is submitted in compliance with national and international regulations and Scottish Government guidelines. The schedule outlined in this document is for a <insert number> year decommissioning project programme due to begin in <insert date that decommissioning is currently envisaged to begin>.

## 2. Introduction

A brief introduction should be included in the initial programme and updated when the programme is reviewed. The introduction should state the companies that are party to the programme and describe their ownership status.

## 3. Background information

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

- the layout of the infrastructure 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 conditions, sea states, currents, sea-bed conditions, water depths relevant to consideration of the proposed decommissioning programme
- any fishing, shipping and other activity in the area
- the names and locations of an Special Areas of Conservation (“SAC”) or candidate SAC (under the Habitats Directive) and/or Special Protection Areas (“SPA”) or proposed SPA (under the Birds Directive) that may be affected by the decommissioning programme
- any other background information relevant to consideration of the draft decommissioning programme

The <insert development name> wind farm / tidal array / wave device is located at <location>. It was <granted consent under Section 36 of the Electricity Act 1989 / a marine licence in> <month & year>. The development was installed in and was commissioned in <insert dates>. Production of electricity is due to cease in <year>.

<Development name> is a <insert number of devices and maximum capacity or a description of the development> situated in <insert m> water depth. Electricity was exported from the development to <insert location>. <Add a description of any other features of the development>

Following public, stakeholder and regulatory consultation, the decommissioning programme is submitted in full compliance with the Scottish Ministers' guidelines. The decommissioning programme explains the principles of the removal activities and is supported by an environmental impact assessment (and information to inform a habitats regulations appraisal, if required).

#### 4. Description of items to be decommissioned

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 / test 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 masts
- materials which may have been placed on the sea-bed, for example for scour protection, including rock, grout bags, sandbags and mattresses

Table 4.1: Renewable Energy Installations and Stabilisation Features

Installations* including Stabilisation Features	Number	Size / Weight (Te)	Location(s)**	Comments / Status***
<Wind / wave / tidal> Turbine(s)	<X>	<X> Tonnes each		<e.g. All turbines are currently operational but will be... The turbines are attached to X with X>
Meteorological Masts				
Foundation(s) - <type – e.g. Jacket, pin pile, gravity base etc.>	<X>			<structure is piled to seabed by X steel piles>
<Mooring lines and Anchors>	<X>			



Installations* including Stabilisation Features	Number	Size / Weight (Te)	Location(s)**	Comments / Status***
Concrete mattresses	<X>	<X> Tonnes each		
Rock				
Grout bags				
Sandbags				

\* turbines / foundations etc.

\*\* location to be given in WGS84 decimal of a minute (3 decimal places) format

\*\*\* indicate in comments / status the known status of the installation / object, e.g. are turbines operational or non-operational, how are foundations attached to sea bed, etc.

b) Related lines

- <List and describe all Electric lines / cables, including inter-turbine cables, inter-substation cables and export cables>

Table 4.2 Subsea Cables

Description	Cable Number (as per X)	Diameter (inches)	Length (km)	Description of Component Parts	From – To End Points	Burial Status	Cable Status
Inter-array cable						Trenched with 7 m section exposed	Operational
Export cable						Surface laid	Operational

Description	Cable Number (as per X)	Diameter (inches)	Length (km)	Description of Component Parts	From – To End Points	Burial Status	Cable Status
Inter-substation cable						Trenched and buried	Operational

Table 4.3: Subsea cable stabilisation features

Stabilisation Feature	Total Number	Weight (Te)	Location(s)	Exposed / Buried / Condition
Concrete mattresses	5	6 tonnes each		buried
Concrete mattresses	20	10 x 6 tonnes 10 x 8 tonnes		
Grout bags				
Formwork				
Froned Mats				
Rock Dump				
Other (describe briefly)				

## 5. Description of proposed decommissioning measures

This section should set out the proposed measures to be taken for decommissioning the installation. The programme should be sufficiently detailed, from the outset, to demonstrate that the decommissioning has been fully considered and factored into design decisions and that a valuable decommissioning strategy has been developed. The methods of decommissioning should be in line with the best possible methods available at the time of drafting and there should be an assumption that objects will be removed. This section should cover:

- **Any planned phasing integration**

Consideration may be given to the potential for beneficial phasing / integration of decommissioning activity between operators in order to realise any economies of scale that may be possible.

- **Proposed method of removal**

You must be able to demonstrate how you have taken on board and are in line with:

- policy considerations
- Environmental impact assessment requirements
- 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, other recovery (e.g. 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**

Decommissioning programmes should start from the presumption of total removal. Where, in exceptional circumstances, non-removal or partial removal of items is proposed, the programme must state 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](#) (Decommissioning Methods) of this guidance**

## 6. Environmental impact assessment

Early iterations of this section should be informed by the EIA report submitted with the original application for consent / marine licence and should be proportionate to the activities proposed. However, this will require to be updated nearer the actual time of decommissioning as appropriate.

Mitigation measures should also be outlined here.

### Environmental sensitivities (summary)

Table 6.1 Environmental sensitivities

Environmental Receptor	Main Features
Ecosystem impacts	
Seabed	
Fish	
Fisheries	
Marine mammals	
Birds	
Other users of the sea (risks to human health, cultural heritage, accidents and disasters)?	
Atmosphere	
<add additional rows for site specific issues>	

## 7. Consultations and interested parties

The decommissioning programme should describe the consultation process employed. It should provide a summary table (as per that set out below) of the consultations undertaken with interested parties (the Scottish Ministers would recommend using the same or equivalent consultees used for the marine licence application, some example consultees are listed below in blue) and explain the extent to which their views have been taken into account in the programme or influenced the decision making process (in the action taken column). Relevant correspondence (including copies of the public notice and correspondence from consultees) should be annexed to the programme.

Table 7.1 summary of stakeholder comments

Who	Comment	Action taken
Scottish Fishermen's Federation		
NatureScot		
SEPA		
Historic Environment Scotland		
The Maritime and Coastguard Agency		
The Northern Lighthouse Board		
Public		
Scottish Government departments		
Crown Estate Scotland		
The Secretary of State*		

\* where Section 105 (1C) applies

## 8. Costs

The responsible person will be expected to provide a confidential annex setting out the following:

- the Scottish Ministers will require financial models as approved via the developer / operators' governance structure, including payments of debt financing / financing structure prior to construction commencing, in order to assess financial security requirements
- 3 years of accounts for all operators involved in the OREI, including Parent Companies;
- the business plan for the project
- full funding model, detailing when the senior lenders will be paid back;
- a cash flow for the life of the project
- a robust 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

The responsible person must complete the tables below when submitting decommissioning programmes. If decommissioning is assumed to be taking place over multiple years, costs should be set out per individual year.

Work Package	Year 20X6 £'000	Year 20X7 £'000	Description of work to be undertaken (including for example vessel day rates, number of turbines etc)
Preparation of Assets			
Removal of generators			
Removal of Foundations			
Removal of offshore substations			
Decommissioning of cables			
Seabed clearance and restoration			
Recycling and Waste Management <sup>13</sup>			
Monitoring			
Other			
VAT*			
Exchange Rate Fluctuation**			
Inflation***			
Optimism Bias****			
Contingency*****			

<sup>13</sup> This should include the costs of dealing with marine growth on structures / equipment.

Work Package	Year 20X6 £'000	Year 20X7 £'000	Description of work to be undertaken (including for example vessel day rates, number of turbines etc)
Total Security per year			
Total Overall Security Fund			

Costs should be reviewed in line with decommissioning review timelines and altered as required. This includes any changes to the VAT rate, exchange rate and inflation.

The responsible person should not offset scrappage value from their total cost assumptions.

#### \*VAT

Unlike the responsible person, the Scottish Government has no exemption from VAT should it fall to them to decommission. Therefore, to allow for the possibility of the Scottish Government having to decommission infrastructure in internal waters and/or the territorial sea, VAT will have to be factored into financial securities.

The VAT regime only applies within territorial waters (i.e. up to 12 nautical miles from the shore baseline). Projects primarily located outside of territorial waters will therefore need to set out how they have calculated VAT for a limited proportion of their decommissioning costs (for example removal of cables within territorial waters, and any on-land recycling or disposal costs).

Costs	£'000	Description of costs
Costs within territorial waters		
VAT (20%) Cost		
Costs outwith territorial waters		

#### \*\* Exchange rate fluctuations

For any decommissioning works to be undertaken outwith the sterling area / paid for in non-sterling currency, exchange rate hedging should be applied. Guidance is included within HM Treasury's 'Managing Public Money'.

Steps taken to manage exchange rate fluctuations	Text here
--	-----------

#### \*\*\* Inflation calculator

The responsible person should ensure that inflation over the lifetime of the project is included within the security. The rate at which inflation should be assessed is the OBR forecast for inflation as measured by the CPI.



Inflation should be forecast until the proposed date for decommissioning. If the current OBR forecast does not go up to the end of the subsidy period then an average inflation figure should be assumed for the years not yet covered by OBR forecasts.

Inflation should be charged against the total cost of decommissioning (excluding optimism bias and contingency).

Year	20XX	20X1	20X2	20X3	20X4	20X5	20X6	20X7	Total
Inflation Rate (%)									
Inflation Uplift Per Annum (%)									
Total costs to apply to inflation (£'000)									
Inflation cost (£'000)									

**\*\*\*\*Optimism bias**

HM Treasury 'Green Book' guidance<sup>11</sup> should be utilised in the calculation of optimism bias. Optimism bias should be applied to the full cost of security, including exchange rate and inflation rate costs. Varying optimism bias rates can be applied to the different elements of decommissioning, based on the extent to which contributory factors are mitigated.

Work package	Work package cost (£'000)	Optimism bias rate applied (%)	Optimism bias cost £'000	Reason for rate used including mitigation factors

**\*\*\*\*\*Contingency**

Contingency percentage applied should reflect the sum of measured risk. The assumptions made in determining the contingency percentage should be included in the reasons for the contingency rate applied.

Contingency applied	Reason for rate used
X%	

It is recognised that there will be concerns about including commercially sensitive cost and securities data in a decommissioning programme, and placing such data in the public

domain. Therefore it is proposed that this section (8) and section 9 on securities are provided as a confidential annex to the Scottish Government only.

## **9. Financial security**

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 cost estimates set out in [Chapter 8](#).

## **10. Schedule**

Details of the proposed decommissioning time scale should be provided, including a schedule (preferably in Gantt chart form) showing the dates at which the various stages of the decommissioning are expected to start and finish. Final details of the 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.

## **11. Project management and verification**

The programme should provide information on how the Operator will manage the implementation of the decommissioning programme and provide verification to the Scottish Ministers 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).

## **12. Sea-bed clearance**

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 7.17 to 7.19.

## **13. Restoration of the site**

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.

## **14. Post-decommissioning monitoring, maintenance and management 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. This

should be similar to the example in green below. There should be a commitment to report the outcome of this work to the Scottish Ministers.

### 15. Supporting studies

Provide a list of supporting documents / studies (and supporting diagrams, graphics or other material) referenced in the programme(s) which are not presented in the Appendices. See examples in blue below.

Table 15.1: Supporting Documents

Document Number	Title	Electronic copies available at
1	EIA report	<insert link>
2	Comparative assessment	<insert link>



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