OFFSHORE RENEWABLES DECOMMISSIONING GUIDANCE CONSULTATION

Analysis of Consultation Responses

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Executive Summary

The consultation

The Scottish Government has consulted on guidance for the decommissioning of offshore renewable energy infrastructure (OREI) in Scottish Waters. The consultation ran from 22 November 2019 until 16 March 2020.

The consultation document sought views from industry, regulators and other stakeholders on the draft guidance. The consultation posed 10 questions, six with a closed agree / disagree element and also inviting further comment and four purely seeking comments.

The final number of submissions received was 30, including 26 from group respondents, 2 from individuals and a further 2 which did not include a completed respondent information form.

The key findings from the analysis are that respondents' views are as follows:

- The majority of respondents agree that the guidance, where possible, should be kept in line with UK Government Guidance.
- Making test centres responsible for decommissioning assets deployed at their facilities by tenants where insufficient or no financial provision has been made would result in unacceptable financial risk for the test centre.
- There were differing views on the timing of securities but most called for a proportionate approach. Scrappage income should be included in the calculation of securities, whilst VAT should not.
- Need to ensure inflation is not double counted.
- Consider guidance on 'triggers' for review on material changes rather than a pre-set schedule, perhaps based on the points set out in 5.25
- Submission of DPs 18 months prior to construction is very challenging and is likely to be of limited value as detailed project design is not likely to be confirmed at this time and costs would be high level estimates.
- A template is very useful to ensure consistency in terms of the information to be included in the DPs and level of detail required but there should be flexibility for developers to amend the template or create their own. Amendments suggested.
- Useful to retain flexibility on the issue of partial decommissioning depending on circumstances and in line with consent / licence and lease conditions.
- The accrual of securities poses a significant financial cost to developers and obtaining approval prior to offshore construction could lead to increased construction and commissioning costs for projects.
- There were a wide range of additional comments ranging from exceptions to full removal, sharing good practice and post-decommissioning monitoring.

The consultation questions and a summary of responses are in tables **Table 1** and **Table 2**.

Table 1. Questions asked by consultation

Q	Question
1	This is the first version of the guidance for decommissioning offshore renewable energy installations in Scottish waters. We have, where possible, kept this in line with the UK Government's guidance. Do you agree or disagree with this approach?
2	The main proposed variation from the UK Government's approach is in relation to test centres. The BEIS guidance states that test centres remain responsible for ensuring decommissioning of tenants. The Scottish Government is proposing that plans for tenants should instead be approved by Marine Scotland. Do you agree or disagree with this approach?
3	Do you agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance?
4	We are proposing to include a requirement for developers to set out inflation on their securities up to the end of the project lifetime, as set out in the draft guidance document at section 8.8-8.11. Do you have any comments on this proposal?
5	Do you agree or disagree with the proposed timescales for review of decommissioning programmes set out in sections 5.24 – 5.29?
6	We aim to ensure that all future offshore renewable energy installations have an approved decommissioning programme in place prior to construction, as this will help to manage the risk of projects going into the water without proper plans in place for removal. How achievable is this for developers? What are the challenges for different types of project?
7	We have provided a draft template for a decommissioning programme as this was something that was highlighted as good practice from the oil and gas sector. Do you think that a template is useful?
8	It seems likely that there will be cases where part of a windfarm or array may reach the end of its lifetime earlier than others, for example where the turbines at the edge wear out more quickly than those at the centre. We would be interested to hear views on how decommissioning might work in these scenarios, for example whether non-functioning turbines could or should be left in situ until the rest of the windfarm or array can be decommissioned, and what the risks of this approach might be, or any other risks or opportunities relating to the idea of "step-down" decommissioning.
9	In relation to the Partial Business and Regulatory Impact Assessment, do the proposals in this consultation have any financial, regulatory or resource implications for you and/or your business (if applicable)?
10	Do you have any further comments on the draft guidance?

Table 2. Summary of views of respondents

Q	Agree		Disagree		Unclear / no answer		Respondent types with most widespread agreement	Key comments from respondents who agree	Respondent types with most widespread disagreement	Key comments from respondents who disagree
	No.	%	No.	%	No.	%				
1	23	82.1	1	3.6	4	14.3	Offshore wind developers, offshore transmission asset owners, government agencies, non-departmental public bodies, wave and tidal sector, trade organisations, individuals and universities	Welcome consistency across UK; however, further clarification needed on the points where the guidance diverges from the BEIS guidance; deeper waters in Scotland automatically disadvantage Scottish projects; guidance should explicitly state projects will be assessed on a case-by-case basis.	Planning Authorities	There should definitely be a decommissioning policy which applies to all installations. The Scottish Government should ensure that this is in place, even if there are variations with other parts of the UK. The policy should require the complete removal of all apparatus which has been introduced to the marine or terrestrial environment.
2	10	35.7	3	10.7	15	53.4	Government / executive agencies / public corporations, planning authorities, non-departmental public bodies, universities and conservation organisations	Agree that DPs should be approved prior to construction starting. Nothing should be left on the sea bed by test centres or commercial installations.	Wave & tidal sector, offshore wind developers and trade organisations	Making test centres responsible for decommissioning assets deployed at their facilities by tenants would result in unacceptable financial risk for the test centre. Test centre tenants having to provide securities upfront may become a barrier to deployment.

3	12	42.9	7	25	9	32.1	Government / executive agencies / public corporations, trade organisations and individuals	There was general agreement that finance should be secured to ensure future works are carried out. However, thoughts on timings differed. Concerns over how commercially sensitive information will be treated given the commercial risk of sharing it. Developers of small-scale projects who have proven their capabilities should receive a more proportionate approach, e.g. early life accrual.	offshore wind developers	Scrappage income should be permitted in the calculation of securities. The inclusion of VAT is a significant requirement which needs further consideration. A definition of "full security" and whether this refers to the cost of decommissioning at present, or at the point of decommissioning is required.
4	15 responded (54%)						The comments received covered the need to ensure inflation is not double counted; support for the proposals for Consumer Price Index (CPI) Indexation; but flagging that Ofgem require companies bidding for the assets to have inflated costs by RPI. Some suggested alternative methods – i.e. securities should be in place to cover the decommissioning costs applying as of the current year; or that decommissioning costs should be linked to actual costs not forecasts. The need for guidance on calculating inflation beyond published CPI forecasts was also raised. Others called for consistency across the UK and a more proportionate approach for smaller scale projects.			
5	14	50	6	21.4	8	28.6	offshore wind developers, offshore wind transmission asset owners, Government / executive agencies / public corporations, planning authorities and conservation organisations	Views on this varied massively from agreeing with the timescales to suggesting alternatives: 'triggers' for review based on material changes; a 5 year review cycle; reduce reviews after year 15 to every 3 years; reviews in second half of an assets lifetime only. Others called for review timelines to be flexible and proportionate (on a case-by-case basis).	universities	The timings are too short and should be expanded to allow a feedback loop on the design of OREI.

6	20 responded (71%)						Submission of DPs 18 months prior to construction is challenging and costs would be high level estimates, whilst others thought it was not achievable; to remain competitive this requirement should be applicable to all UK offshore installations; the requirement to have the plan approved prior to construction and additional approval steps could both result in delays and impact on the delivery obligations under a CfD contract; Scottish Ministers must be adequately resourced, commitments should be made on response times; need to consider how timings would work for phased projects; DP preparation could be phased; the presumption for removal should be removed. BPEO should be used; consistency with the rest of the UK required for investor confidence. Others thought that the level of detail required should be proportionate to the scale and risk of the development; 18 month approval timeframe needs to be shorter for wave, tidal and test centre devices; timelines should be in line with those of the UK guidance; Ofgem encouraged regular contact with Marine Scotland to ensure any delays to the approval process can be avoided so as not to put the developer of the project at risk of breaching the legislated deadline for the sale of the OFTO; whilst some thought that the proposed approach minimises risk to the taxpayer and ensures that a decommissioning plan is in place before construction starts.			
7	20	71.4	1	3.6	7	25	offshore wind developers, the wave and tidal sector, offshore transmission asset owners, government / executive agencies / public corporations, trade organisations, planning authorities, non-departmental public bodies and conservation organisations	A template is useful to ensure consistency; there should be flexibility on its use; the detail being asked for is unlikely to be available in the given timescales; concerns around confidentiality of information; the template is too prescriptive; need for proportionality; recommend that a more streamlined approach to the requirements for EIA and HRA for decommissioning is agreed; the requirement to provide financial modelling seems disproportionate; the examples provided within the template should consider all sectors;	universities	The template should reflect the opportunity for circular economy approach; it should include a bill of materials and how will each be recovered; make development of decommissioning expertise explicit and obligatory; plead for effective integration of the EIA and comparative assessment directly into the decommissioning programme; there are aspects of the template which will be of more value if detailed in the EIA at the point of decommissioning.
8	21 responded (75%)						The majority of respondents thought it would be useful to retain flexibility on this issue depending on the individual circumstances; whilst other thought this was an issue better dealt with through consent conditions; or that individual turbine removal was an O&M and not a decommissioning issue. Others views included: a life cycle analysis should be undertaken to ascertain the best approach; OREI should be removed all at once to restrict disturbances; and a staged decommissioning programme would be the most appropriate mechanism and would reduce risks to other sea users.			

9	8	28.6	1	3.6	19	67.9	offshore wind developers, wave and tidal sector, government / executive agencies / public corporations, trade organisations and non-departmental public bodies	Potential impacts range from the increased cost of having DPs in place up front, risk of confidential information becoming public, potential to restrict and delay projects because of additional steps in Scotland.	Planning authorities	No expected impacts
10	20 responded (71%)						A wide range of points were made regarding: the scope of the guidance; the need to ensure Scottish projects can complete with the rest of the UK; the types, timing and cost of securities; exceptions to the requirement for full removal; the impacts of non-removal on other sectors; a more proportionate approach to be taken for wave and tidal technologies; the implications for test-centres; issues on which clarification is requested; treating developments on a case-by-case basis; being flexible to allow compatibility with licencing and lease conditions; taking a more circular economy approach to decommissioning; who to consult with and when; liabilities; requirements under the Construction (Design and Management) Regulations 2015; and alternatives to decommissioning.			

1. Introduction

1.1. This report presents an overview of findings from an analysis of responses to the Scottish Government's consultation on its offshore renewable energy draft decommissioning guidance. The consultation opened on 22 November 2019. The Scottish Government hosted a workshop event for developers on 31 January 2020 to encourage participation in the consultation.

The consultation process

1.2. Scottish Ministers are now responsible for approving decommissioning programmes for renewable energy installations in Scottish waters following changes to the Energy Act 2004.

1.3. The consultation sought views on draft new guidance on the decommissioning of OREIs in Scottish Waters.

1.4. This is the first version of this guidance published specifically to cover Scotland, as powers passed from UK Government on 1 April 2017. This Scottish guidance covers many of the issues covered in the UK Government's guidance for installations in English and Welsh waters. It focuses in particular on issues relating to the provision of decommissioning cost estimates and associated financial security, to assist and inform developers.

1.5. Views on this first draft were sought from industry, regulators, and other interested parties, on the potential impacts - for example on the offshore renewables sector, the environment, or on other users of the sea.

1.6. The consultation posed 10 questions, six with a closed agree / disagree element and also inviting further comment and four purely open questions. The questions were as follows:

1. This is the first version of the guidance for decommissioning offshore renewable energy installations in Scottish waters. We have, where possible, kept this in line with the UK Government's guidance. Do you agree or disagree with this approach?
2. The main proposed variation from the UK Government's approach is in relation to test centres. The BEIS guidance states that test centres remain responsible for ensuring decommissioning of tenants. The Scottish Government is proposing that plans for tenants should instead be approved by Marine Scotland. Do you agree or disagree with this approach?
3. Do you agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance?
4. We are proposing to include a requirement for developers to set out inflation on their securities up to the end of the project lifetime, as set out in the draft guidance document at section 8.8-8.11. Do you have any comments on this proposal?
5. Do you agree or disagree with the proposed timescales for review of decommissioning programmes set out in sections 5.24 – 5.29?

6. *We aim to ensure that all future offshore renewable energy installations have an approved decommissioning programme in place prior to construction, as this will help to manage the risk of projects going into the water without proper plans in place for removal. How achievable is this for developers? What are the challenges for different types of project?*
7. *We have provided a draft template for a decommissioning programme as this was something that was highlighted as good practice from the oil and gas sector. Do you think that a template is useful? Do you have any suggestions on how it could be improved?*
8. *It seems likely that there will be cases where part of a windfarm or array may reach the end of its lifetime earlier than others, for example where the turbines at the edge wear out more quickly than those at the centre. We would be interested to hear views on how decommissioning might work in these scenarios, for example whether non-functioning turbines could or should be left in situ until the rest of the windfarm or array can be decommissioned, and what the risks of this approach might be, or any other risks or opportunities relating to the idea of "step-down" decommissioning.*
9. *In relation to the Partial Business and Regulatory Impact Assessment, do the proposals in this consultation have any financial, regulatory or resource implications for you and/or your business (if applicable)?*
10. *Do you have any further comments on the draft guidance?*

Overview of written responses

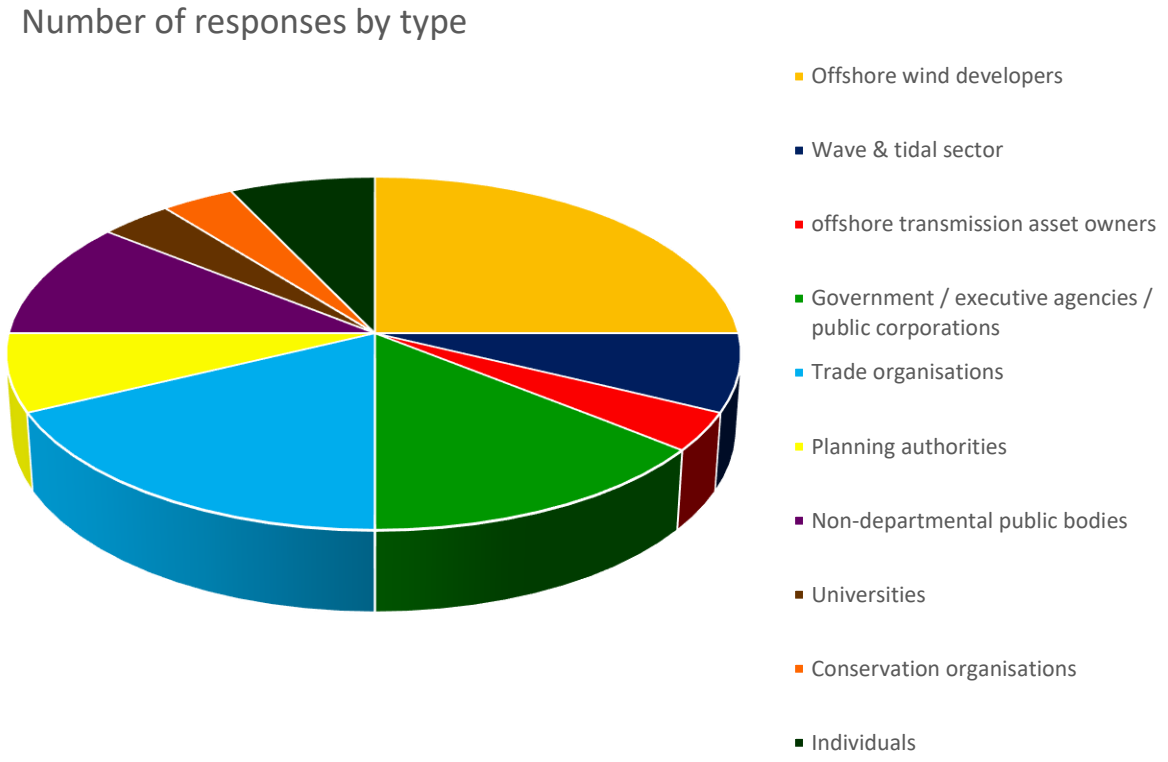
1.7. The final number of responses received was 30, including 26 from group respondents and two from individuals. Two further responses were received without respondent information forms. 20 submissions were made via the consultation website and 10 responses were received by email, some of which did not adhere to the template of questions and answers used by the website – for example, not providing a clear response to the closed agree / disagree element but providing written comments neither wholly in clear agreement or disagreement, or raising other issues.

1.8. A profile of respondent types is provided in the following table:

Table 3. Overview of consultation respondents

Group Type	Number	Percentage
Offshore wind developers	7	25%
Wave & tidal sector	2	7.14%
Offshore transmission owner	1	3.57%
Government / executive agencies / public corporations	4	14.29%
Trade organisations	5	17.86%
Planning authorities	2	7.14
Non-departmental public bodies	3	10.71
Universities	1	3.57%
Conservation organisations	1	3.57%
Group respondents (total)	**26**	**92.86%**
Individuals	**2**	**7.14%**
Total	**28**	**100%**

Figure 1. Breakdown of Consultation Respondents



1.9. Respondents were grouped into ten broad respondent types based on their role – nine types for group respondents, and one for individuals. The main points to note about the composition of the groups are:

- **Offshore wind developers** – Seven respondents representing a diverse range of organisation sizes and types from independent developers to companies owned by some of the "big six".
- **Wave and tidal sector** – Two respondents fit into this category, one tidal developer and one wave and tidal test centre.
- **Offshore transmission asset owners** – One company was an offshore wind transmission asset owner.
- **Government / executive agencies / public corporations** – Four respondents fit into this category, which includes both Scottish and UK Government agencies and a public corporation.
- **Trade organisations** – Five respondents were from trade organisations, one representing the renewables sector, two representing the wider energy sector (including oil & gas), one representing the fishing sector and one representing the shipping sector.
- **Planning authorities** – Two respondents were from Scottish planning authorities, one of which was a National Park authority.
- **Non-departmental public bodies** – Three public bodies responded - covering natural heritage, waste and navigation interests.
- **Universities** – One university responded in relation to resource recovery issues

- **Conservation organisations** – One UK conservation organisation responded.

1.10. A summary of the responses can be found in **Table 2** above.

Analysis approach

1.11. The Scottish Government carried out an internal analysis of the responses to the consultation.

1.12. The remainder of this report presents an analysis of all submissions. This includes the balance of views on the "closed" agree / disagree or yes / no questions by respondent group, and a summary of key issues raised by written responses. Our analysis has sought to identify key motivations for agree / disagree or yes / no responses, views on specific elements of the draft ORE decommissioning guidance, and any modification or alternatives suggested by respondents. The report also highlights where views or suggestions are specific to one or more respondent types.

1.13. Where respondents responded via the website, their response to the consultation closed question elements (whether affirmative, negative or not answered) is used in tables **Table 4** to **Table 9** and figures **Figure 2** to **Figure 7** below. Where respondents submitted email responses in formats of their choosing without clear separation of the closed question and written comments, the analysis has interpreted the written comments to establish whether the closed question element was met with agreement, disagreement, not answered or unclear.

1.14. It should be noted that the purpose of the report is to reflect the balance and range of views expressed through the consultation. It does not seek to provide any policy recommendations.

2. Respondents Views on The Draft Guidance

2.1. This section provides a summary of respondents' views on the draft guidance, as set out in response to the consultation questions.

Question 1. Extent of agreement / disagreement on keeping the ORE decommissioning guidance in line with the UK Government's guidance, where possible

2.2. A total of 24 respondents answered the "closed" consultation question on whether they agreed or disagreed with the Scottish Government's approach of keeping the ORE decommissioning guidance in line with the UK Government's guidance, where possible. 23 respondents agreed and one disagreed with this approach.

- One planning authority agreed with the approach, whilst the other disagreed
- Both individuals agreed
- The offshore transmission asset owner agreed
- Three government agencies agreed
- All seven offshore wind developers agreed
- Two of the non-departmental public bodies agreed
- The university agreed
- Four trade organisations agreed
- Both wave & tidal respondents agreed

2.3. The respondent types showing most widespread **agreement with the proposal** in question 1 were offshore wind developers, offshore transmission asset owners, government agencies, non-departmental public bodies, wave and tidal sector, trade organisations, individuals and universities.

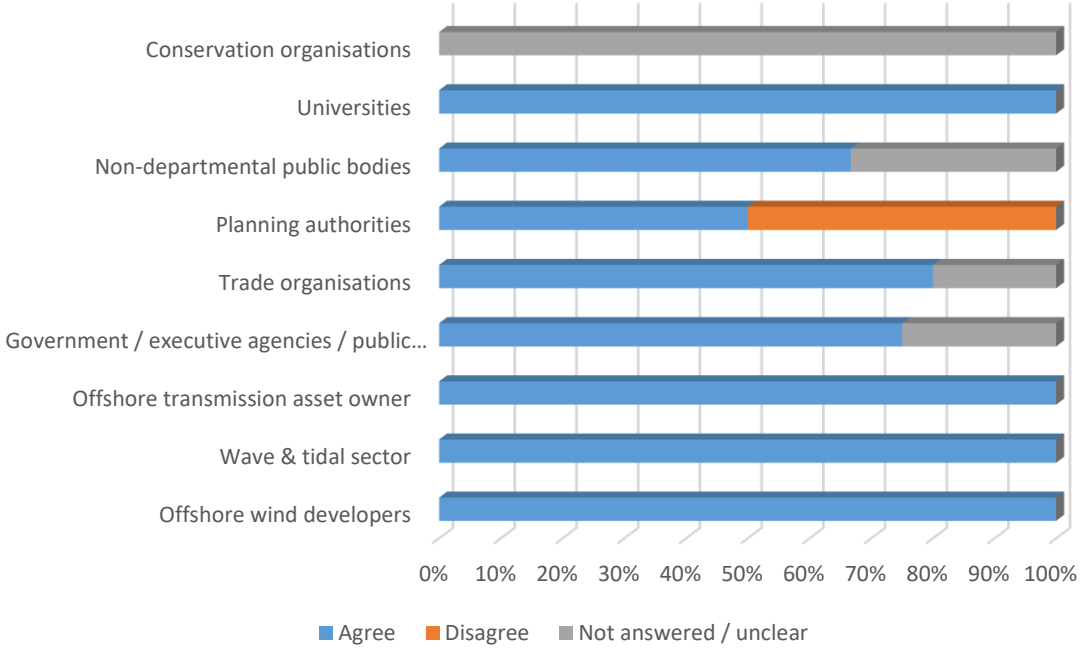
2.4. The respondent types showing most widespread **disagreement with the proposal** in question 1 were planning authorities.

Table 4. Do you agree or disagree with keeping the ORE decommissioning guidance in line with the UK Government's guidance, where possible?

Group Type	Agree	Disagree	Unclear / no response	Total
Offshore wind developers	7	0	0	7
Wave & tidal sector	2	0	0	2
Offshore transmission asset owner	1	0	0	1
Government / executive agencies / public corporations	3	0	1	4
Trade organisations	4	0	1	5
Planning authorities	1	1	0	2
Non-departmental public bodies	2	0	1	3
Universities	1	0	0	1
Conservation organisations	0	0	1	1

Group respondents (total)	**21**	**1**	**4**	**26**
Individuals	**2**	**0**	**0**	**2**
Total	**23**	**1**	**4**	**28**

Figure 2. Do you agree or disagree with keeping the ORE decommissioning guidance in line with the UK Government's guidance, where possible?



2.5. 25 respondents provided written comments as part of their consultation response (including one who did not answer the closed question). Respondents made a broad range of points relating to the principle of keeping the Scottish guidance in line with the UK Guidance, as far as possible, including detail on perceived issues with the current draft of the guidance, and suggested amendments or alternatives to the proposals. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Welcome Consistency across UK, fairer and reduces confusion (19)
- BEIS only require DPs to be submitted prior to construction, whilst Scottish guidance requires submission and approval (4)
- More stringent timelines and greater security requirements would lead to an unfair disadvantage compared to English and Welsh counterparts (4)
- Review of securities soon after construction would be ineffective (4)
- Deeper water in Scotland makes complete removal of fixed foundations more difficult and less of an issue for navigation so the presumption on complete removal of structures is arguably less relevant (4)

- Further clarification could be given on the points where the guidance for Scottish waters is not aligned with the UK Government's guidance (3) – would be useful to have a table as an appendix (1)
- Deeper waters in Scotland automatically disadvantage complete-removal, making Scottish projects less competitive than shallower water sites (3)
- Guidance should explicitly state projects will be assessed on a case-by-case basis (3)
- The draft guidance does not include a section on environmental assessment and surveys prior to decommissioning. Is this because decommissioning activities will be subject to a separate marine license issued by Scottish Ministers? (2)
- Need to consider the component materials and how they will be reused, recycled etc (2)
- More emphasis could be given to the statement in paragraph 7.5 on the IMO guidelines for design to consider removal at the product design stage.
- 3 months should be sufficient to review plans for small projects (2)
- The Scottish Government should take the UK wide guidance as a starting point and improve upon it (2)
- Marine Scotland must have sufficient resources to meet the expected timelines (1)
- Guidance in England and Wales is more flexible, and would welcome a similar approach being taken in Scotland (1)
- More detail needed on role of Finance & Constitution Committee (1)
- The wish to stay close to UK wide guidance and to avoid the risk of costs to tax payers due to poorly articulated decommissioning programmes are incompatible, unless both the UK and Scottish guidance are improved significantly (1)
- Ensures that existing experience in preparing Decommissioning Plans as well as undertaking said operations can be utilised (1)
- Important to have consistency but it may be necessary for certain aspects of the guidance to deviate from, or propose / adopt alternative approaches, to the UK Government Guidance (1)
- Scotland is a world-leader in marine renewable energy. The Scottish Government should continue to innovate to support the sector's development, whilst ensuring sufficient consistency across the UK (1)
- The assumption of full removal of all cable infrastructure will add decommissioning costs to Scottish projects, which may in turn disadvantage them in comparison to other UK projects (1)
- There should definitely be a decommissioning policy which applies to all installations. The Scottish Government should ensure that this is in place, even if there are variations with other parts of the UK. The policy should require the complete removal of all apparatus which has been introduced to the marine or terrestrial environment (1)
- Chemical use and discharge should be considered in the commissioning, production and decommissioning phases of renewables (1)
- Welcome the clarity given to aspects around decommissioning of projects, which may raise issues due to cross border issues (1)
- OFTOs should be treated differently. OFTO regime already protects the tax payer (1)

- May be worthwhile working closely with Norway, the Netherlands and Denmark to ensure consistency across these median lines (1)

Question 2: Extent of agreement / disagreement on the Scottish Government's approach to test centres

2.6. A total of 15 respondents answered the "closed" consultation question on the Scottish Government's approach to test centres. 10 respondents agreed and five disagreed.

- One trade organisation agreed (but supported the position of EMEC), whilst two disagreed
- One respondent from the wave and tidal sector agreed, whilst the other disagreed.
- One Offshore windfarm developer disagreed
- Two non-departmental public bodies agreed
- The two Planning authorities both agreed
- One Government Agency agreed
- The conservation organisation agreed
- The university agreed in principle
- One individual agreed and one disagreed

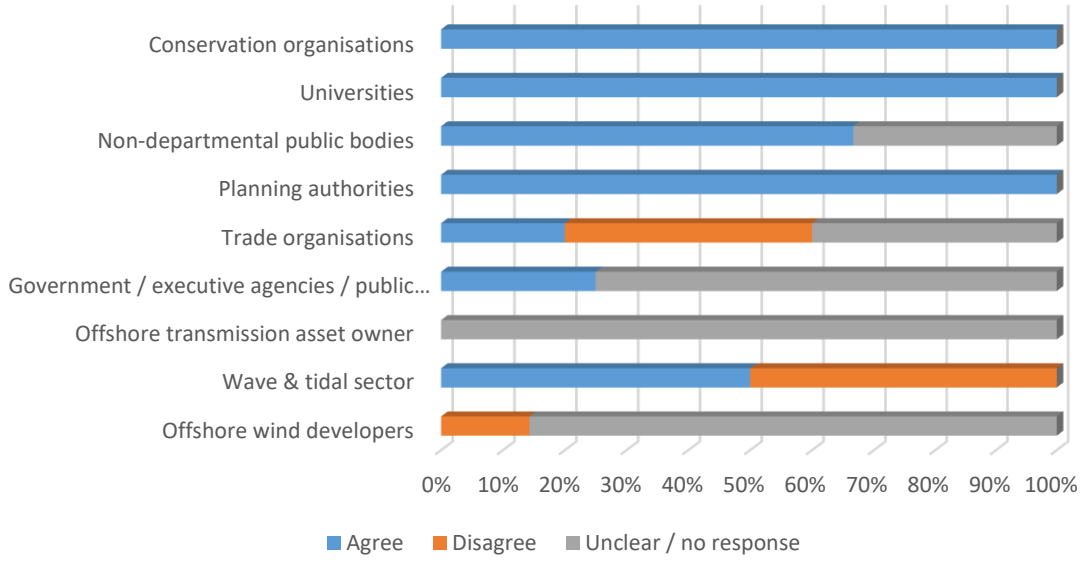
2.7. The respondent types showing most widespread **agreement with the proposal** in question 2 were non-departmental public bodies and planning authorities.

2.8. The respondent type showing most widespread **disagreement with the proposal** in question 2 was trade organisations.

Table 5. Do you agree or disagree with the Scottish Government's approach to test centres as set out in the draft decommissioning guidance?

Group Type	Agree	Disagree	Unclear / no response	Total
Offshore wind developers	0	1	6	7
Wave & tidal sector	1	1	0	2
Offshore transmission asset owner	0	0	1	1
Government / executive agencies / public corporations	1	0	3	4
Trade organisations	1	2	2	5
Planning authorities	2	0	0	2
Non-departmental public bodies	2	0	1	3
Universities	1	0	0	1
Conservation organisations	1	0	0	1
Group respondents (total)	**9**	**4**	**13**	**26**
Individuals	**1**	**1**	**0**	**2**
Total	**10**	**5**	**13**	**28**

Figure 3. Do you agree or disagree with the Scottish Government's approach to test centres as set out in the draft decommissioning guidance?



2.9. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Making test centres responsible for decommissioning assets deployed at their facilities by tenants where insufficient or no financial provision has been made would result in unacceptable financial risk for the test centre. Scottish Ministers to be the funder of last resort as well. An alternative route might be via the seabed owner (2)
- Test centre tenants having to provide securities upfront may become a barrier to deployment (2)
- Agree that DPs should be approved prior to construction starting (2)
- Nothing should be left on the sea bed by test centres or commercial installations (1)
- Will help ensure DPs contribute to sustainable management of Scotland's marine environment and wider environmental strategy and environmental protections are incorporated into marine decision making (1)
- More information is required on how Marine Scotland would assess / facilitate the differing agreements that BEIS allow test site and tenants to hold in respect of agreement on decommissioning responsibility and securities (1)
- Marine Scotland could come to mutual agreements with test centres on the decommissioning of tenant OREI innovations, allowing a more informed decision to be made (1)
- Agree with this approach for existing test centres. Less clear whether this approach should also be the case for any new test centres or whether alternative approaches may be preferable (1)
- Para 4.8 and 4.11 seem to contradict each other (1)

- Definitions needed for some of the terms used. e.g. for test devices / array in a test centre; test device / array out-with a test centre; Research and demonstration project; and commercial scale project (1)
- As project numbers increase within Scottish waters, could develop more bespoke advice for differing technology types taking account of their developmental stages (1)
- Requiring early-stage developers to engage directly with the regulator can help to build commercial and regulatory experience (1)
- Test centre tenants should be required to gain an approved decommissioning programme from Scottish Ministers and this should be managed by Marine Scotland rather than the test centre itself (1)
- The timeframe for approval of decommissioning programmes must be proportional to the consenting and testing timeframe. (1)
- Marine Scotland and the Finance and Constitution Committee will need to have sufficient resource to efficiently manage the approval process (1)
- Marine Scotland approval for devices installed at test centres will ensure that all developers in Scotland are held to the same standard (1)
- Concern over impact of Committee approval requirement on timescales. (1)
- Support the test centres holding responsibility for ensuring decommissioning of tenants in Scottish waters (1)
- Requiring test centre tenants to have to follow the full decommissioning programme process seems excessive and disproportionate (1)
- Need clarity from Scottish Government as to the reasoning behind this variation in approach from the BEIS guidance (1)
- Test centres should assume responsibility for the cost of the decommissioning in the centre, and factor that into their fees (1)
- As worded, if the tenant fails to decommission and the security is inadequate, the financial consequences will rest with the test centre (1)
- Test centres may be cautious about accepting tenants unless the centre operator is provided with financial security by them. Suggest that the position is dealt with in the same way as the UK Government guidance with test centres being responsible for the decommissioning of the infrastructure of their tenants; or guidance is amended so that that Scottish Ministers agree the plan and financial security package with tenants and take the financial consequences if that security proves to be inadequate (1)

Question 3: Do you agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance?

2.10. A total of 19 respondents answered the “closed” consultation question on whether they agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance. Eleven respondents agreed and eight disagreed.

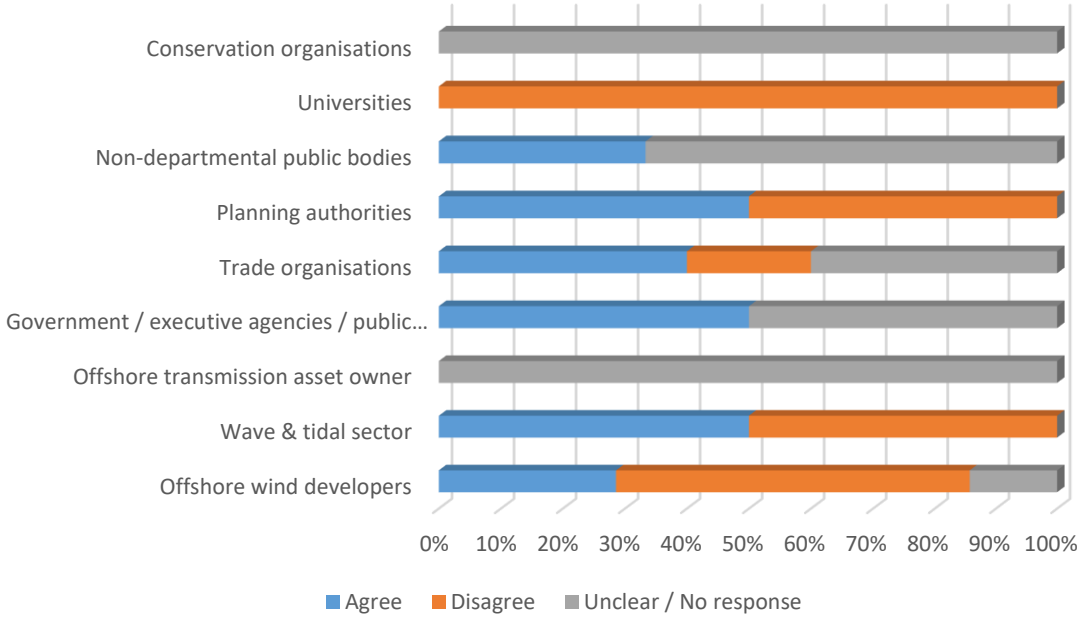
2.11. The respondent types showing most widespread **agreement with the proposal** in question 3 were government/executive agencies / public corporations, trade organisations and individuals.

2.12. The respondent types showing most widespread **disagreement with the proposal** in question 3 were offshore wind developers.

Table 6. Do you agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance?

Group Type	Agree	Disagree	Unclear / no response	Total
Offshore wind developers	2	4	1	7
Wave & tidal sector	1	1	0	2
Offshore transmission asset owner	0	0	1	1
Government / executive agencies / public corporations	2	0	2	4
Trade organisations	2	1	2	5
Planning authorities	1	1	0	2
Non-departmental public bodies	1	0	2	3
Universities	0	1	0	1
Conservation organisations	0	0	1	1
Group respondents (total)	**9**	**8**	**9**	**26**
Individuals	**2**	**0**	**0**	**2**
Total	**11**	**8**	**9**	**28**

Figure 4. Do you agree or disagree with the proposed approach and timings in relation to financial securities set out in Section 9 of the draft guidance?



2.13. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Scrappage income should be permitted in the calculation of securities (5)

- The inclusion of VAT in costings for territorial water projects is a significant requirement which has not been fully justified. Further consideration required(4)
- Agree finance should be secured to ensure future works are carried out (4)
- A definition of “full security” and whether this refers to the cost of decommissioning at present, or at the point of decommissioning is required (4)
- CfD is not a ‘subsidy’, but a price stabilisation mechanism (4)
- Concerns over how commercially sensitive information will be treated given the commercial risk of sharing it. More clarity needed (3)
- Developers of small-scale projects who have proven their capabilities should receive a more proportionate approach, e.g. early life accrual (3)
- Upfront securities for novel technologies is onerous and could lead to projects lacking the relevant approvals to reach the construction phase (2)
- The guidance places the onus on developers to justify costs for decommissioning, but places overly conservative, restrictive requirements for generating costs based on a high perceived level of risk, whilst allowing little ability for developers to justify realistic costs, or areas for cost reduction (2)
- support mid-life accrual from year 10 of a CfD period (2)
- Support mid-life accrual but this date will have to be clarified for each OFTO. For OFTOs with 25-year licences the mid-life accrual beginning in year 15 would provide the best outcome for the consumer (1)
- The decommissioning reserve account should remain with the relevant asset owner. The account holder should be able to access the account on a general management basis, with certain parameters around the withdrawal conditions, in order to conduct the decommissioning activities (1)
- For projects that have already entered into a financing arrangement, the projects ability to provide guarantees earlier than year 16 of operations would be contingent on acceptance from senior lenders. A stepped approach, where guarantee is increased year on year in years 10-15, may be more acceptable to banks (1)
- For projects that are earlier in the development of the project earlier guarantees can be taken into account when negotiating the financing of the project and agreed with senior lenders prior to financial close. However, guarantees would still be subject to acceptance by potential lenders. For projects not based on fixed revenues through a subsidy support mechanism where revenues may be fixed by another method; in these cases, the fixed revenue tenor would match the debt tenor and the aforementioned bank approvals would still apply (1)
- It is unlikely a private entity would share the financial model for review unless undertaken by an advisory entity who are willing to accept reliance (1)
- Annual renewal of letters of credit is an overcautious administrative burden (1)
- Having securities tied up before year 15 is unnecessary. Agree with the increasing incremental payments over the CfD period (1)
- Greater flexibility will allow developers to look at ways to reduce ultimate costs to consumers (1)
- Commercial scale offshore wind is no longer a developing or novel technology, and this should be reflected in the perceived risk to the tax payer, and translated into acceptable levels of security, as per BEIS guidance (1)
- Requirements for developers/owners to put securities in place should be consistent with other proven generation technologies, and should allow sufficient flexibility so that a projects ability to seek investment or re-finance are

not impacted. There is a need to reflect some of the risk that would apply to Scottish Government as residual liability holders. However, these security commitments required should be based on realistic commercial assumptions, not overly conservative and there needs to be a fair process where developers can justify and defend costs without threat of delays to the start of construction. Costs should acknowledge the true risk of exposure to the Scottish Government, and the guidance makes clear that tax payer liability would be a last resort, therefore the current risk of exposure would appear low (1)

- It is strongly advised that this position on projects not supported by subsidy being likely to require payment up front of installation be readdressed, especially in light of the results of the 2019 CfD auction, where only one Scottish project received partial subsidy (1)
- Overly conservative assumptions may have a detrimental impact on how investors value projects (1)
- The guidance needs to consider projects that secure Power Purchase Agreements ("PPA") for a specific duration. It would be expected that full accrual reflect the duration of the PPA (e.g. 25 years) (1)
- Research suggests a significant underestimate of decommissioning costs, therefore a high optimism bias should be applied to all calculations (1)
- Do not support inclusion of 'optimism bias' in calculating securities as this is not relevant for private sector, industry projects such as windfarms (1)
- The cost structure is not in line with general waste management regulations, nor the Circular Economy Bill, by ignoring solutions such as designing out wastes – i.e. design for durability, reuse, repair, repurposing, disassembly and remanufacturing – and instead asks only for costings on removal, recycling and waste management. This must be adapted (1)
- It is not possible to hedge out exchange rate fluctuations to cover contract placements with unknown vendors / currencies in 30 years' time (1)
- Allow draw down on reserved cash during decommissioning works to ensure developers are not required to obtain funds for decommissioning twice (1)
- Include other mechanisms of revenue than CFD in the guidance (1)
- It would be beneficial to include wording such as: '*For deployments that receive a predictable revenue stream (such as ROCs or CfD) and involve a proven technology with low operating risk but are not yet fully commercial, a secure, segregated decommissioning fund that accrues by the middle of the subsidy period ("early-life accrual") may be acceptable'*. This would be assessed on a case-by-case basis as per Section 9.30. This would enable a three-track (up-front payment / early-life accrual / mid-life accrual) or otherwise more proportionate approach to be taken with regards to financial securities (1)
- A requirement for developers to ramp up security over the final two years of the subsidy period is sufficient because the revenue received each year under a CfD for a typical installation would be more than double the annual security accrual. For phased projects, the accrual should apply to the final two years of the subsidy period for each phase (1)
- Would welcome clarity on the approach taken regarding mid-life accrual of securities for any projects that might not secure government subsidy (1)
- Agree that the timings relating to financial security for OFTO projects outlined in paragraph 9.32 are appropriate, as is the proposed process (1)

- If a suitable amount of time can be agreed before accruals start to cover securities there should be no reason for any developer to find this to be a hindrance to their work, it should be the responsibility of the renewables industry to ensure that securities an place for all developments (1)
- Provision 9.17(f) should be deleted so as to provide certainty to companies that securities with the stated features and by an entity with the features (including credit rating) in the guidance will be acceptable (1)
- Useful to clarify what is meant by "a limited proportion of the funds" (Section 9.34) may be held back pending a successful decommissioning report (1)

Question 4: We are proposing to include a requirement for developers to set out inflation on their securities up to the end of the project lifetime, as set out in the draft guidance document at section 8.8-8.11. Do you have any comments on this proposal?

2.14. A total of 15 respondents answered this "open" consultation question which asked for any comments on the requirement for inflation, as set out in the guidance.

2.15. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Need to ensure inflation is not double counted, e.g. in any CES process (5)
- support proposals for CPI Indexation (4)
- It may make sense to link any regular review with the way in which the Consumer Price Index has varied the original funds. (4)
- Securities should be in place to cover the decommissioning costs applying as of the current year (3)
- Decommissioning costs should be linked to actual costs not forecasts (1)
- Need guidance on calculating inflation beyond published CPI forecasts (1)
- Methods of applying inflation should be consistent across the UK (1)
- Inflation should be based on CPI not RPI, which is flawed in this context (1)
- Any 'cost review' should supersede the inflationary increases (1)
- The level of securities required should be based on the cost of decommissioning as assessed at the end of the CfD. The cost increase due to subsequent inflation can then be paid by the developer at the point of decommissioning, to match the actual level of inflation that occurred in the subsequent 10 years, rather than on a projected rate (1)
- Requiring developers of projects with < £300k liability to provide annual updates on the impact of inflation does not seem proportionate (1)
- Developers should be able to pursue their own methodology for considering inflation (1)
- As part of the OFTO bidding process, Ofgem require companies bidding for the assets to have inflated costs by RPI within their submissions (1)
- concerns with certain cost elements of the security payments required for mid-life accrual (1)

- The processes and regulation around the OFTO regime is adequate to find a solution to an OFTO in financial distress and protect taxpayers and electricity customers. Thus the need to include VAT in the accrual from year 10 is not required, but as the costs become known closer to decommissioning they should be something to be factored into the decommission fund (1)
- Ofgem currently include a licence amendment to factor in any request for an OFTO to increase the size of its security to account for the payment of VAT. The standard rate of VAT is not fixed, therefore if VAT were to decrease at the end of the revenue period, the OFTO will have unnecessarily accrued years of additional revenue if bidders were to factor in the current rate for VAT within their TRS bids (1)
- Providing examples of what Marine Scotland consider to be exceptions to the full removal presumption would help to drive down costs within the OFTO regime (1)

Question 5: Do you agree or disagree with the proposed timescales for review of decommissioning programmes set out in sections 5.24 – 5.29?

2.16. A total of 20 respondents answered the "closed" consultation question on whether they agree or disagree with the proposed timescales for review of decommissioning programmes. Fourteen respondents agreed and six disagreed.

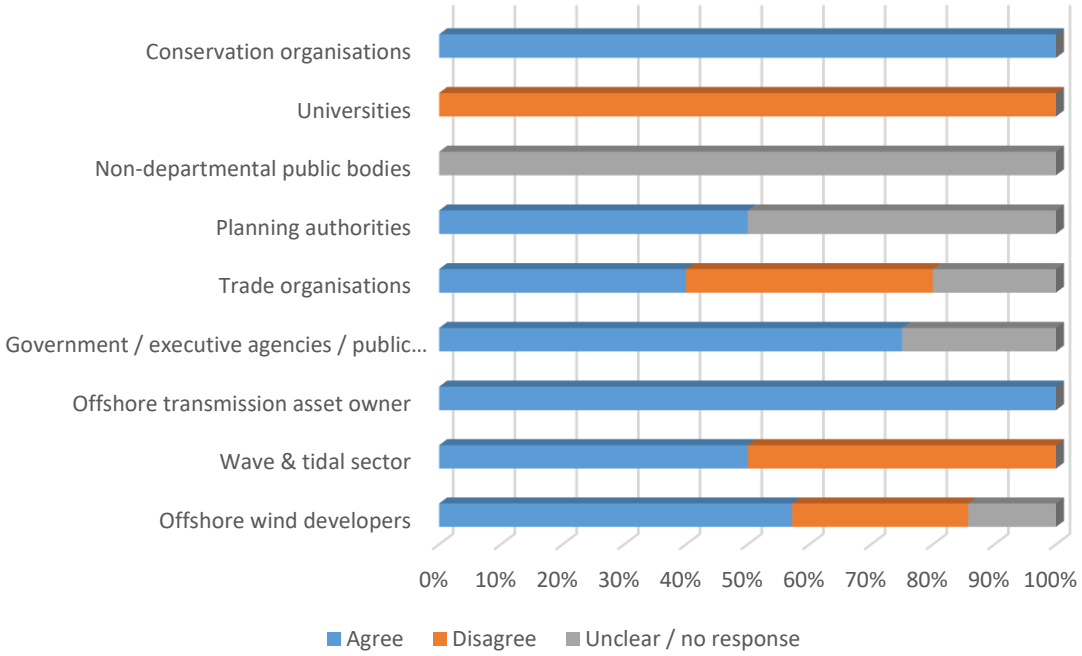
2.17. The respondent types showing most widespread **agreement with the proposal** in question 5 were offshore wind developers, offshore wind transmission asset owners, Government / executive agencies / public corporations, planning authorities and conservation organisations.

2.18. The respondent types showing most widespread **disagreement with the proposal** in question 5 were universities.

Table 7. Do you agree or disagree with the proposed timescales for review of decommissioning programmes set out in sections 5.24 – 5.29?

Group Type	Agree	Disagree	Unclear / no response	Total
Offshore wind developers	4	2	1	7
Wave & tidal sector	1	1	0	2
Offshore transmission asset owner	1	0	0	1
Government / executive agencies / public corporations	3	0	1	4
Trade organisations	2	2	1	5
Planning authorities	1	0	1	2
Non-departmental public bodies	0	0	3	3
Universities	0	1	0	1
Conservation organisations	1	0	0	1
Group respondents (total)	**13**	**6**	**7**	**26**
Individuals	**1**	**0**	**1**	**2**
Total	**14**	**6**	**8**	**28**

Figure 5. Do you agree or disagree with the proposed timescales for review of decommissioning programmes set out in sections 5.24 – 5.29?



2.19. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Consider guidance on 'triggers' for review on material changes rather than a pre-set schedule, perhaps based on the points set out in 5.25 (4)
- Welcome regular reviews (3)
- Agree with the requirement to carry out a comprehensive review of the DP 12 - 18 months of this first security provision being made (3)
- Need clarity on the role and timescales envisaged for scrutiny of DPs by the Finance & Constitution Committee (3)
- Instead of submitting a report within 6 months of completion of construction, recommend this is changed to within 1 year after the official commercial operation date (COD) (3)
- Agree with the proposed timescales for long term projects (2)
- In-depth review annually would be overly onerous (2)
- The 12 month timescale for review is reasonable and achievable, allowing flexibility for changing circumstances (2)
- Welcome further clarity on the difference between an "annual review" and a "comprehensive review" (1)
- Construction issues report within 6 months seems logical, albeit with an annual review period it may be prudent to shorten this timescale (1)
- There should be timelines on Ministers when it comes to review and approval of decommissioning programmes (1)

- The initial post construction report timing is reasonable (1)
- Annual reviews should only apply during the period when security provisions are being increased to the full amount (Years 11 - 15) (1)
- Suggest reducing frequency of reviews after year 15 to every 3 years. The final review should then commence 3 years prior to the end of operation (1)
- Recommend regular reviews to ensure new information and technologies, as well as changes in environmental conditions, are considered (1)
- Welcome that the requirement after the start of the security period is for annual developer-lead reviews rather than full approval process each year, in line with what lenders would expect (1)
- 5 year review cycle is more proportionate than a 1 year cycle (1)
- Reviews likely to be more beneficial in second half of an assets lifetime (1)
- Reviews should allow for revision of scrappage income assumptions (1)
- Paragraph 5.27 makes an assumption that the long term projects are able to start accruing securities later in the project life. Provisions are required for those projects that may have to provide securities earlier. (1)
- The timings are too short and should be expanded to allow a feedback loop on the design of offshore renewable energy infrastructure. (1)
- Guidance should include process for amendment of securities if costs fall(1)
- Reviews for short-term deployments may require to be discussed and agreed on a case-by-case basis (1)
- Clarity needed on who will be consulted during reviews and when? (1)
- A developer may need to run two decommissioning strategies in parallel (1)
- Request clarity on the process for requesting an exception to full removal(1)
- Paragraph 5.28 comments that short-term projects will be considered on a case-by-case basis. The expected review schedule should be made clear to the developer on approval of the decommissioning programme.
- Review timelines should be flexible and proportionate (2)
- Suggest amending the text of 5.28 as follows: Review periods for shorter term projects [and those with decommissioning liabilities under £300k] will be considered on a case-by-case basis (1)
- 12 -18 months before first security will be a key time to ensure that the costs will be accrued appropriately over the remaining operational life and equally the final year review should allow sufficient time to make any corrective measures to the existing plans (1)
- All infrastructure, including cables, need to be included in decommissioning (1)
- Guidance should outline expectations with regards to decommissioning renewable assets, both when their sole purpose is to serve an operating oil and gas asset, and when they also supply electricity to the grid or other users (1)
- The timing requirement is more rigid than that for the oil and gas industry (1)
- It may make sense to set a regular review point (e.g. every 5 years) (1)

Question 6: We aim to ensure that all future offshore renewable energy installations have an approved decommissioning programme in place prior to construction, as this will help to manage the risk of projects going into the water without proper plans in place for removal. How achievable is this for developers? What are the challenges for different types of project?

2.20. A total of 20 respondents answered the "open" consultation question on the achievability of having approved decommissioning programmes up front and what challenges that poses.

2.21. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Submission of DPs 18 months prior to construction is very challenging and is likely to be of limited value as detailed project design is not likely to be confirmed at this time and costs would be high level estimates (7)
- Broadly supportive of the requirement for a decommissioning plan (for iterative review) to be approved prior to the start of deployment (4)
- In order for Scotland to remain competitive in the wind energy market, this requirement should be applicable to all UK offshore installations, including projects in England and Wales (1)
- Scottish Ministers must be adequately resourced. Commitments should be made on response times (4)
- Agree DP should be approved before construction takes place (3)
- Need to consider how timings would work for phased projects (2)
- The preference is for the seabed to be returned to original state (2)
- The detail will not be known but commitment to ensuring consultation will take place three years before it is due to take place and commitment to removing all necessary infrastructure would be prudent (1)
- Section 5.23 states '.....The final version of the approved programme, as modified from time to time, will be the version produced 12-18 months before authorisation (see stage 6)'. This is not consistent with Section 5.6 which refers to the final version of the programme being submitted for approval no later than 6 months in advance of construction (1)
- DP preparation could be phased: e.g. draft submitted one year prior to the project reaching FC. Then final DP submitted for approval (including the Confidential Annex) at least 6 months prior to commencement of construction (1)
- More emphasis should be placed on the assessment of embodied carbon (1)
- Having approved decommissioning programmes in place is essential (1)
- The presumption for removal should be removed. BPEO should be used (1)
- Sometimes leaving undersea OREI may be the course of action that offers the best environmental outcomes (1)
- The retention of undersea OREI in situ may not always provide the most positive environmental outcomes. For example, where environmental degradation has been observed during an OREI's lifetime it may be best to remove all OREI (1)

- Suggest that single turbine removals / replacements are treated as operations and maintenance activity rather than a decommissioning activity (1)
- Offshore wind has a proven track-record, the risk of owners not meeting obligations is low. Requiring approval of financial securities to be agreed prior to construction risks not allowing sufficient time to undertake realistic cost exercise prior to construction, with the effect that projects will need to over-estimate the accrual required during operation to cover decommissioning costs. This will inaccurately impact on proposed revenue streams and the perceived profitability of projects at a time when developers are looking for investment decisions to be finalised. If there is not consistency between Scottish projects and the rest of the UK, there is a risk that investors will see Scottish projects as lower value.
- DPs should acknowledge current scarcity of decommissioning infrastructure, current capacity and limitations of 'waste' management technologies, the impact of these current limitations, and the efforts being taken to address these (1)
- If this were to cause delays to the commencement of construction for projects this would be a major concern.
- There are differences in this aspect of this guidance as compared to the BEIS guidance. This aspect of the guidance should be reviewed as follows:
    - Whether the advice should remain the same, depending on technology type and scale of proposed development. There may be a need to consider further the differences in scale between testing at a test centre, demonstration scale and full commercial scale. The timescale of when a decommissioning plan is required may vary in each of these scenarios. There may be more risk during the test and research stages and therefore the early requirement for decommissioning. In all cases there is a need for a decommissioning plan to be submitted and approved before deployment, but the timing in which this is submitted may need to vary from the timescales suggested in this draft guidance and depending on technology type, scale and location.
    - Given this is a key difference between UK and Scottish guidance, there should be an opportunity for regular dialogue between the two regulators to share lessons learned and to review and revise guidance to ensure it is fit for purpose.
- Detail needed on how the Committee will approve subsequent revisions (1)
- Would welcome a defined mechanism that will allow developers to revise security estimates when more detailed project information is confirmed. (1)
- This requirement is not deliverable. Requiring plan approval rather than submission at this stage could add uncertainty and risk to the overall process, as developers will clearly not have full details at this stage (1)
- For wave and tidal projects seeking to test at EMEC, these timescales are not at all practical, with typical engagement with tenant beginning 3-9 months in advance of deployment, depending on the scale of testing (1)
- Welcome the requirement for approved decommissioning programmes to be in place prior to installation, however prior to construction would not be achievable (1)
- 18 month approval timeframe needs to be nearer 3 months for wave & tidal (1)
- It is understood it is Scottish Ministers intention to regulate the requirement for approved decommissioning programmes prior to installation via marine licence

conditions. This should be clearly stated within the guidance. In addition, the process for non-compliance with such a condition should be outlined (1)

- As long as the level of detail required is proportionate to the scale and risk of the development, this should be achievable for developers. However, if developers of pre-commercial projects (which have not for example required Section 36 consent or an EIA) are to be expected to complete decommissioning programmes to the same level of detail as commercial developers (who do require Section 36 consent and an EIA), this would be more challenging and does not seem proportionate. It may also put developments in Scotland at a competitive disadvantage compared to offshore installations in England and Wales (1)
- Developers should have the flexibility to trial different approaches to decommissioning (1)
- A requirement to have the plan approved by Scottish Ministers prior to construction is likely to result in a delay to the construction programme, which could impact on the delivery obligations under a CfD contract. Furthermore, the inclusion of an additional approval step by the Finance and Constitution Committee could result in an added delay to construction and therefore have a significant business and cost impact (1)
- Timelines should be in line with those of the UK guidance (1)
- The sale of the OFTO must be completed 18 months from when the whole transmission system has reached full capacity (Generator Commissioning Clause under The Energy Act 2013) and the project completion notice has been issued by National Grid. The preferred bidder is normally in a position to submit their decommissioning programme within the last six months of this deadline. Ofgem are therefore slightly concerned that an additional level of approval to that of the process followed by BEIS (gaining approval from Scottish Ministers), could in turn take much longer - potentially risking a delay to asset transfer and taking the project close to this legislative deadline. Ofgem include within the obligations they set to the preferred bidder on appointment that they are to submit their draft decommissioning programme within 2-3 weeks of us issuing a notice to help alleviate this time constraint. Ofgem would encourage Marine Scotland to bear this in mind when reviewing these proposals. Regular contact between Ofgem and Marine Scotland is encouraged to ensure any delays to the approval process can be avoided so as not to put the developer of the project at risk of breaching this legislated deadline (1)
- Agree with proposed approach, which minimises risk to the taxpayer and ensures that a decommissioning plan is in place before construction starts (1)

Question 7: We have provided a draft template for a decommissioning programme as this was something that was highlighted as good practice from the oil and gas sector. Do you think that a template is useful?

2.22. A total of 21 respondents addressed this “open” question in their response. Twenty thought that the inclusion of a template was helpful, whilst one did not.

2.23. The respondent type showing most widespread **agreement with the proposal** in question 7 were offshore wind developers, the wave and tidal sector, offshore transmission asset owners, government / executive agencies /

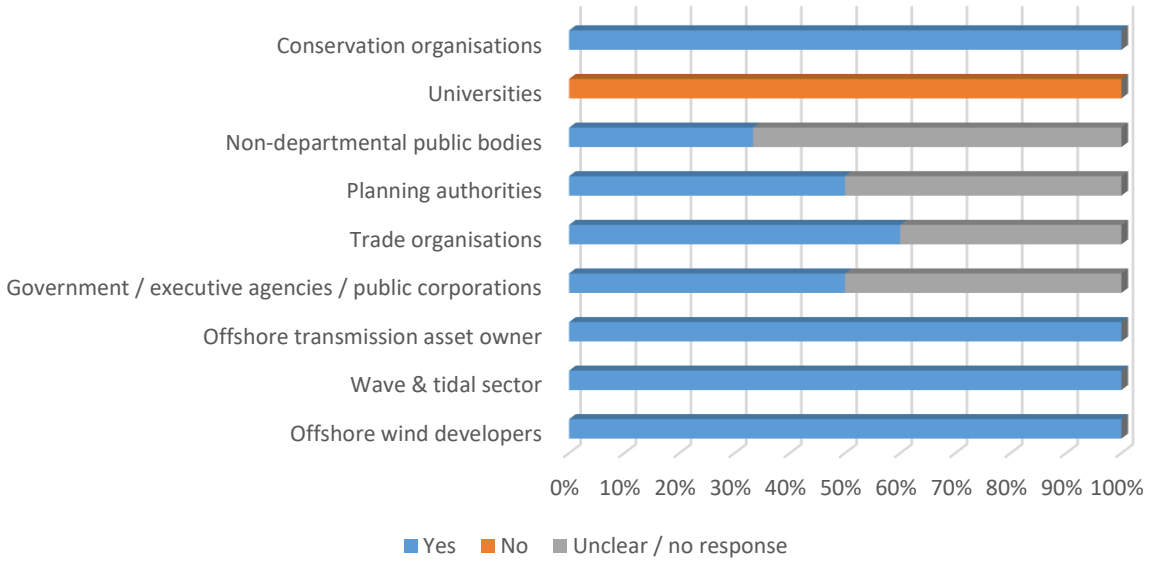
public corporations, trade organisations, planning authorities, non-departmental public bodies and conservation organisations.

2.24. The respondent type showing most widespread **disagreement with the proposal** in question 7 was universities.

Table 8. Do you think that a decommissioning programme template is useful?

Group Type	Yes	No	Unclear / no response	Total
Offshore wind developers	7	0	0	7
Wave & tidal sector	2	0	0	2
Offshore transmission asset owner	1	0	0	1
Government / executive agencies / public corporations	2	0	2	4
Trade organisations	3	0	2	5
Planning authorities	1	0	1	2
Non-departmental public bodies	1	0	2	3
Universities	0	1	0	1
Conservation organisations	1	0	0	1
Group respondents (total)	**18**	**1**	**7**	**26**
Individuals	**2**	**0**	**0**	**2**
Total	**20**	**1**	**7**	**28**

Figure 6. Do you think that a decommissioning programme template is useful?



2.25. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- A template is very useful to ensure consistency in terms of the information to be included in the DPs and level of detail required. (5)
- Template useful as an example but there should be flexibility for developers to amend the template to their own needs or create their own template. (5)
- Section 5 - Further clarity needed on the definition of “clear seabed”. (4)
- Section 4 - much of the detail being asked for is unlikely to be available, certainly 18 months prior, and potentially six months prior to construction. (3)
- Section 8 - There is a row for "inflation" and a separate "inflation calculator". It would seem logical that the figure in the "inflation calculator” be passed through into the "inflation" row, negating the need for the second column. (3)
- The requirement for content to be included in the template is very detailed and would welcome clarity as to why this level of detail is required. (3)
- The financial information required in Section 8 and 9 have typically been included in a confidential Annex to date. Whilst the template acknowledges this, it should accurately reflect what information is required in Sections 8 and 9 and what information is expected / allowed to be included in a confidential annex. (2)
- The template is too prescriptive (2)
- May wish to introduce a word limit on some sections (1)
- An explicit section on chemical use and discharge should be included (1)
- All developments offshore - not just renewable projects – should be held to these same high standards when it comes to decommissioning. (1)
- Need to include a section detailing proposed mitigation measures (1)
- The template as currently presented appears, in some sections, to be fairly prescriptive in terms of the actual wording to be used etc. Clarity needed in the guidance that alignment with / use of the template is preferred, however, developers will not be penalised where there is a need to deviate from the structure or wording of the template depending on specific project requirements (1)
- This is a helpful template that lends openness and transparency to the decommissioning planning and approval process (1)
- However, there is opportunity to go above and beyond current good practice in the oil and gas sectors to move away from a presumption of the removal of OREI, and instead assess if the removal of structure delivers the best outcomes for the marine environment (1)
- The template should include a line for scrap value, to be deducted from the Total Security figure (1)
- Marine Scotland’s requires submission to Scottish Ministers ~18 months in advance of construction, comparatively to BEIS requiring submission only 12 months, making it more onerous (1)
- Each installation should include a bill of materials i.e. how much iron, copper, composite and rare earth element fluid is in each turbine and how will each be recovered (1)
- The template should reflect the opportunity for circular economy approach (1)
- Make development of decommissioning expertise explicit and obligatory (1)
- Recommend changing the minimum of 30 days for consultation to a minimum of 20 working days (1)

- Plead for a more effective integration (than that used by the oil & gas sector) of the EIA and comparative assessment directly into the decommissioning programme (1)
- Section 3 – we agree that some of this information is relevant, but there are aspects of this, in particular, the description of the environment, which will be of more value if detailed in the EIA at the point of decommissioning.
- In the section on proposed waste management solutions - further emphasis could be made to indicate to developers that they should be considering the decommissioning options of their components at the design stage. (1)
- Table 6.1 - suggest rewording the first item from conservation interests to ecosystem impacts (1)
- Recommend that a more streamlined approach to the requirements for EIA and HRA for decommissioning is agreed, perhaps through a review and scoping before the final decommissioning programme is submitted.
- Section 8 provides a template for costs / securities but the application of this is not entirely clear. For example, columns are in place for costs in "todays money" and also for costs "at the point of decommissioning", against each work package.
- The requirement to provide financial modelling seems disproportionate, and we would ask for reconsideration on this point.
- The requirement for a first draft of the document 18 months ahead of construction is too far in advance (1)
- Industry notes that the difference in submission timeline requirements between Scotland and England means Marine Scotland's approach is more onerous than BEIS' requirement. Marine Scotland's requires submission to Scottish Ministers ~18 months in advance of construction, comparatively to BEIS requiring submission only 12 months.
- The inclusion of the template within the guidance is welcomed however, the examples provided within the template should consider all sectors to which the guidance relates and not just the wind sector.
- Section 1/3 - The templates assumes that Section 36 consent has been required, but this is only the case for offshore generating stations above 1MW. The total consented capacity of the six-turbine Shetland Tidal Array is 0.6MW.
- Section 4: The requirement for a first draft of the document 18 months ahead of construction is too far in advance. A more proportionate approach should be considered for smaller, low-risk projects
- The requirements for financial models, operators' governance structure, 3 years of accounts, the business plan for the project, the full funding model, a cash flow for the life of the project; and a robust overall cost estimate, while understandable for large commercial projects, are disproportionate for projects which:

a) Have decommissioning liabilities below the £300k limit requiring notification to the Scottish Government Finance and Constitution Committee.
b) Do not require Section 36 consent
c) Do not require a full Environmental Impact Assessment
d) Have demonstrated reliable generation and cost-effective decommissioning and recovery / redeployment operations

- A detailed, costed and evidenced decommissioning methodology should be sufficient.
- A template is useful. Experience from the oil and gas industry suggests that a template can shorten the documentation by ensuring that only the most important issues are covered. (1)

Question 8: We would be interested to hear views on how decommissioning might work in these scenarios, for example whether non-functioning turbines could or should be left in situ until the rest of the windfarm or array can be decommissioned, and what the risks of this approach might be, or any other risks or opportunities relating to the idea of "step-down" decommissioning.

2.26. A total of 21 respondents answered this "open" consultation question.

2.27. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- Useful to retain flexibility on this issue depending on circumstances (13)
- Better dealt with through consent conditions (5)
- Decommissioning is the final phase of an offshore wind farm project's life cycle and does not apply to repairing / replacing individual turbines or parts of arrays during the operational phase (2)
- Broadly in favour of this approach. This methodology would also allow for the most resource efficient recovery of assets (2)
- A life cycle analysis of the step-down approach compared to complete site end of life removal should be considered up front (1)
- Disadvantages may include the costs and environmental impacts associated with multiple operations to remove WTG's at different stages (1)
- Variation to Aids to Navigation, ERCoP and Notices to Mariners will be important for ensuring safety to vessels and mariners (1)
- In general OREI should be removed all at once to restrict disturbances (1)
- A staged decommissioning programme would be the most appropriate mechanism and reduce risks to other sea users. However, if assets are to remain onsite unused, a guarantee from the assets' owner should be required to ensure the equipment is maintained to a suitable standard (1)
- Not a problem for small devices which just reverse install (1)

Question 9: do the proposals in this consultation have any financial, regulatory or resource implications for you and/or your business?

2.28. A total of nine respondents answered the "closed" consultation question on whether the proposals in this consultation have any financial, regulatory or resource implications for them or their business. Eight respondents stated that yes, the proposals would have implications, whilst one said no, they would not.

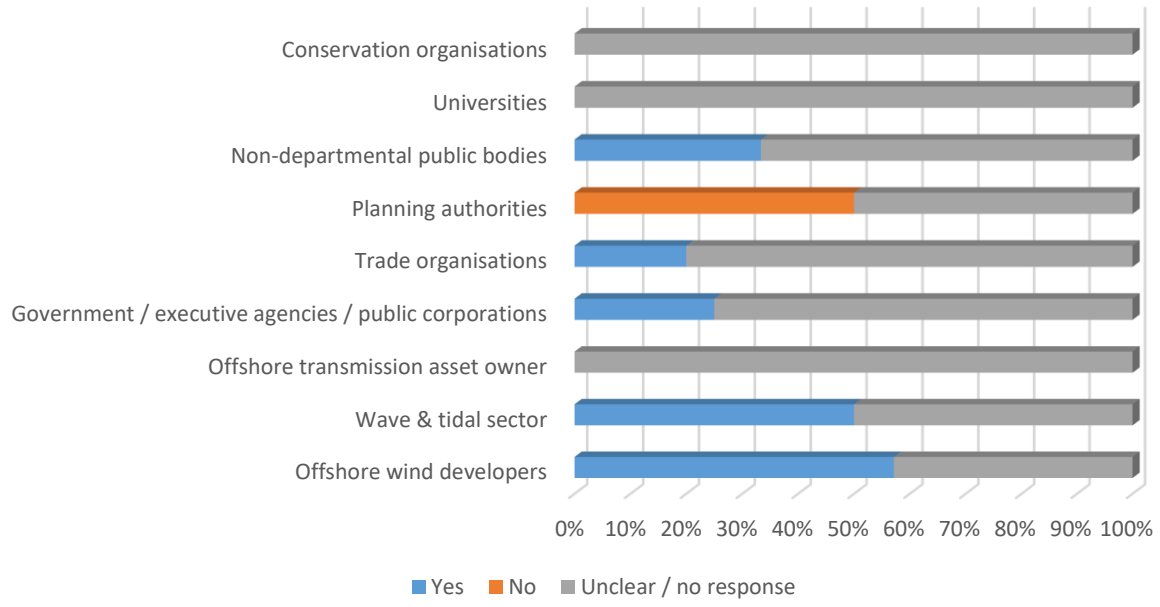
2.29. The respondent types stating that **the proposals would have financial, regulatory or resource implications** for them were offshore wind developers, wave and tidal sector, Government / executive agencies / public corporations, trade organisations and non-departmental public bodies.

2.30. The respondent type stating that **the proposals would not have financial, regulatory or resource implications for them** was planning authorities.

Table 9. Do the proposals in this consultation have any financial, regulatory or resource implications for you and/or your business?

Group Type	Yes	No	Unclear / no response	Total
Offshore wind developers	4	0	3	7
Wave & tidal sector	1	0	1	2
Offshore transmission asset owner	0	0	1	1
Government / executive agencies / public corporations	1	0	3	4
Trade organisations	1	0	4	5
Planning authorities	0	1	1	2
Non-departmental public bodies	1	0	2	3
Universities	0	0	1	1
Conservation organisations	0	0	1	1
Group respondents (total)	**8**	**1**	**17**	**26**
Individuals	**0**	**0**	**2**	**2**
Total	**8**	**1**	**19**	**28**

Figure 7. Do the proposals in this consultation have any financial, regulatory or resource implications for you and/or your business?



2.31. Below is a summary of points raised by respondents, listed in descending order of number of respondents raising each point. The number in brackets

next to each indicates the number of respondents making the point in response to this question. It should be noted that some respondents repeated the same point across responses to more than one question.

- The accrual of securities poses a significant financial cost to developers and obtaining approval prior to offshore construction could lead to increased construction and commissioning costs for projects through any delays to the construction programme (3)
- Resource implications for consultees (2)
- The proposals in the guidance document have inherent financial, regulatory and resource implications. These implications are already addressed by the company as part of the requirements to produce a DP. The functions of the DP and commitments made within it will also have financial, regulatory and resource implications (1)
- Would welcome clarity on what information will be treated in confidence (1)
- Up-front payment or the accrual of securities poses a significant financial cost to developers and the requirement to submit draft decommissioning programmes 18 months in advance of works commencing is disproportionate for small projects and will lead to increased construction and commissioning costs for projects through delays to the construction programme. Such financial and consenting restraints also arguably run contrary to the Scottish Government's declaration of a climate emergency, given their potential to restrict and delay the development of renewable projects (1)
- A number of the consultation's proposals, such as reviews of decommissioning plans, have the potential to cause delays to construction programmes and therefore risk significantly hiking the cost of commissioning or cause knock-on impacts where developers lose a whole season, and therefore a year to construct a project (1)
- There are financial, regulatory and resource implications for developers - In summary these relate to the timing of financial securities, timescales for approval and review of decommissioning programmes, extensive requirements relating to provision of costs information, confidentiality of financial information and the role and involvement of the Finance and Constitution Committee (1)

3. Other Issues Raised by Respondents

3.1. Other points raised by respondents, either in the 20 responses to question 10, which asked "do you have any other comments", or elsewhere in their responses beyond the scope of the foregoing questions, include the following. They are listed in descending order of number of respondents raising each point. The number in brackets next to each indicates the number of respondents making the point. It should be noted that some respondents repeated the same point across responses to more than one question.

- Inclusion of VAT on financial security is an unnecessary additional cost to consumers (2)

- Guidance should be flexible on post-decommissioning survey / report requirements to allow compatibility with licencing conditions (2)
- Guidance on repowering and life extension scenarios would be welcome in future guidance updates or separately (2)
- Request for clarity on the process for requesting, and the range of, exceptions to full removal (2)
- Consider how good practice can be captured and shared, perhaps through workshops (2)
- Question what the aims and objectives of post-decommissioning monitoring are. How long will post-decommissioning monitoring be expected to last, and how this will be controlled when CES leases have ended? (2)
- It would be helpful to have clarity on which regime will apply to applications beyond the territorial seas limit (2)
- Need to ensure Scottish projects can complete with the rest of the UK, particularly through allowing scrappage costs to be taken into account and treatment of VAT in territorial waters (1)
- The application of the guidance should be consistent with the approach taken in England and Wales, in order to enable Scotland to remain competitive within the wind industry in a UK context (1)
- A joined-up approach between CES, TCE, MS and MMO in their assessments of a project would be required for consistency in the consenting and regulation of a project (1)
- Further clarity on monitoring requirements is needed (1)
- It is welcomed that the guidance clarifies that in some cases full removal is not achievable (1)
- Clause 7.5 reference to extreme cost is vague and should be clarified for each type / category of offshore installation(1)
- More information about the role of the Finance and Constitution Committee (FCC), particularly the review process and timescale, would be useful. (1)
- Expand flow diagram in Annex B to clarify how reviews relate to the accrual of financial securities. (1)
- Scotland's offshore industry differs from the rest of the UK and mirroring BEIS is not entirely appropriate (1)
- Given Scotland's deeper water and ambition for floating wind technology for future ScotWind sites, the presumption for complete removal of structures could become both more costly for Scottish sites and less necessary for protection of navigation (1)
- Given how far off actual decommissioning could be - allowing for flexibility in the application of this guidance is key (1)
- Clause 7.12 - Can MS provide clarification on what they mean by 3rd party involvement in providing evidence that the site has been cleared? This is not included in the BEIS guidance (1)
- No details are included in the guidance on how the Developer can access / draw down the decommissioning funds or how funds are to be released. Draw down of securities should be possible prior to individual decommissioning activities taking place. (1)
- Should future revisions of a projects decommissioning programme demonstrate a decrease in decommissioning costs then a project should be able to draw on that difference immediately (1)

- A definition of ‘partial decommissioning’ is required (1)
- Need an explanation on how the presumption towards removal can be reconciled against the more likely approach within the offshore renewables sector of repowering / upgrading of facilities (1)
- Definition of a responsible person as highlighted explicitly in Section 3.1 (1)
- Request for clarity on nature of criminal offences mentioned in guidance (1)
- Offshore windfarms should be treated on a case by case basis (1)
- Parent company guarantees are more economic as they are securitised against the business portfolio of assets, and therefore create economies of scale as opposed to individual 3rd party sourced securities. Ultimately, they can therefore lower the cost to consumers of offshore wind technology (1)
- Understand the objection to parent company guarantees is that their value can diminish if the credit quality of the parent company were to deteriorate. However, there are well established methods to mitigate this. For example, a credit trigger clause could be included, whereby if a measure of the parent’s credit rating dropped below a predetermined level, the provider would need to revert to a third-party form of guarantee (e.g. a Letter of Credit or similar type of security). This could be backed by a provision for a charge over parent assets if the alternative security was unavailable (1)
- Changes in policy or scope after CfD award / financial close can affect project viability (1)
- Further clarity would be welcome on the role of the Scottish Parliament’s Finance and Constitution Committee: whether it will consider plans in private, and what information will be included in the Committee’s reports (1)
- What is the likely review period for the guidance? What would be the expected impact of any changes on implementation? For instance, if the decommissioning programme is changed, is it subject to re-approval and what would be the requirements here? If the conditions are always changing, does a developer ever have an approved plan? (1)
- Clarity requested on definition of ‘partial decommissioning’, is this flexible? (1)
- It may be beneficial for this guidance to expand on the range of exceptions that may be considered (in addition to a developer / owner referring to the oil and gas comparative assessment methodology for considering and demonstrating the case for decommissioning) and under what circumstance a comparative assessment may be appropriate – this type of expanded guidance is given in the oil and gas guidance equivalent with reference to OSPAR (particularly decision 98/3 which wouldn’t apply here) and the Petroleum Act for pipelines etc. Where it is clear that a recognised exemption applies, industry would argue that it should not be a requirement to provide costings and security for full removal (1)
- Would welcome clarity on whether Marine Scotland intend to publish its own version of the oil and gas comparative assessment – better tailored to offshore renewables’ industry (1)
- Developers should not remain liable indefinitely for infrastructure that is left in situ (1)
- Offshore infrastructure may actually create valuable habitats (1)
- The business of commercial fishing could be wiped out if regulators do not have the power to control the licensing system adequately. This applies to the whole process, but in the context of this consultation, if decommissioning fails

to occur, the loss of fishing grounds is redoubled and the concurrent loss of protein to the human food chain would be disastrous (1)

- Would like to see clarification within the guidance document regarding how Scottish Ministers would handle the decommissioning of the equipment that is left behind when a company goes into administration or liquidation (1).
- The current inclusion of paragraph 4.11 makes the proposed process for managing decommissioning responsibilities completely untenable for EMEC. If introduced as outlined then this may prevent EMEC continuing to operate(1)
- Post-decommissioning: request for further detail on the requirement around third-party evidence, described in 7.12, as this is not required under the BEIS guidelines (2)
- For Scotland to maintain and build upon its world lead, the draft decommissioning guidance should be amended to allow distinctions to be made between (for example) first generation wave devices, pre-commercial tidal arrays and commercial wind farms (1)
- Rather than pursuing a two-track approach where up-front payment and mid-life accrual are the only two options, a more proportionate approach is recommended. One that recognises that there are now companies in the tidal energy sector which pose a far lower risk than (for example) the early wave developers, but are not yet at the same level as commercial offshore wind (1)
- Need for definitions of certain terms and for the guidance to reflect further on the current differences between offshore wind (fixed and floating), tidal stream and wave energy converters and how this guidance may need to be revised to reflect the differences between scales in deployment and the hydrodynamic environments in which these operate (1)
- Review period for any agreed decommissioning plans might differ depending on scale and technology type. Suggest that projects are reviewed to understand whether general principles can be applied depending on technology / scale etc (1)
- If there is likely to be, through decommissioning, the need to consider onshore activities, would welcome further consideration of this aspect in conjunction with SEPA, Local Authorities, ports etc (1)
- How are decommissioning activities between the mean high and low water springs and above the mean high water spring mark to be addressed? (1)
- The guidance states that if Scottish Ministers have decided OREI should be left in situ for environmental reasons, the developer / owner should not be responsible for post-decommissioning monitoring, maintenance and management of the structure. Need clarification on who would be responsible for this, and the consideration of it would be appropriate for the developer to have a time-limited requirement to monitor the remaining installation to ensure the environmental assumptions made are being realised (1)
- It is recommend that, in anticipation of a scenario arising where it is most environmentally friendly to keep structures in situ, when planning and installing OREI developers / owners must ensure they use material that will not degrade the marine environment if left in it long term (1)
- The Strategic Environment Assessment argues that there is insufficient insight into scale, nature, extent and timescales of future developments to analyse impacts of decommissioning. Believe that efforts can be made to estimate the scale and scope of the challenges, opportunities, impacts and benefits. The

University of Leeds, for example, has calculated the volumes of materials currently deployed and permitted to be commissioning in the near future for offshore wind, and this offers a basis to provide such estimates. This would help government and industry to plan for decommissioning. Happy to discuss initial headline results with Marine Scotland (1)

- The decommissioning programme should include evidence on how the offshore renewable energy infrastructure has been designed to optimise the economic, social, technical and environmental values at every stage of the infrastructure's lifecycle including the end of use. This will require a feedback to the design of the offshore renewable energy infrastructure itself, and not just to the decommissioning programme. This should be added into the processes outlined in Chapter 5 and in the Flowchart in Annex B. This statement, in 5.5, is too non-committal "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" and has to be strengthened. This means that the timelines indicated in point 5.6, "Scottish Ministers expect that final drafts of decommissioning programmes should be submitted for approval no later than 6 months in advance of construction, and that the first drafts should be submitted about 18 months in advance", will have to be longer in advance to include the design phase of the offshore renewable energy infrastructure (1)
- Having a one-stop-shop is a considerable improvement compared to North Sea Oil & Gas decommissioning. This places a huge responsibility on Marine Scotland, and requiring expertise that may not traditionally have been within its remit. Recommend carrying out an analysis of expertise and capacity required, and to prepare a plan to supplement any capacity gaps should they be present in Marine Scotland (1)
- Waste is to be brought to shore and re-used, recycled or incinerated. This potentially means that materials could be brought ashore at a suitable port and then transported elsewhere via the strategic road network either by HGV or by abnormal loads. Transport Scotland would generally request that the applicant identifies the port facilities to be used, road routes to be used, the expected volume of any HGV movements and whether any abnormal load movements would be required on the trunk road network (1)
- For the purposes of occupational health and safety, the Construction (Design and Management) Regulations 2015 require that the Client (in the case of an offshore wind farm the operator / developer) compile a health and safety file which should contain sufficient information needed to ensure health and safety during any subsequent work, such as maintenance, cleaning, refurbishment or demolition (1)
- The operator must then retain the file and ensure it is available to anyone who may need it for as long as it is relevant – normally the lifetime of the windfarm – to enable them to comply with health and safety requirements during any subsequent project. It can be kept electronically, on paper, on film, or any other durable form (1)
- If a client disposes of their interest in the windfarm they must give the file to the individual or organisation who takes on the client duties and ensure that the new client is aware of the nature and purpose of the file. The client must

arrange for the file to be made available to a person involved in managing the safe demolition of the wind farm or any structure within (1)

- As technology changes the method selected for demolition may be changed but only by a methodology that is as a minimum equally as safe (1)
- It was noted that “Where safety concerns are being cited in arguments against full decommissioning, this is likely to be given greater weight if written evidence from a third party (such as the Health and Safety Executive or a known decommissioning contractor) can be provided”. HSE are unable to provide this service (1)
- Transport Scotland, NatureScot and the MOD all want to be consulted on DPs at appropriate points.
- It will be important to ensure that where any deferral of the approved decommissioning programme for a scheme is considered, 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 (1)
- Expand Section 7.15 to account for the risks to aviation and need to notify airspace uses / operators on relevant marine renewable developments that may cause some form of navigational hazard to air traffic (1)
- Support these thorough proposals (1)
- Helpful if final guidance could signpost who to engage with and when (1)
- Decommissioning may be pollution in and of itself (1)
- Greater clarity around geographical scope of the scheme and how the relevant limits of the scope can be identified (1)
- Growing body of evidence that full removal may not be the optimal environmental option, and would urge Government to keep their approach under review (2)

The following technical alterations were also requested:

- Section 7.9 – the insertion of “appropriate” ahead of General Lighthouse Authority.
- The reference to “OFTO Revenue” in the table in clause 9.32 should be updated to reflect the fact that OFTO projects typically have a 25-year licence period.
- Change references to ‘SNH’ to ‘NatureScot’.

4. Appendix 1: Consultation Respondents

Organisation or Individual	Organisation group	Name of organisation or individual
Organisation	Non-departmental public body	Northern Lighthouse Board
Organisation	Planning Authority	Aberdeenshire Council
Organisation	Offshore transmission Asset Owner	(withheld)
Organisation	Planning Authority	Galloway National Park Association
Organisation	Government agency	Maritime & Coastguard Agency
Organisation	Offshore wind developer	EDPR
Organisation	Non-departmental public body	Zero Waste Scotland
Organisation	Conservation organisation	National Trust for Scotland
Organisation	Offshore wind developer	Innogy Renewables UK Ltd
Organisation	Offshore wind developer	Red Rock Power Ltd
Organisation	University	University of Leeds
Organisation	Trade organisation – shipping	UK Chamber of Shipping
Organisation	Offshore wind developer	SSE Renewables
Organisation	Non-departmental public body	NatureScot (formerly SNH)
Organisation	Offshore wind developer	Vattenfall
Organisation	Offshore wind developer	EDF
Organisation	Trade organisation – renewables	Scottish Renewables & Renewables UK
Organisation	W & t developer	The European Marine Energy Centre Ltd (EMEC)
Organisation	Tidal developer	Nova Innovation
Organisation	Government agency	Transport Scotland
Organisation	Public corporation	Crown Estate Scotland
Organisation	Trade organisation – energy	Energy UK
Organisation	Offshore wind developer	Scottish Power Renewables
Organisation	Non-ministerial government department	Ofgem
Organisation	Trade organisation – fishing	Scottish Fishermen's Federation
Organisation	Trade organisation - wider	Oil & Gas UK
Individual		(Withheld)
Individual		