Response ID ANON-1FA5-8JSH-A

Submitted to Scottish Government Review of Permitted Development Rights - Phase 3 Submitted on 2023-08-23 21:53:18

- 2.1 Domestic Renewables: Solar energy equipment
- 1 Do you agree with the proposed permitted development rights for solar panels attached to domestic properties in conservation areas?

Yes

Please comment in support of your answer:

The IOA is primarily interested in noise related issues. Since domestic solar panels are not commonly associated with adverse noise issues/reasonable cause for complaint the IOA has no adverse comments to make in relation to the proposal.

2 Do you agree with the proposed permitted development rights for the installation of solar panels on outbuildings ancillary to, and within the curtilage of, a dwellinghouse?

Yes

Please comment in support of your answer:

The IOA is primarily interested in noise related issues. Since domestic solar panels are not commonly associated with adverse noise issues/reasonable cause for complaint the IOA has no adverse comments to make in relation to the proposal.

- 2.2 Domestic Renewables: Air source heat pumps
- 3 Do you agree with the proposed amendments to permitted development rights for air source heat pumps?

No

Please comment in support of your answer:

No, as the proposed amendments (for example that one ASHP is permitted per dwelling, or that the externally sited part of the ASHP must not be within 1 metre of any window of a habitable room) are based on aesthetics and are not primarily based on the noise impact that such machines can have on neighbouring properties. There are several issues raised with the reliability of the current MCS-020 methodology being able to ensure that problem noise situations are not created by its use in its current form.

Amending the permitted development rights to allow for one ASHP per dwelling as opposed to one per building could result in significant impacts in relation to noise. It should be noted that the basis of MCS-020 is that there should be no more than one ASHP per building, and therefore the assumptions that underpin the scheme would be invalidated by these proposals. It is strongly recommended that the Scottish Government does not pursue minimum set back distances from other dwellings or physical size restrictions as a means of mitigating impact from noise. The impact from noise is a function of its sound power level alongside the distance from the receiver and physical size. Significant adverse impacts cannot be avoided through limitations on physical size and setback distances alone.

It has been widely reported that the fixed limit approach recommended in MCS-020 is at odds with other guidance on assessing the impact of noise from fixed plant in the UK.

The Institute of Acoustics (IOA) jointly with the English-based CIEH (Chartered Institute of Environmental Health) has published its own professional advice on noise impact assessment from air source heat pumps (ASHPs) and the IOA and CIEH have also jointly published a spreadsheet calculation procedure when considering the noise impact of ASHP units.

Both of these information sources are available for download here: https://www.ioa.org.uk/heat-pump-briefing-notes-calculation-sheet-ioa-cieh

The main themes raised in the guidance relate the existing MCS-020 not taking into account background noise levels lower than 40dB LAeq(T), highlighting that the noise impact of the same unit would be greater in a low noise environment than in one with a background noise level close to 40dB(A). The consequence of this is that under the existing permitted development scheme an ASHP unit could be 'permitted development' when assessed in terms of the MCS-020 methodology, but could subsequently be a cause for complaint due to the noise it creates being in relative terms considerably higher than a low background noise level in a particular location (e.g. a courtyard where the buildings screen out a significant amount of background noise).

The MCS-020 methodology does not take into account the potential cumulative effect of several ASHP units each serving one individual property e.g. in a block of flats.

The MCS-020 methodology does not take into account the characteristics of the noise output from the unit under consideration. There is discussion of this aspect in the attached IOA/CIEH published guidance documents.

Alternative assessment methodologies e.g. BS4142 take into account the background noise representative of the location, and the characteristics of the

source noise.

When a proposed ASHP development requires Planning permission due to it not meeting the requirements of MCS-020, then it is likely that in the ensuing Planning process the Planning Authority will require a noise impact assessment to be undertaken for the proposed development in terms of a standard other than the MCS-020 methodology. Presently there is no real published centralised Planning guidance in Scotland on this circumstance and so individual Planning authorities may request a noise impact assessment to be undertaken to meet local circumstances e.g. a more stringent absolute noise level criteria (possibly based on noise rating (NR) curves) or require an assessment in terms of BS4142, or require the more stringent of both, or may have some other criteria depending on the circumstances of the proposal (e.g. if there are any cumulative effect issues due to existing or proposed units nearby in that location).

It should be noted that the cumulative level of several ASHP units could be largely determined by the sound power level of the loudest unit, depending on the location of the units involved.

The attached IOA guidance material on this subject also highlights the potential cost of providing acoustic enclosures for ASHP units, and that these might not always be successful. The guidance also highlights the fact that if a complaint in relation to 'noise nuisance' from one neighbour's ASHP unit affecting another property is substantiated via investigation then this could have serious repercussions if action is required to be taken by a local authority environmental health service (i.e. a family living in a domestic property may, in a worst case scenario, be left with no means of heating from the system).

The IOA understands that presently Sustainable Acoustics and Apex Acoustics are jointly conducting research into the current ASHP microgeneration certification scheme for many of the reasons highlighted. The IOA awaits the findings of this research which could inform an amendment to the scheme. Any further response on the issue of the suitability of MCS-020 as the benchmark criteria for permitted development would be more appropriate once the review findings are published.

It is acknowledged that Scottish Government intends to take into account the findings of an ongoing research project into noise from air source heat pumps into the amended PDRs. It would therefore not be appropriate to comment on the proposals as they stand and the IOA should be invited to respond to the next draft following the consideration of the discussed research.

2.3 Domestic Renewables: Ground and water source heat pumps

4 Do you agree that classes 6D and 6E should be amended to include reference to the installation etc of pipework and associated connections required to operate a ground or water source heat pump?

No

Please comment in support of your answer:

Class 6D and 6E permit the installation, alteration or replacement of ground source heat pump (6D) or water source heat pump (6E) within the curtilage of a dwellinghouse or a building containing a flat.

The current PDE does not consider the potential impact from noise on the residents. Further, the proposed changes to include pipework within the PDE does not address the fact that noise could be transferred within the building through inadequately designed heat pumps or pipework. The recommendations contained within BS 8233:2014 should be adopted within the current framework.

The Institute of Acoustics (IOA) jointly with the English-based CIEH (Chartered Institute of Environmental Health) has published its own professional advice on noise impact assessment from ground source heat pumps (GSHPs) which can be downloaded at https://www.ioa.org.uk/heat-pump-briefing-notes-calculation-sheet-ioa-cieh. The main sources of noise from GSHPs are from the pump and the compressor unit.

Often this apparatus can be located within a building to reduce the impact of any environmental noise impact on neighbouring properties.

The suggested amendment to the permitted development system for domestic ground/water source heat pumps are as follows;

2.3.4 We propose to amend classes 6D and 6E to clarify that, in addition to the ground/water source pump itself, the PDR also cover the associated underground pipework and any above-ground connections to the pump. The pipework would need to be wholly within the curtilage of the dwellinghouse or flatted building.

We would agree with the suggested amendments to these classes, but point out that in terms of noise impact considerations, the current permitted development system for these machines makes no reference to the noise generated by such development, and neither does the proposed amendment.

For a development where e.g. a ground source heat pump was proposed in a domestic property which is structurally connected to others (e.g. a semi-detached house, or flats, etc.) then the indoor siting of pump apparatus could lead to sound transmission problems between the properties within the building if not properly installed to take this into account.

2.4 Domestic Renewables: Free-standing wind turbines

5 Do you agree with the proposed amendments to permitted development rights for free-standing domestic wind turbines?

Please comment in support of your answer:

No. The proposed amendments on height and standoff distance are based on aesthetics, not on the noise impact that such machines can have on neighbouring properties.

With respect to noise emissions, current permitted development rights for free-standing domestic wind turbines are conditional on the proposed turbine in the proposed location meeting the noise impact standards set out in MCS-020.

Scottish Government is correct to acknowledge that arbitrary standoff distances do not provide sufficient protection from significant adverse impact due to noise. It should be noted that the approach considered in this section to remove the setback distance is directly at odds with the approach relating to ASHPs which endorses new minimum setback distances.

Given that the free-standing turbines will still be required to meet the same overall noise limit, which is currently enforced. The IOA agrees with the proposal to remove the minimum setback distance.

6 Do you agree with the current list of designated areas where the permitted development rights do not apply, noting that the list does not currently include national parks or National Scenic Areas?

Don't know

Please comment in support of your answer:

The IOA has no particular view on this issue.

2.5 Domestic Renewables: Wind turbines attached to a dwelling

7 Do you agree with the proposed new permitted development rights for wall or roof-mounted wind turbines attached to a dwellinghouse?

No

Please comment in support of your answer:

Previous comments made in relation to the current MCS-020 calculation procedure, and the ongoing review of this standard, apply in answer to this question as in the answer to earlier questions. It is considered that a lack of ongoing general maintenance of maintenance of such turbines could lead to additional noise issues being caused by component parts through wear and tear on the nearest surrounding properties.

The noise impact on the nearest properties (including noise characteristics and noise emission levels) would again be determined mainly by the sound power level of the machine and by distance.

On many new build housing estates the distances between one detached dwellinghouse and the next is often a matter of metres as developers maximise the amount of units which can be built on a particular development site. There is no acoustic mitigation solution (e.g. acoustic barriers or enclosures) available to reduce the noise impact from such machines. The owner of such a machine would have no control over when the wind was likely to be stronger and blowing in a direction from their turbine to the nearest neighbouring house or garden area and so couldn't pre-emptively prevent potential adverse noise impacts on the occupiers of the neighbouring properties.

Provided that the domestic turbines attached to a dwelling adhere to the MCS-020 limits, there is no reason for the turbines to be treated differently in terms of noise whether they are free-standing or attached to a dwelling.

However, the current guidance is not clear on whether or not the MCS-020 limits should be enforced for the nearest residential property to the building with the turbine attached or to the building with the turbine itself. It should be noted that the MCS-020 limits should be enforced at any and all buildings, including the building which the turbine is attached to. By way of example, if this is not properly clarified there is a risk that a building owner / landlord installs a turbine to the building and introducing a significant adverse impact to the tenant, without any means of protection for the tenant.

In addition, there is a risk of structure-borne noise causing adverse impact, which would not be controlled by MCS-020. An update to MSC-020 to address structure-borne noise would be required to enable the proposed extensions to PDRs to be enacted satisfactorily.

2.6 Domestic Renewables: Flues for certain heating systems

8 Do you have any comments on the potential removal of permitted development rights for flues for wood burning stoves (including wood burners and log burners), biomass boilers and biomass heating systems?

Don't know

Please comment in support of your answer:

The IOA understands that the main issue for consideration with the proposed changes is one of air pollution and air quality impact, which the IOA would not wish to comment on, being outwith its sphere of interest.

Environmental noise is also regarded as a 'pollutant'.

In the context of domestic biomass heating systems these are not a known source of environmental noise impact on surrounding neighbouring properties. Larger domestic biomass heating systems or combined heating and power (CHP) systems (more than just a wood burning stove) tend to be located within a utility room inside domestic properties and any noise from e.g. water pump systems associated with such installations would generally not be seen to be any different from the noise generated by pump systems associated with other forms of heating technology within domestic buildings in terms of environmental noise or noise transmission between buildings.

However larger CHP systems serving numerous domestic properties tend to be purpose built systems generally within purpose built buildings and these can be a source of more notable environmental noise emissions via flues or other ventilation systems in the locations where these open to the outside air.

The IOA generally sees no real change in terms of the potential for adverse environmental noise effects from the proposed changes with regard to domestic type biomass heating installations. However we would advise that permitted development should not cover the scenario of a 'district heating system' serving multiple properties, which is a more specialised undertaking.

9 Noting that current permitted development rights (PDR) cover the installation, alteration or replacement of flues, should any removal of these PDR be limited to installation of new flues, or also prevent existing flues being altered or replaced under PDR?

Please comment:

In terms of environmental noise there is no issue to respond to in terms of alterations to flues or the replacement of flues for the type of apparatus previously discussed.

- 3.1 Non-Domestic Renewables: Solar panels
- 10 Do you agree with the proposed amendments to class 6J permitted development rights for solar panels attached to non-domestic buildings?

No

Please comment in support of your answer:

Solar panels themselves do not generate noise. However, often overlooked is the noise associated with the ancillary infrastructure, such as inverters and transformers. While it is likely that the scale of developments that will fall under this PDE are not likely to generate significant magnitudes of noise, there is the potential for significant adverse impact due to badly designed and/or laid out developments, particularly given the scale of developments that would fall under this PDR are greater than those for residential use. It is recommended that any extension to PDRs to include non-domestic solar panels are required to adhere to noise limits as per ASHPs and free-standing turbines. The IOA would be willing to work with Scottish Government to consider an appropriate limitation and compliance.

11 Do you have any comments on the potential to amend the current restrictions that apply to solar panels on non-domestic properties (class 6J) and solar canopies in parking areas (class 9M) within 3km of airports and technical sites associated with civilian and military air traffic services?

No

Please comment in support of your answer:

Solar panels themselves do not generate noise. However, often overlooked is the noise associated with the ancillary infrastructure, such as inverters and transformers. While it is likely that the scale of developments that will fall under this PDE are not likely to generate significant magnitudes of noise, there is the potential for significant adverse impact due to badly designed and/or laid out developments, particularly given the scale of developments that would fall under this PDR are greater than those for residential use. It is recommended that any extension to PDRs to include non-domestic solar panels are required to adhere to noise limits as per ASHPs and free-standing turbines. The IOA would be willing to work with Scottish Government to consider an appropriate limitation and compliance.

12 Do you agree with the proposed new permitted development rights for solar panels within the curtilage of non-domestic buildings?

No

Please comment in support of your answer:

Solar panels themselves do not generate noise. However, often overlooked is the noise associated with the ancillary infrastructure, such as inverters and transformers. While it is likely that the scale of developments that will fall under this PDE are not likely to generate significant magnitudes of noise, there is the potential for significant adverse impact due to badly designed and/or laid out developments, particularly given the scale of developments that would fall under this PDR are greater than those for residential use. It is recommended that any extension to PDRs to include non-domestic solar panels are required to adhere to noise limits as per ASHPs and free-standing turbines. The IOA would be willing to work with Scottish Government to consider an appropriate limitation and compliance.

- 3.2 Non-Domestic Renewables: Solar canopies in parking areas
- 13 Do you agree with the proposal to extend the Class 9M permitted development rights to allow these to apply to solar canopies generally, rather than only those for which the primary use is charging of electric vehicle?

Please comment in support of your answer:

Solar panels themselves do not generate noise. However, often overlooked is the noise associated with the ancillary infrastructure, such as inverters and transformers. While it is likely that the scale of developments that will fall under this PDE are not likely to generate significant magnitudes of noise, there is the potential for significant adverse impact due to badly designed and/or laid out developments, particularly given the scale of developments that would fall under this PDR are greater than those for residential use. It is recommended that any extension to PDRs to include non-domestic solar panels are required to adhere to noise limits as per ASHPs and free-standing turbines. The IOA would be willing to work with Scottish Government to consider an appropriate limitation and compliance.

14 Do you agree that any extension of Class 9M permitted development rights to be for the purposes of producing electric power generally, should not have a maximum power generation capacity?

No

Please comment in support of your answer:

Solar panels themselves do not generate noise. However, often overlooked is the noise associated with the ancillary infrastructure, such as inverters and transformers. While it is likely that the scale of developments that will fall under this PDE are not likely to generate significant magnitudes of noise, there is the potential for significant adverse impact due to badly designed and/or laid out developments, particularly given the scale of developments that would fall under this PDR are greater than those for residential use. It is recommended that any extension to PDRs to include non-domestic solar panels are required to adhere to noise limits as per ASHPs and free-standing turbines. The IOA would be willing to work with Scottish Government to consider an appropriate limitation and compliance.

- 3.3 Non-Domestic Renewables: Air source heat pumps
- 15 Do you agree with the proposed permitted development right for air source heat pumps on non-domestic buildings?

No

Please comment in support of your answer:

The IoA does not agree with the proposed extension to PDRs to cover non-domestic ASHPs. The context for change refers to MCS-020, but the proposed change only includes non-acoustic limitations on the ASHPs. As a result there is a reasonably likelihood for significant adverse impact from this proposed change. It is recommended that the extension of this PDR is reconsidered following the publication of the research discussed above and appropriate noise limits are adopted.

such machines can have on neighbouring properties. As highlighted on pages 2-6 in this response there are several issues raised with the reliability of the current MCS-020 methodology being able to ensure that problem noise situations are not created by its use in its current form.

It is recognised in the consultation text that the MCS-020 guidance (currently under review) does not apply to non-domestic ASHPs.

The IOA understands that presently Sustainable Acoustics and Apex Acoustics are jointly conducting research into the current ASHP microgeneration certification scheme for many of the reasons highlighted in this response. The IOA awaits the findings of this research which could inform an amendment to the scheme. Any further response on the issue of the suitability of MCS-020 as the benchmark criteria for permitted development would be more appropriate once the review findings are published.

- 3.4 Non-Domestic Renewables: Ground source and water source heat pumps
- 16 Do you agree with our proposed amendments to class 6l permitted development rights for ground and water source heat pumps on non-domestic buildings?

No

Please comment in support of your answer:

The current PDE does not consider the potential impact from noise on the residents. Further, the proposed changes to include pipework within the PDE does not address the fact that noise could be transferred within the building through inadequately designed heat pumps or pipework. The recommendations contained within BS 8233:2014 should be adopted within the current framework.

In terms of noise impact considerations, the suggested permitted development system for these machines makes no reference to the noise generated by such development.

For a development where e.g. a ground source heat pump was proposed in a non-domestic property which is structurally connected to others (e.g. a commercial property connected to a semi-detached house, or flats, etc.) then the indoor siting of pump apparatus could lead to sound transmission problems between the properties within the building if not properly installed to take this into account.

4. Thermal Efficiency: Replacement windows

17 Do you agree with the proposed permitted development rights for replacement windows of domestic buildings located in conservation areas?

Yes

Please comment in support of your answer:

The IoA notes that the changes could inadvertently reduce the number of people exposed to internal noise levels above the threshold over which adverse impacts are observed. However, any earlier acoustic requirements for windows at the properties should be retained as a minimum when replacements are introduced.

18 Do you have any comments on the conditions that we propose the permitted development rights for replacement windows would be subject to?

Yes

Please comment in support of your answer:

Certain new build properties might have a Planning condition requiring a certain acoustic performance standard for the window and associated room ventilation system in order to be effective against an existing external environmental noise source (such as road traffic noise).

In such circumstances any permitted development for the replacement of such windows should also have a requirement for these to meet the equivalent acoustic performance as the windows these replace.

19 Do you agree with the proposal to align non-domestic buildings with domestic buildings, as regards permitted development rights for replacement windows? Are there any types of non-domestic building that should be excluded?

No

Please comment in support of your answer:

Certain existing non-domestic properties might have a Planning condition requiring a certain acoustic performance standard for the window and associated ventilation system in order to be effective against an existing external environmental noise source (such as road traffic noise). Such properties can include hotel accommodation, hospitals, etc.

Certain existing non-domestic properties might have a Planning condition requiring a certain acoustic performance standard for the window and associated ventilation system in order to be effective in preventing noise escape from the building and adversely effecting neighbouring residential properties.

In such circumstances any permitted development for the replacement of such windows should also have a requirement for these to meet the equivalent acoustic performance as the windows these replace.

5.1 Electricity Undertakings: Overview

20 Do you agree that class 40 permitted development rights should be amended to clarify that they can be applied by statutory undertakers for the purposes of 'smart meter communications' and the 'distribution' and 'interconnection' of electricity as well as its 'generation', 'transmission' and 'supply'?

No

Please comment in support of your answer:

The IoA disagree with the proposed changes to increase the current limitation on PDRs from enclosed substations of 29m2 to 40m3. The proposed changes do not allow for the consideration of any potential noise impact. While the PDR covers internally housed substations, which are less likely to result in significant adverse impact than external substations, the PDR does not control the replacement of existing infrastructure with much louder replacements or protect residents against groundborne or structureborne noise as a result of poorly mounted infrastructure.

While different in scale (i.e. not specific to this PDR in question), there are numerous examples in Scotland of substations being extended under existing PDR rights which have resulted in complaints due to increased noise. This is perhaps most evident at Beauly Substation, which was served a noise abatement notice. In spite of the different scale, there is no guarantee of this outcome being avoided purely by way of the developments which fall under this PDR being smaller.

Electricity substations, in particular substations where the noise producing apparatus such as transformers are not contained within a building are known to produce characteristic low frequency tonal environmental noise. The noise from such electricity substations can be particularly noticeable in urban areas with residential properties in relatively close proximity.

Other issues can be caused by substation equipment not being isolated from the bedrock on which these are built and this can result in ground borne issues through vibration.

5.2 Electricity Undertakings: Class 40

5.4 Electricity Undertakings: Substation infrastructure

21 Do you agree with the proposed amendments to the provisions of class 40 permitted development rights which relate to new or replacement substations?

No

Please comment in support of your answer:

No. Due to the potential for environmental noise and other problems from the location of new electricity substations, or from the alteration of existing stations, there should be no changes to widen the scope of permitted development.

The IoA disagrees with the proposed changes to increase the current limitation on PDRs from enclosed substations of 29m2 to 40m3. The proposed changes do not allow for the consideration of any potential noise impact. While the PDR covers internally housed substations, which are less likely to result in significant adverse impact than external substations, the PDR does not control the replacement of existing infrastructure with much louder replacements or protect residents against groundborne or structureborne noise as a result of poorly mounted infrastructure.

While different in scale (i.e. not specific to this PDR in question), there are numerous examples in Scotland of substations being extended under existing PDR rights which have resulted in complaints due to increased noise. This is perhaps most evident at Beauly Substation, which was served a noise abatement notice. In spite of the different scale, there is no guarantee of this outcome being avoided purely by way of the developments which fall under this PDR being smaller.

5.5 Electricity Undertakings: Communications Lines

22 Do you agree with the proposal to allow the replacement of communications lines in National Scenic Areas and Sites of Special Scientific Interest under class 40 permitted development rights provided that the design, height or position of the replacement line matches the original?

Don't know

Please comment in support of your answer:

No comment

23 Do you have any thoughts on the potential to provide for the installation or replacement of communications lines of a greater length than 1,000m under class 40? If so, do you have a view on an appropriate alternative threshold?

No

Please comment in support of your answer:

No comment

5.6 Electricity Undertakings: Site Investigation Works

24 Do you agree with the proposal to extend the range of site investigation works that can be carried out under class 40?

Don't know

Please comment in support of your answer:

No comment

25 Do you consider that there are any designated areas where permitted development rights for certain site investigation works should be restricted? Should there be any limitations on the scale of certain intrusive site investigation works permitted, for example, the size of trial pits?

Yes

Please comment:

From the perspective of noise impact caused by intrusive site investigation works these works can be prolonged by encountering rock seams of depths or type not initially anticipated by the contractor meaning that e.g. the drilling has to go on for a longer time period (many more days) than was first anticipated.

Environmental noise from such activities should adhere to the relevant industry standards (which allow relatively high noise levels) and the impact of such noise sources (albeit temporary) would be greatest on locations where e.g. there was a local hospital, school, residential or care facility, hotel, or residential area.

5.7 Electricity Undertakings: Fences, gates, walls and other means of enclosures

26 Do you agree with the proposed introduction of specific permitted development rights enabling electricity undertakers to erect, construct, maintain or improve gates, fences, walls or other means of enclosure up to 3m in height?

No

Please comment in support of your answer:

The IoA disagree with the proposals. Often where substation infrastructure has been developed in proximity to residential properties, noise mitigation is embedded in the design in the form of site layout. The introduction of acoustically reflective walls, which could be erected using the proposed changes to the PDR, could result in noise levels at residential amenities increasing as a result of new reflective paths for sound to propagate.

This eventuality could be controlled through limiting this PDR to palisade fencing, which will not introduce the risk of elevated noise levels.

5.8 Electricity Undertakings: Development of Operational Land

27 Do you agree with the proposed removal of prior approval requirements that apply to certain works under class 40 permitted development rights?

No

Please comment in support of your answer:

The IoA do not agree with changes to the permitted development rights which could result in the development of operational land which included the alteration of a noise producing site to the extent that the noise produced following the development results in a greater (and potentially unacceptable) impact on the nearest neighbouring properties.

The current systems requiring prior notification and approval from planning authorities allows the planning authority to consider the likelihood of the proposed changes introducing an adverse noise impact. Removing this mechanism could result in the introduction of significant adverse impact as a result development under this PDR.

There are numerous examples in Scotland of substations being extended under existing PDR rights which have resulted in complaints due to increased noise. This is perhaps most evident at Beauly Substation, which was served a noise abatement notice. The mechanism for planning authorities to review and approve changes to operational land in theory limits the likelihood of this occurrence.

28 Please provide any further views you may have on the proposals in Chapter 5 on the permitted development rights associated with electricity undertakings.

Please comment:

The IoA do not agree with changes to the permitted development rights which could result in the development of operational land which included the alteration of a noise producing site to the extent that the noise produced following the development results in a greater (and potentially unacceptable) impact on the nearest neighbouring properties.

The current systems requiring prior notification and approval from planning authorities allows the planning authority to consider the likelihood of the proposed changes introducing an adverse noise impact. Removing this mechanism could result in the introduction of significant adverse impact as a result development under this PDR.

There are numerous examples in Scotland of substations being extended under existing PDR rights which have resulted in complaints due to increased noise. This is perhaps most evident at Beauly Substation, which was served a noise abatement notice. The mechanism for planning authorities to review and approve changes to operational land in theory limits the likelihood of this occurrence.

6.1 Reverse vending machines

29 Do you agree with the proposed amendments to permitted development rights for reverse vending machines?

No

Please comment in support of your answer:

No. We note that the proposed conditions make no reference to the potential noise impact from the front end or back end from the operation of such machines, which if sited in relatively close proximity to residential properties or other noise sensitive properties, could create an adverse noise impact. We do note that PDR would not apply where the machine would be situated within 15m of the curtilage of a building for residential purposes.

Depending on the sound power level of the machine, whether or not there was a direct line of sight to the receiver location, depending on the noise characteristics of the machine and the background noise of the proposed location we note that a 15m distance could result in a situation where the resulting noise impact was an adverse one.

6.2 Temporary use of land: Shooting ranges

development right)? If such a change were taken forward, do you have views on the potential justification for exempting the activities discussed in paragraphs 6.2.4 and 6.2.5?
Yes
Please comment:
It would seem prudent and proportionate to exclude these categories of activities from the permitted development rights as detailed in the consultation given their potential for adverse noise impact.
The IoA agrees with the proposed changes. In its current form there is the provision for land to be used for shooting ranges which could result in significant adverse impact due to noise at nearby residential properties (or other noise sensitive land uses). The fact that the activities may happen fewer than 28 days per calendar year does not negate any potential impact. Given the impulsive nature of noise from shooting ranges, and the fact that impulsive noise is known to have a greater adverse impact than steady state noise, it is considered reasonable for shooting ranges to be excluded from Class 15 of the GPDO.
7. Assessment of Impacts
31 What are your views on the findings of the Update to the 2019 Sustainability Appraisal Report at Annex A?
Please comment:
No comment
32 Do you have any comments on the partial and draft impact assessments undertaken for Phase 3?
No
Please comment:
No comment
33 Do you have any suggestions for additional sources of information on the potential impacts of the proposals that could help inform our final assessments?
No
Please comment:
No comment
About you
What is your name?
Name: Anne Budd
What is your email address?
Email: anne@newacoustics.co.uk
Are you responding as an individual or an organisation?
Organisation
What is your organisation?
Organisation: Institute of Acoustics
The Scottish Government would like your permission to publish your consultation response. Please indicate your publishing preference:
Publish response only (without name)
We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so. Are you content for Scottish Government to contact you

again in relation to this consultation exercise?

Yes

I confirm that I have read the privacy policy and consent to the data I provide being used as set out in the policy.

I consent

Evaluation

Please help us improve our consultations by answering the questions below. (Responses to the evaluation will not be published.)

Matrix 1 - How satisfied were you with this consultation?: Slightly satisfied

Please enter comments here.:

Matrix 1 - How would you rate your satisfaction with using this platform (Citizen Space) to respond to this consultation?: Slightly satisfied

Please enter comments here.: