Marine Noise Registry

Help and Guidance

This document provides help and guidance on how to upload and obtain data from the Marine Noise Registry (MNR).

If you have further questions or queries, please email MNR@jncc.gov.uk.

Contents

1. About The MNR

Underwater noise has the potential to adversely impact marine organisms ranging from fish to marine mammals, for instance by masking sounds used for communication and foraging, displacing animals from important habitats, or by causing physical injuries and even death. Therefore, it is vital to monitor and quantify when and where man-made underwater noise occurs to inform research on the environmental pressures arising from marine noise as well as potential management measures.

JNCC developed, hosts, and maintains the UK Marine Noise Registry (MNR), guided by and on behalf of Defra and the UK's devolved administrations. The MNR was established as a commitment made in the UK Marine Strategy and records data on human activities in UK seas that produce loud, low to medium frequency (10Hz-10kHz) impulsive noise, such as seismic surveys, sub-bottom profiling, impact pile driving, explosive detonations, military sonar, acoustic deterrent devices, and multibeam echo-sounders. Recording data to the MNR is part of licence requirements for many activities, while other activities are not licensed and submit data voluntarily.

Users provide data to the MNR by uploading proposed applications detailing planned noise-producing activities followed by the submission of a close-out report providing an accurate account of the activities after completion. Data specifics include where and when an activity occurred, and, where available, noise source properties such as the frequency, maximum airgun volume, maximum hammer energy, TNT equivalent, sound pressure level and sound exposure level.

The upgraded MNR (2023) introduced two new functionalities: 1) Disturbance Tool, and 2) Cooperation Discussions. The former enables users to assess the potential noise disturbance footprint of their activity and other activities within Special Areas of Conservation for harbour porpoise (*Phocoena phocoena*). The latter enables users to communicate with each other in order to resolve instances when noise limits could be exceeded. Further developments which were released during Spring 2025 introduced further improvements to the Disturbance Tool and user workflows.

In past years, JNCC has published maps and tables depicting the spread of impulsive noise across UK seas . Please visit https://www.data.gov.uk/ to access this data. Users now also have the option to directly obtain custom data from the MNR in the form of GeoPackage files and tables, compiled and produced by JNCC.

The data collated in the MNR can be used for a variety of purposes such as regulatory and academic. For example, the MNR data is used, every six years, for the UK Marine Strategy Assessment of Good Environmental Status of the UK seas. Descriptor 11, Underwater Noise, and in particular the impulsive noise indicator tracks the spatio-temporal distribution of loud, low and mid frequency impulsive sound sources introduced into the marine environment through human activities. The UK Marine Strategy states that such impulsive sounds should be managed to the extent that they do not have adverse effects on marine ecosystems and animals at the population level.

2. System Navigation

The MNR has a base layout that is shared across different pages of the system:

- A collapsible navigation panel to switch between different pages and functionalities.
- A ribbon in the bottom-left corner to open cookie information and settings.
- A 'Help' icon in the top-right corner to download the MNR help guide document.
- A link to the government's guidance on beta phase developments.
- A drop-down menu in the top-right corner to open the account settings and logout.
- A ribbon on the right-hand side to provide feedback to the system developers.
- Links to the terms and conditions, privacy policy, and web framework at the bottom.

Please note that the MNR is not optimised for mobile user and is intended to be used on a desktop computer.

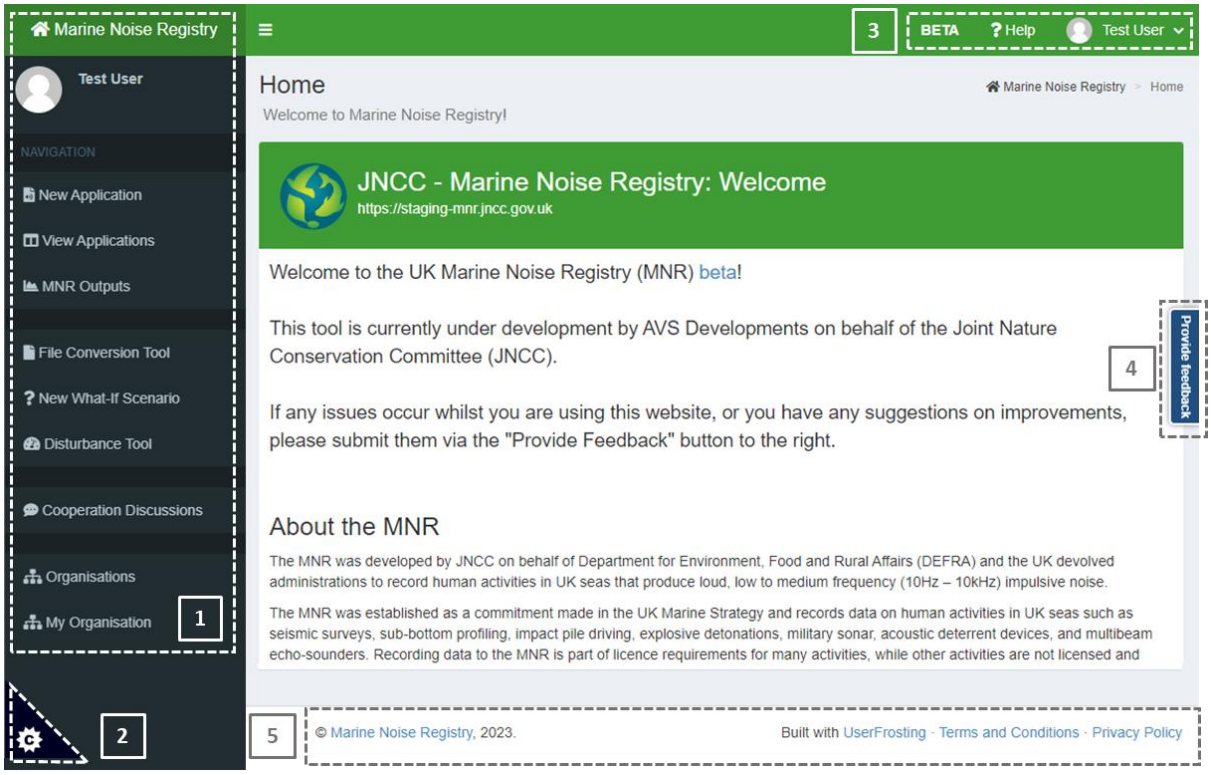

Figure 1. Base layout of a MNR page with: 1) a collapsible navigation panel; 2) cookie settings; 3) links to the beta development guidance, help guide and user account settings; 4) a feedback button; and 5) links to the terms and conditions, web framework, and privacy settings.

2.1. Common System Controls

2.1.1. Panel Controls

Certain panels within the MNR can be expanded or collapsed by users.

- To expand, select the 'plus' icon in the top-right corner of the panel header.
- To collapse, select the 'minus' icon in the top-right corner of the panel header.

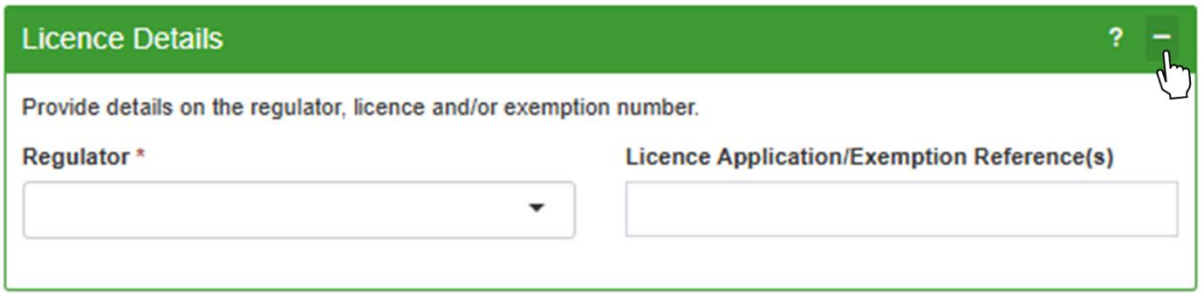

Figure 2. Example of collapsing a panel by selecting the 'minus' icon in the top-right corner.

Users can also view panel-specific guidance and instructions:

- Select the question mark icon in the top right-corner of the panel header.
- Upon selection, the MNR help guide document will open in a pop-up window. The page relevant to the selected panel will display.

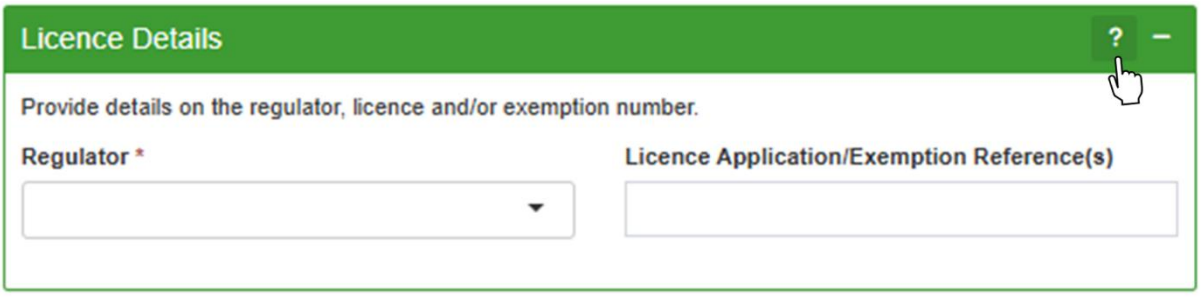

Figure 3. Example of selecting the question mark icon in the top-right corner of a panel to view panel-specific guidance in the MNR help and guidance document.

2.1.2. Selection tools

The MNR uses different controls that enable users to make a selection:

- Tick boxes allow users to select one or multiple custom options from a list.
- Drop-down menus allow users to select one exclusive option from a specified list.
- Text buttons enable users to make a selection or initiate a specific action.
- Tabs allow users to switch between different pages of a panel.
- Radio buttons enable users to select one of multiple available options. Radio buttons are also used to select a specific row of certain tables.

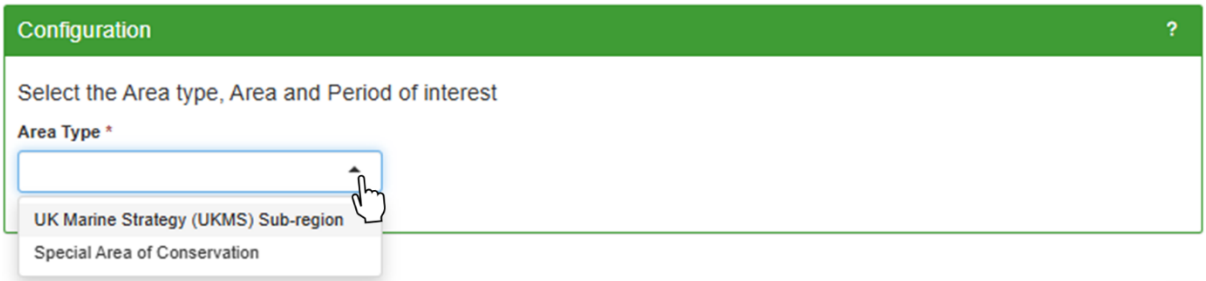

Figure 4. Example of using a drop-down menu which is denoted by a small down arrow.

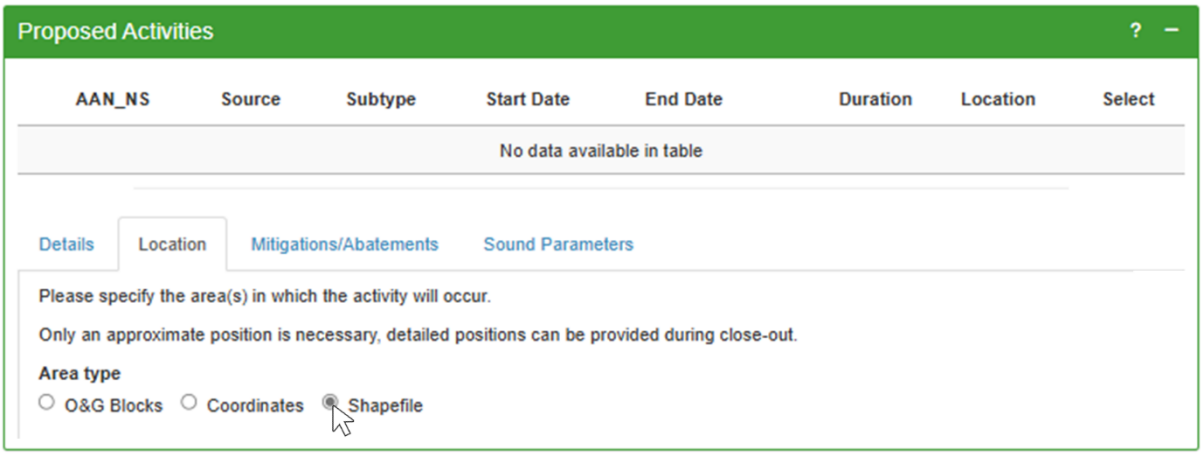

Figure 5. Example of making a selection using a radio button.

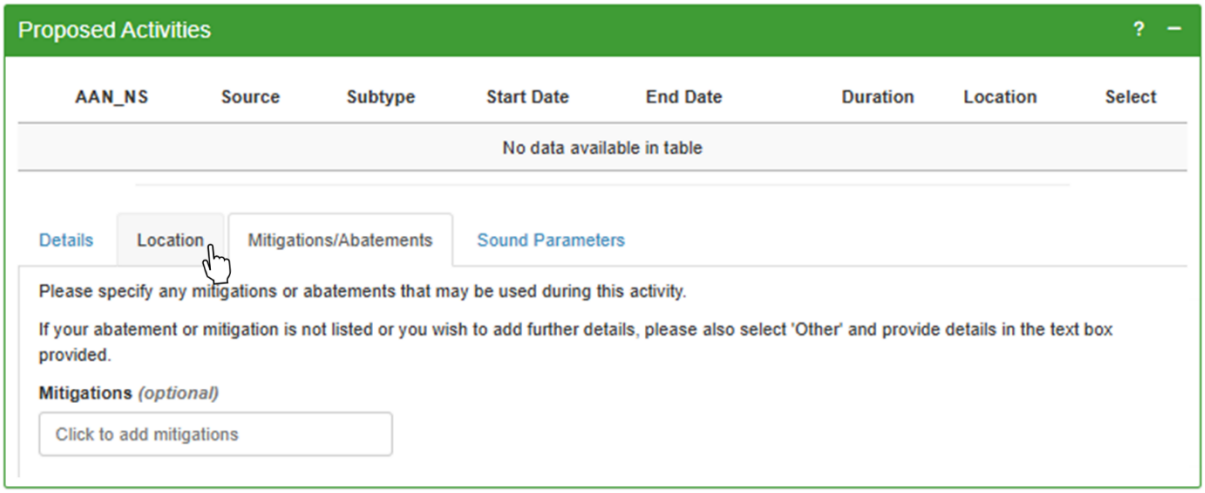

Figure 6. Example of switching between different tabs of the 'Proposed Activities' panel.

2.1.3. Table Controls

Tables provide different controls that enable users to custom filter and display data:

- To change the number of entries that are displayed, navigate to the top-left corner, and select the desired number from the drop-down menu.
- The number of entries displayed in relation to the total number of entries can be found in the bottom-left corner of a table.
- To navigate between different pages of the table, select the respective page number in the bottom-right corner.
- Below each table column header is a search bar to custom filter the table. Several filters can be applied to the table at the same time.
- To clear the selection of a specific table row, select the 'Clear' button.

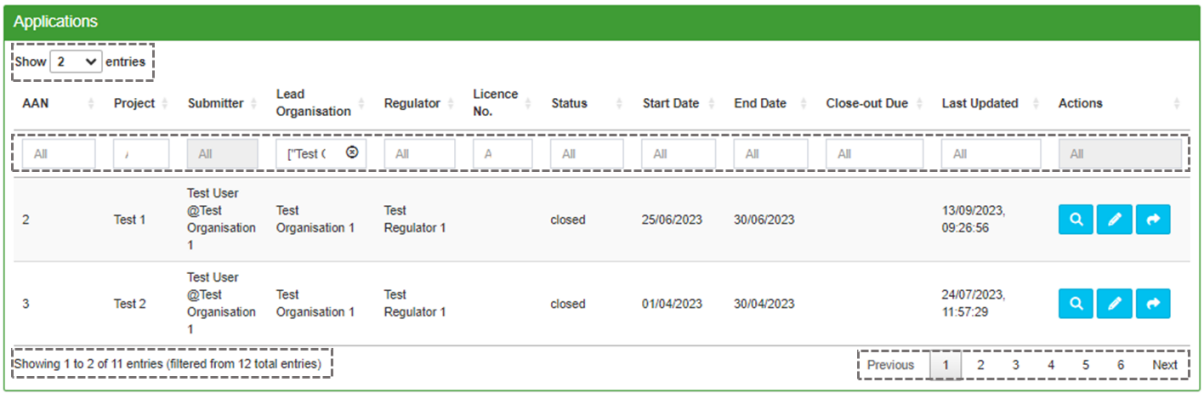

Figure 7. Example view of a MNR table with the different table controls highlighted.

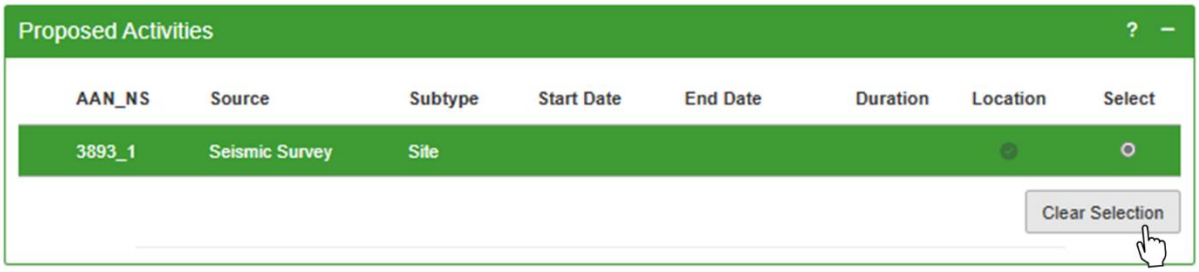

Figure 8. Example of unselecting a specific table row by clicking the 'Clear Selection' button.

2.1.4. Plot Controls

There are multiple plots within the MNR system that provide various controls to adjust the view, zoom, pan, expand the plot, or download a PNG file of the visible plot image.

To use a particular plot control:

- Hover your cursor over the top-right corner of a plot to view the plot controls.
- Hovering over each icon separately will display its function within a pop-up text box.
- Select the control you wish to use.
- Upon selection, your cursor will change to the selected control tool.

Please note that all MNR plots are produced using 'Plotly' and incorporate associated Chart Studio controls and functionalities like Modebar. These controls apply to the 'Geo Plot' (see Section 5.3), the 'GIS Plot ' (see Section 6.2), and visual assessment outputs of the 'Disturbance Tool' (see Section 8.3.4). Please visit the 'Plotly' website for further guidance and information.

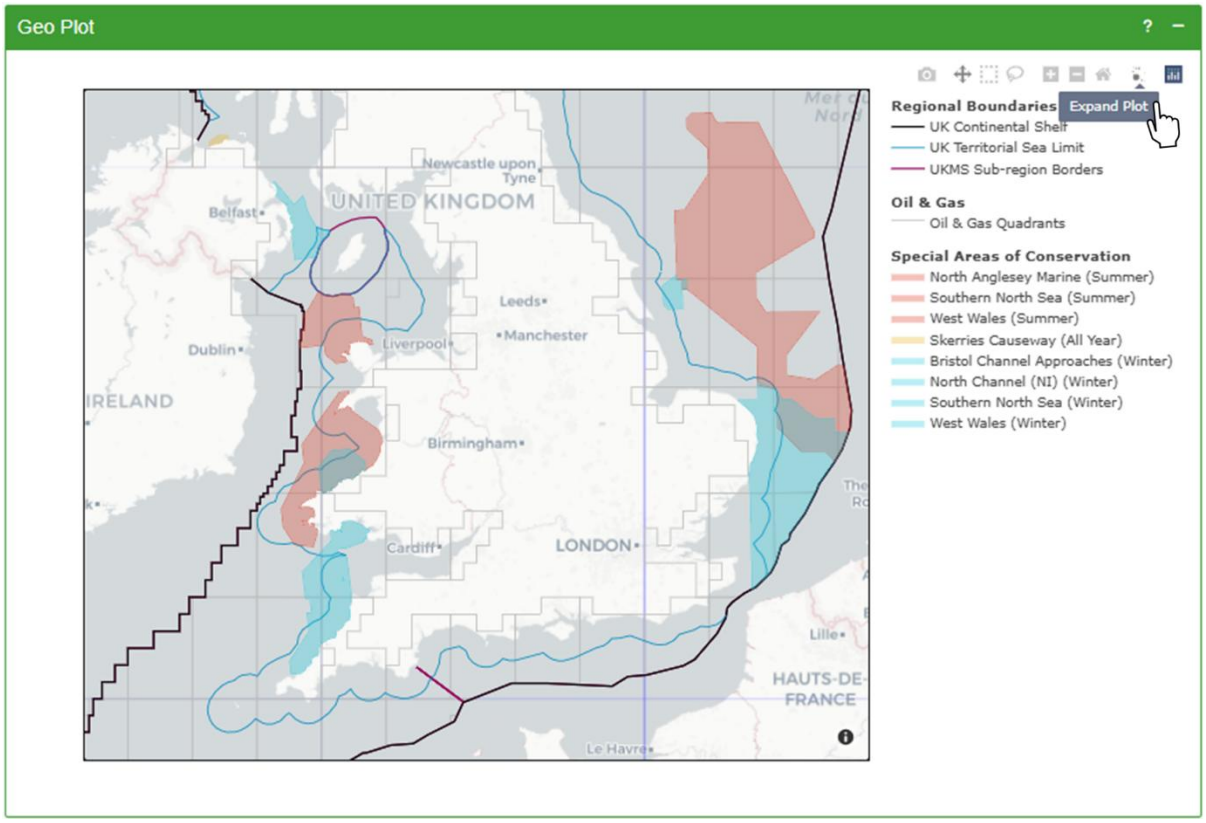

Figure 9. Example of selecting the ‘Expand Plot’ control in the top-right corner of a Geo Plot.

3. User Information

3.1. Registration

To register as a new user, navigate to https://mnr.jncc.gov.uk/.

- Select ‘Sign in / Register’ at the top-right corner of the page.
- A new page with a sign-in window will open.
- Select the ‘Register’ link at the bottom of window to open the registration form.
- Alternatively, select the ‘Register for an account’ link at the bottom of the page.

Please note that individuals are only able to access all MNR functionalities once they are registered as a user. Registered users without organisational membership (see Section 4) are able to view and download data from the MNR Outputs page (see Section 6) but are unable to view and manage applications.

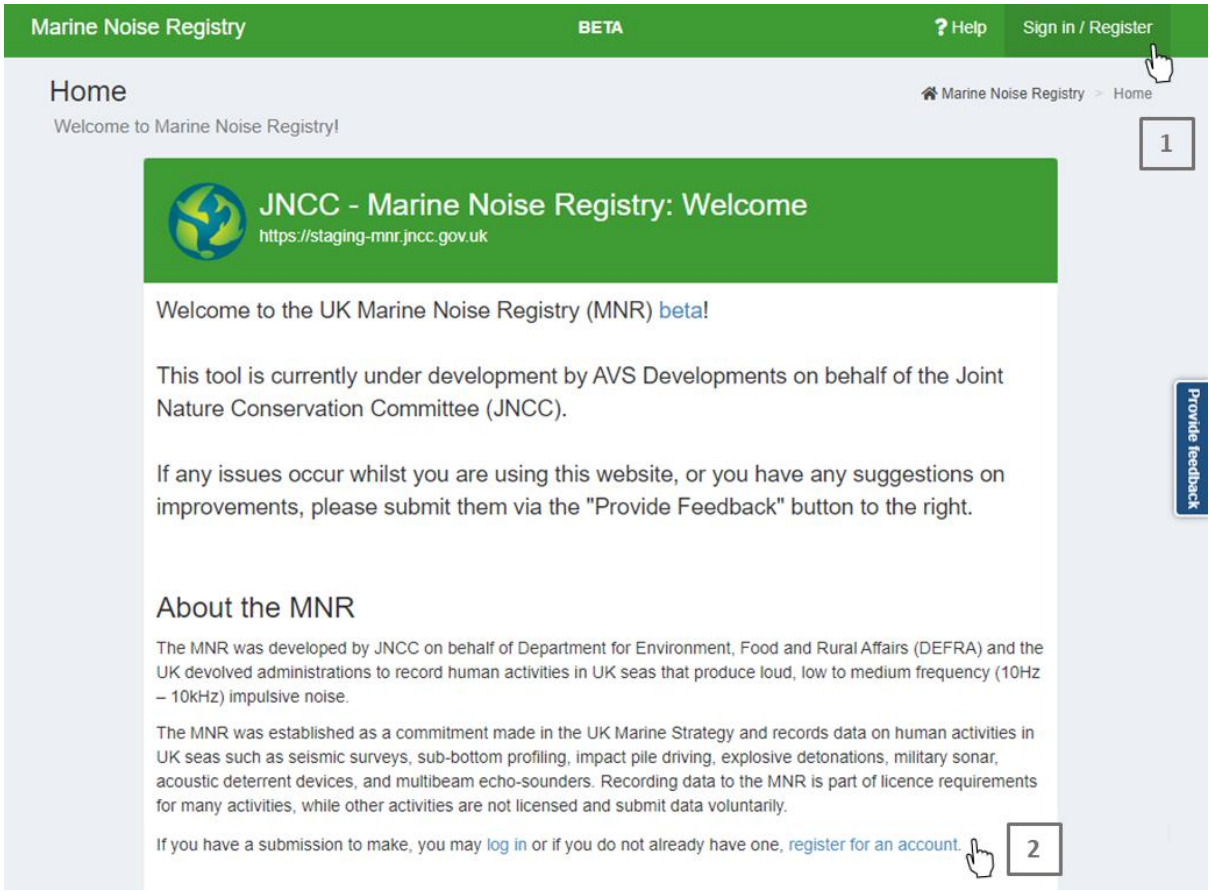

Figure 10. Navigation to the ‘Sign in / Register’ button at the top-right corner of the MNR title page or the in-text link at the bottom.

Complete the registration form with the following information:

- Name and email – Enter your first name, last name, and work email address. Please note that email addresses are case-sensitive.

Please note that email addresses can only be registered to a single user. It is not possible to use a communal email address for all users within an organisation.

- Username – Enter a suitable username or select the 'Suggest' option to have a unique username suggested to you. Please note that usernames are case-sensitive.
- Password – Enter a suitable password that is between 8 and 25 characters long and case sensitive. Confirm your password by re-entering it in the required field.
- Phone Number – Enter your work phone number.
- Email Preferences - Set your email preferences using the toggle switches. To receive email notifications, move the toggle to the right. To switch email notifications off, move the toggle to the left. Please see Section 3.3.1 for more information on the different types of email notifications and how to change preferences.

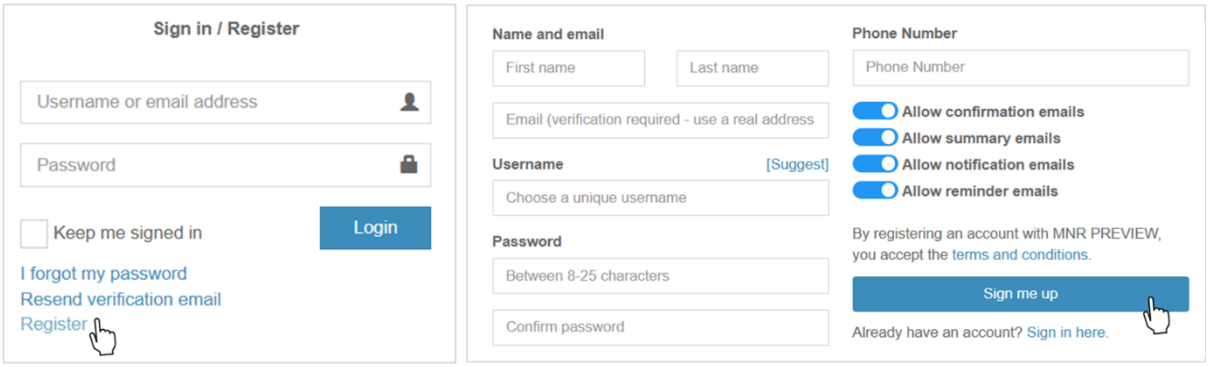

Figure 11. Navigation to the 'Register' link to open the MNR registration form (left). Example of a MNR registration form (right) with fields to enter personal details, select a username, and toggles switches to set email preferences.

To complete your user registration:

- Enter the captcha into the required field.
- Select the 'Sign me up' button.

Please note that by registering, users accept the MNR terms and conditions.

A verification email will be sent to the email address entered during the registration process.

- Please check both your inbox and spam folders.
- Follow the link provided in the email to verify your account.
- After verification, you will be prompted to sign into your account (see Section 3.2).

3.1.1. Resend Verification Email

If you require a new account verification email, navigate to https://mnr.jncc.gov.uk/.

- Select 'Sign in / Register' at the top-right of the MNR title page.
- Select the 'Resend verification email' link.
- Enter the email address you used during the registration process.

- Select the ‘Email the verification link for my account’ button.

A new verification email will be sent to the email address provided.

- Please check both your inbox and spam folders
- Follow the link provided in the email to verify your account.

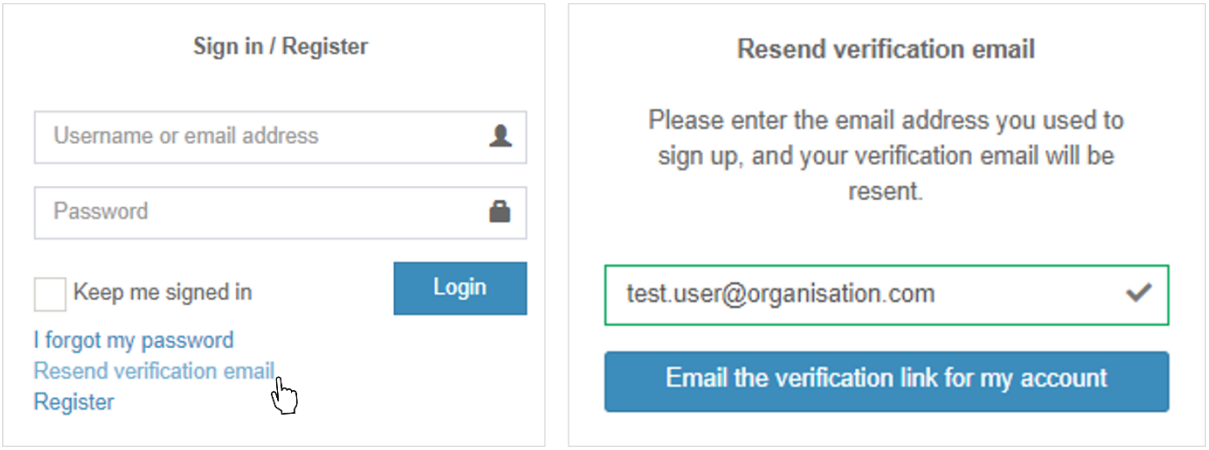

Figure 12. Navigation to the link to request a new account verification email to be sent.

3.2. Sign In

Once your account is verified, navigate to https://mnr.jncc.gov.uk/.

- Select ‘Sign in / Register’ at the top-right of the MNR title page.
- Alternatively, select the ‘Log in’ in-text link at the bottom of the page.

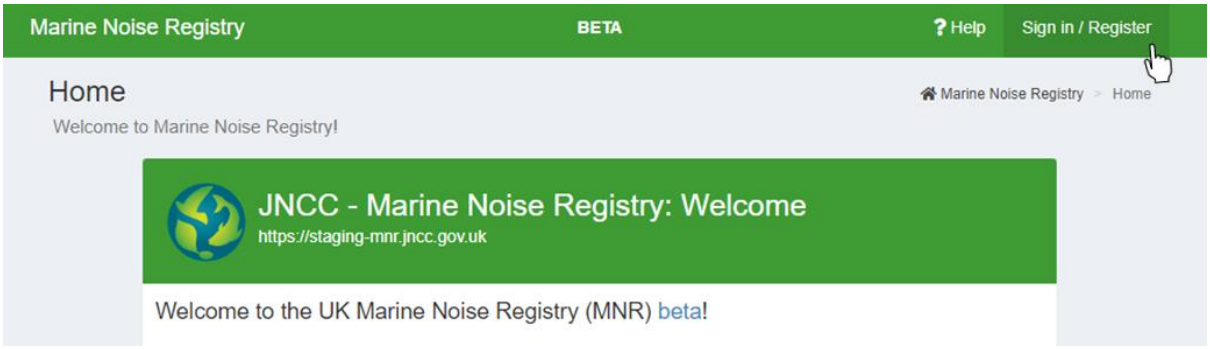

Figure 13. Navigation to the ‘Sign in’ button in the top-right corner of the MNR title page.

A new page with sign-in window will open.

- Enter your username or email address. Please note that this field is case-sensitive.
- Enter your password. Please note that this field is case sensitive.
- Optional: Tick the ‘Keep me signed in’ box to remain signed in.
- Select the ‘Login’ button.

Please note that the ‘Keep me signed in’ option should only be used on a private computer and not on any public access or shared computer.

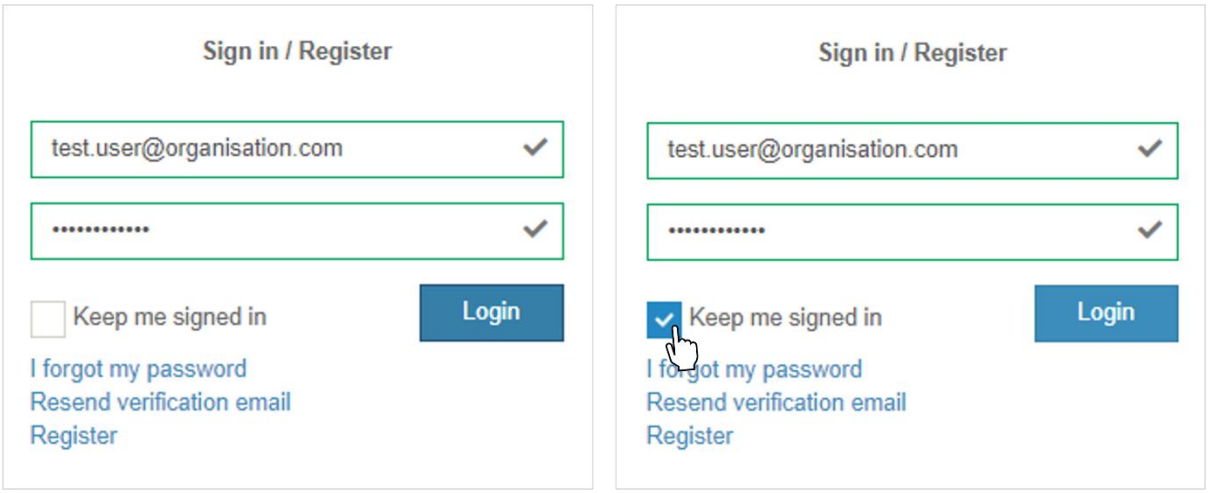

Figure 14. 'Sign in' page for user login. Optional tick box for choosing 'Keep me signed in'.

3.2.1. Forgotten Password

If you have forgotten your password:

- Navigate to https://mnr.jncc.gov.uk/.
- Select 'Sign in / Register' at the top-right of the MNR title page.

A new page with a sign-in window will open.

- Select 'I forgot my password'.
- Enter the email address that was used to register with the MNR.
- Select the 'Email Password Reset Link' button.

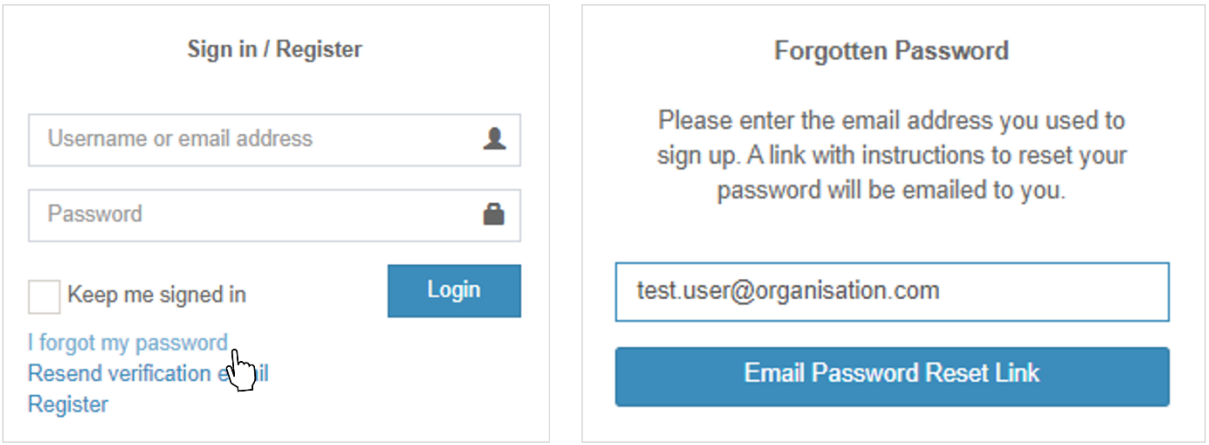

Figure 15. Navigation to password reset link in case of a forgotten password.

If your account exists, an email will be sent to your email address. Please check both your inbox and spam folder.

The email will contain three links to choose from:

- The first link explains the email origin.
- The second link allows you to set a new password.
- The third link allows you to cancel the request.

To reset your password:

- Select the second link to reset your password.
- A new window will open in your browser asking you to create a new password.
- Enter a suitable password. Your password must be between 8 to 25 characters long and is case sensitive.
- Confirm your new password by re-entering it in the required field.
- Select the ‘Set New Password and Sign in’ button.

Please note that if no action is taken, the password reset request will expire on its own after 3 hours.

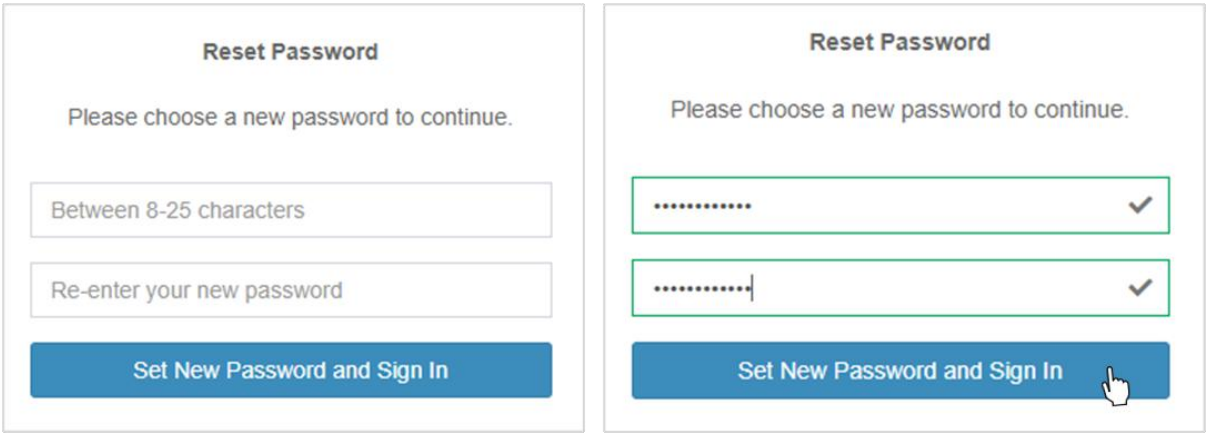

Figure 16. Dialog box allowing users to set a new password if forgotten.

3.3. Account Settings

To open your user account settings:

- Select your username in the navigation panel on the left.
- Alternatively, expand your user profile in the top-right corner and select ‘My Account’.

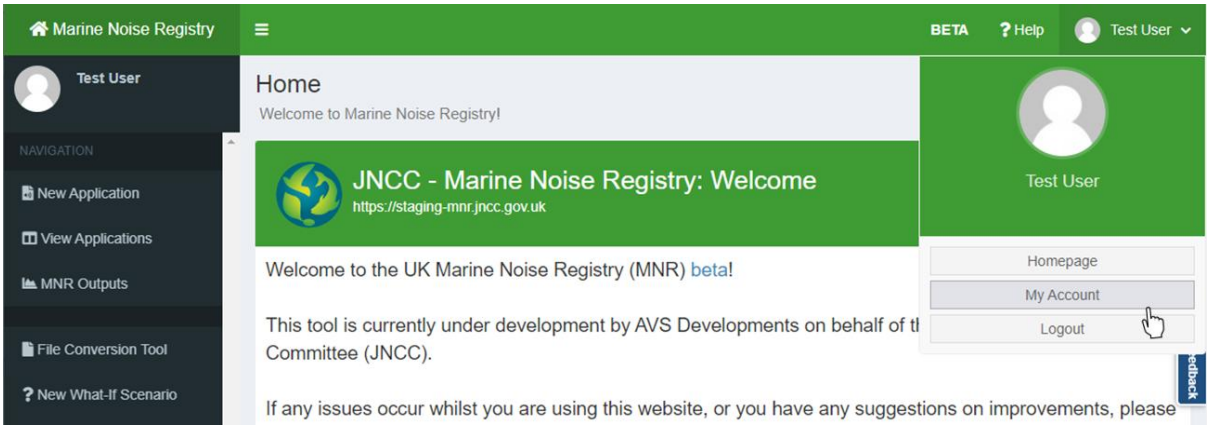

Figure 17. Navigation to the personal user account from the navigation menu panel or user profile drop-down menu.

In your account settings, you can change your first and last name, phone number, email address, email preferences, and password as required.

To change your user profile and/or account settings:

- Navigate to the ‘Profile settings’ and/or the ‘Account settings’ panel.
- Make your changes as required.
- Select the ‘Save’ button to save your changes.
- To cancel, select ‘Reset’ to return to the last saved version of your settings.

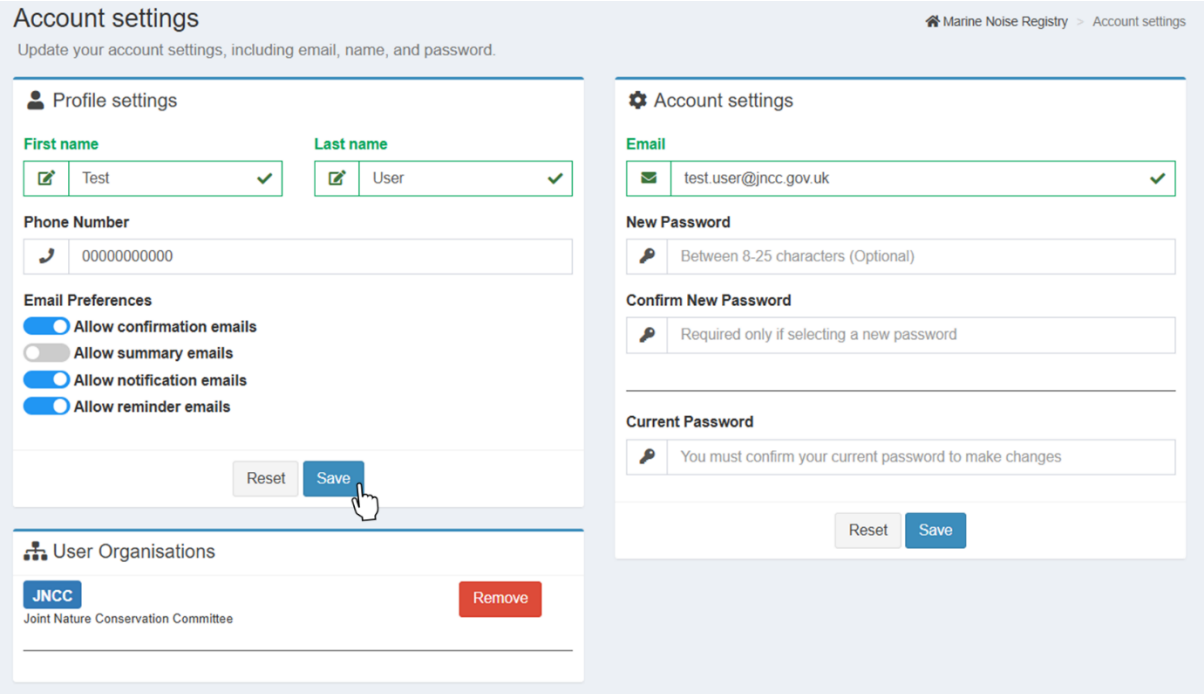

Figure 18. Example of the ‘Account Settings’ page to change user details and account settings.

3.3.1. Email Notifications

Registered users can choose to receive different types of email notifications:

- Confirmation emails – A confirmation when a significant action occurs within your account. For example: An application was submitted, cancelled, or closed.

- Summary emails – A tabulated list of applications relevant to the user/organisation including the close-out due date of applications. These emails are sent once a week.

- Notification emails – A notification of changes to an application relevant to your account. These emails are sent to the administrators of the lead organisation, submitting organisation, and regulator organisation. For example: An application was updated, submitted, closed or cancelled.

- Reminder emails – A notification will be sent to remind users when significant actions are required to happen within their account. For example: A close-out report is due or housekeeping reminders for organisation administrators.

As the default, all types of notifications are toggled on. To change your email preferences:

- Open your account settings (see Section 3.3).
- Navigate to the ‘Email preferences’ heading in the ‘Profile settings’ panel.

- To receive a specific email notification, move the toggle to the right.
- To switch a specific email notification off, move the toggle to the left.
- Select the ‘Save’ button to save your changes.

3.4. Logout

To logout:

- Navigate to your user profile at the top-right corner of any page.
- Click on the arrow to expand a drop-down menu.
- Select ‘Logout’.

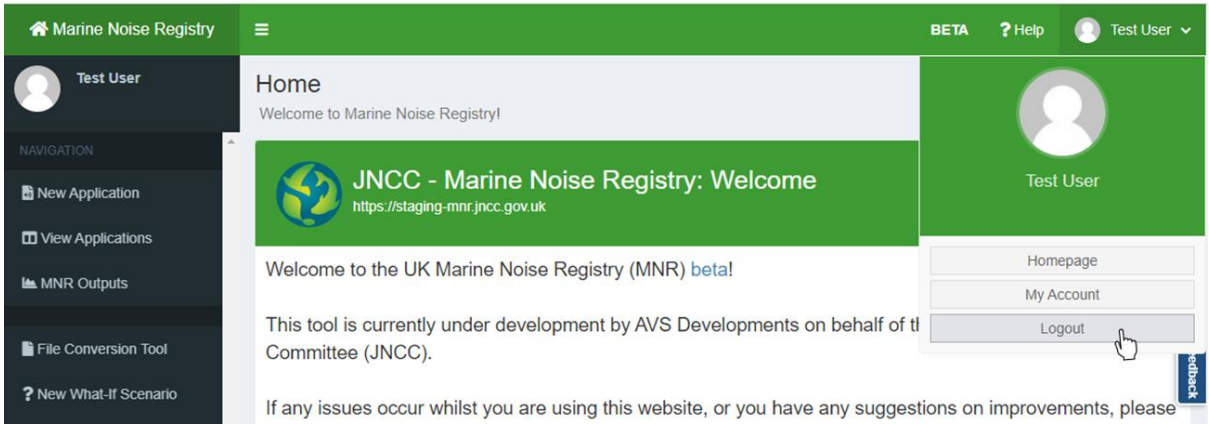

Figure 19. Navigation to the logout button from the user profile drop-down menu.

3.5. Delete Account

It is not possible to delete a user account. If you wish for your personal details to be removed from the MNR, please contact MNR@jncc.gov.uk with your request.

4. Organisational Membership

Newly registered users are only able to access the MNR Outputs page and Disturbance Tool. In order to submit or manage applications, please find and join your organisation as a member. If your organisation is not registered yet with the MNR, it must be registered as a new organisation (see Section 4.3). Once you have been accepted into your organisation, the functionality to submit a new application will become available to you.

4.1. Become A Member

Please join the organisation you are directly working for as a member and not the organisation you may be conducting work on behalf of. If you are uploading data on behalf of another organisation, you need to become an agent for that organisation (see Section 4.2).

Please note that users are only permitted to become a member of one organisation. This must be the organisation that they are a staff member of.

To become a member of an organisation:

- Select the ‘Organisations’ from the navigation menu on the left.
- Search for your organisation under the ‘Organisations’ header of the table.
- Select the ‘Join’ button underneath the ‘Join/Leave’ header of the table.

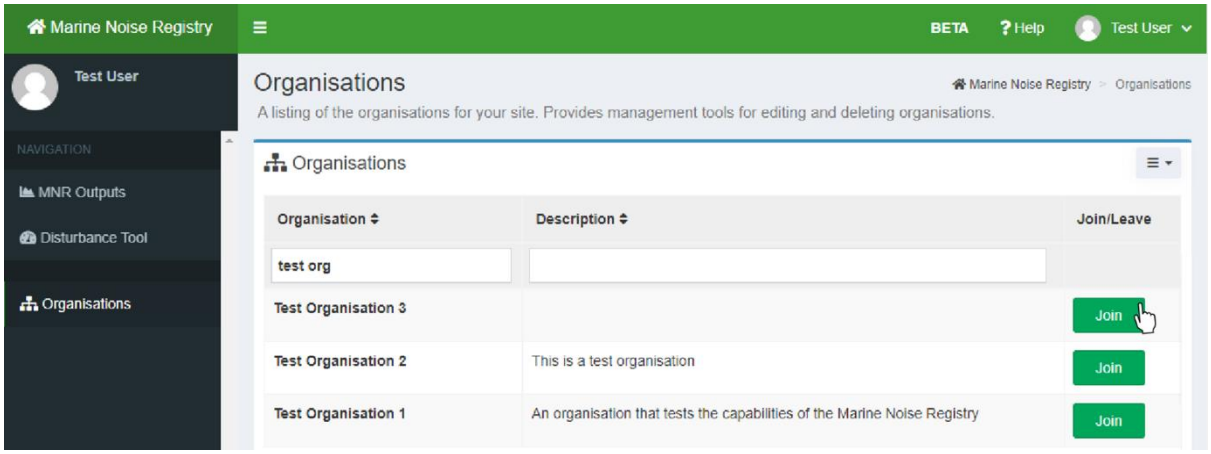

Figure 20. Example of joining an organisation from the ‘Organisations’ table using the ‘Join’ button.

A pop-up window will open asking you to confirm your request.

- Select ‘Yes, join organisation’ to confirm your request to join.
- Alternatively, select ‘Cancel’ to cancel the action.

After you have requested to join your organisation, a notification email will be sent out to the administrator of that organisation who can approve or reject your request. You will receive an email notification informing you of their decision.

4.1.1. Cancel Membership Request

If you wish to cancel your request to join an organisation:

- Select ‘Organisations’ from the navigation menu on the left.

- Search for the organisation under the ‘Organisations’ header of the table.
- Select the ‘Cancel’ button underneath the ‘Join/Leave’ header of the table.
- A pop-up window will open asking you to confirm your request.
- Select ‘Yes, cancel request’.

4.1.2. My Organisation

On the ‘My Organisation’ page, users can view the names of all members, administrators, and agents of their organisation. In addition to this, the names of organisations that their own organisation is acting as an agent for can also be viewed.

Please note that users can only view their own organisation’s profile. It is not possible to view another organisation’s profile even if you are acting as an agent on their behalf.

To view your organisation’s profile, select ‘My Organisation’ from the navigation menu on the left.

Alternatively:

- Navigate to your user profile at the top-right corner of the any MNR page.
- Select ‘My Account’ from the drop-down menu to open your account settings.
- Navigate to the ‘User Organisations’ panel of the ‘Account Settings’ page.
- Select the name of your organisation.

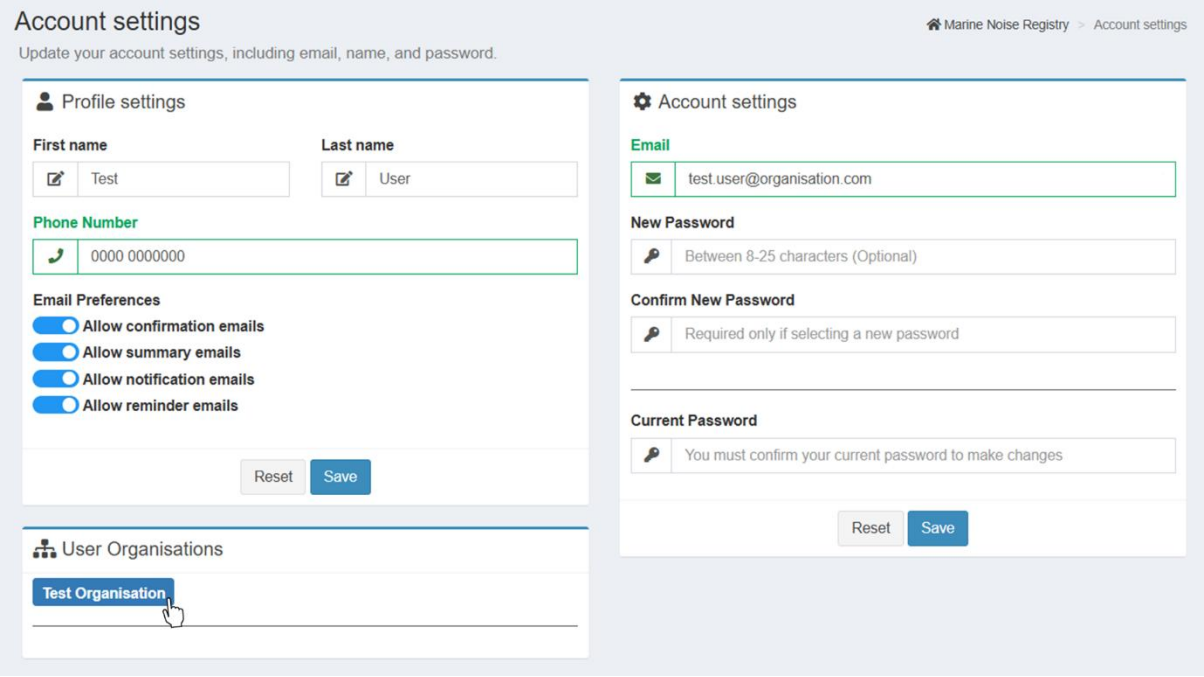

Figure 21. Navigation to the ‘My Organisation’ page from the user ‘Account Settings’ page.

4.1.2.1. Application Change Audit Log

Users can view an audit log for application changes relevant to their organisation. The audit log provides date and time-stamped information on application changes alongside the

respective action, AAN, project name, lead and submitting organisation. The table can be filtered using various table controls (see Section 2.1.3).

To view the audit log:

- Navigate to the ‘My Organisation’ page from the navigation menu on the left.
- Navigate to the ‘Application Change Audit Log’ panel at the bottom of the page.
- Optional: Open the associated application in a new window by selecting the AAN.

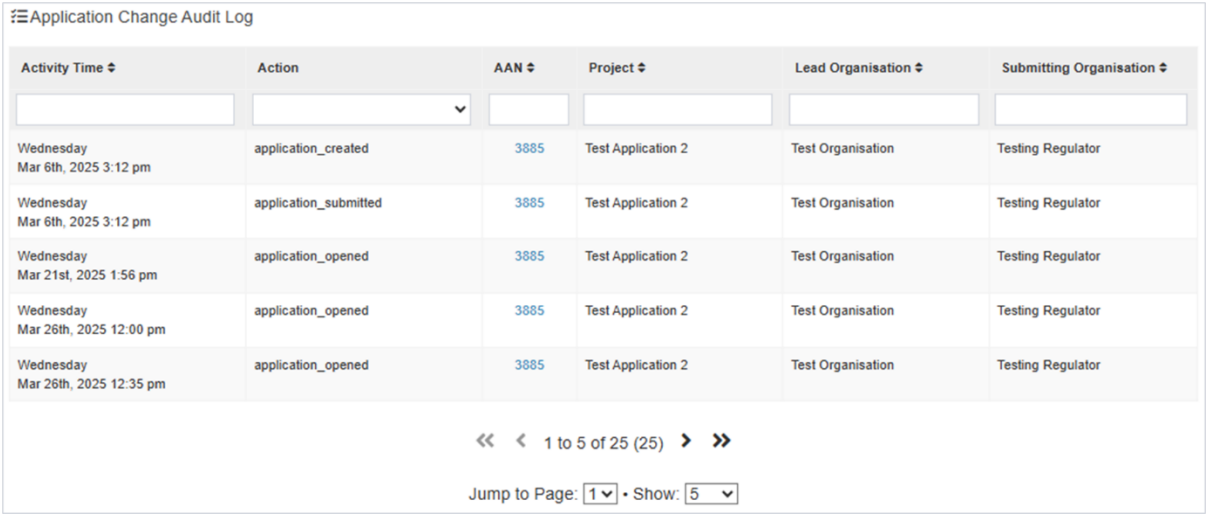

Figure 22. Example view of the Application Change Audit Log on the ‘My Organisation’ page.

4.1.3. Leave Organisation

To leave an organisation as a member:

- Select ‘Organisations’ from the navigation menu on the left.
- Search for your organisation under the ‘Organisations’ header.
- Select the red ‘Leave’ button under the ‘Join/Leave’ header.

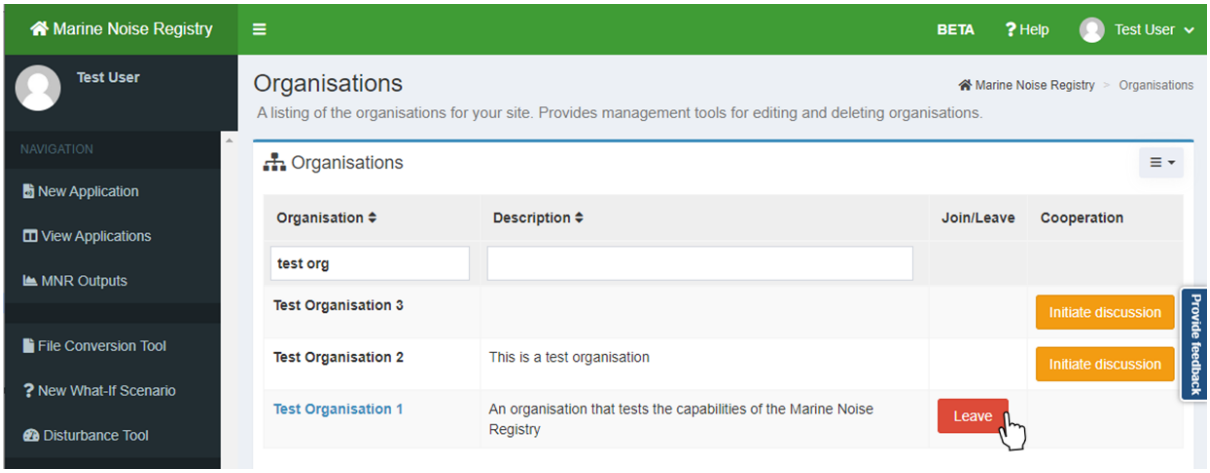

Figure 23. Navigation to the ‘Leave’ button on the ‘Organisations’ page.

Alternatively:

- Select ‘My Organisation’ from the navigation menu on the left.

- Locate the ‘Organisation Summary’ panel in the top-left corner.
- Select the ‘Leave organisation’ button.

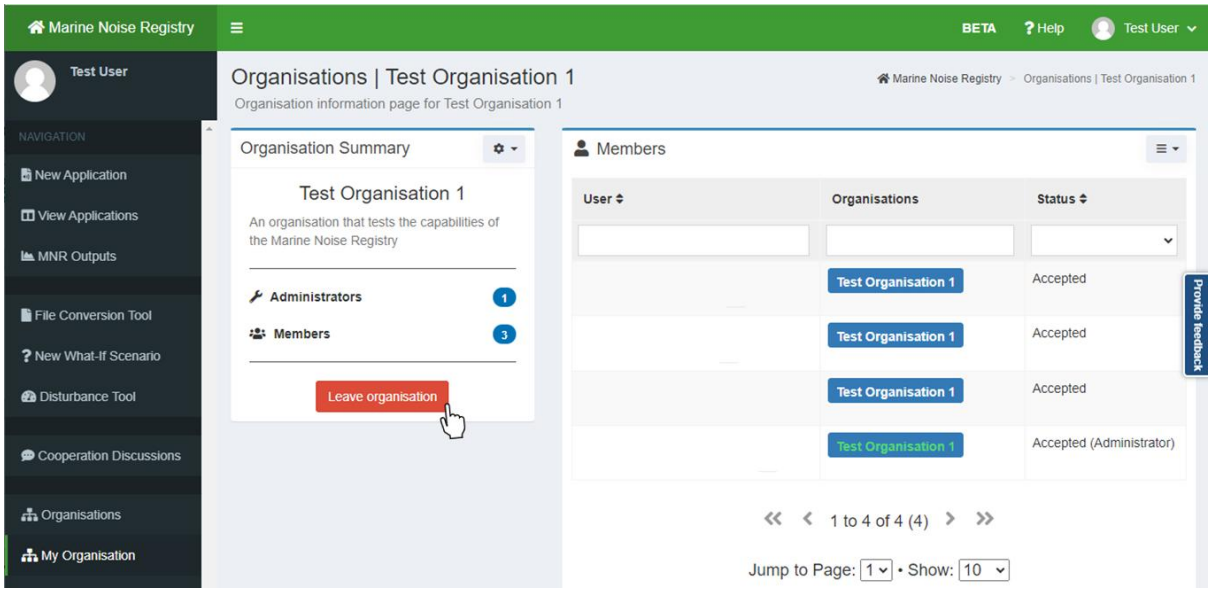

Figure 24. Example of leaving an organisation from the ‘My Organisation’ page.

In both cases, a pop-up window will open asking you to confirm your decision.

- Select ‘Yes, leave organisation’ to leave your organisation.
- Select ‘Cancel’ if you wish to cancel leaving the organisation.

4.2. Become An Agent

If you wish to upload data on behalf of another organisation, for example as a consultant, you need to request to become an agent for that organisation. Being an agent allows you to submit and manage data entries for the lead organisation without being a direct member of that organisation. It does not allow you to edit any other submissions other than those submitted by yourself or other members of your own organisation.

Please note that once you become an agent for another organisation, your whole organisation becomes an agent. This means that any member of your own organisation can access the information that you have submitted for the organisations that you are an agent for.

To become an agent for another organisation:

- Select the ‘Organisations’ tab from the navigation menu on the left.
- Search the table for the organisation you wish to become an agent for.
- Select the ‘Request’ button under the ‘Agent’ header on the right-hand side.

If the organisation is not registered yet, you will need to contact the organisation directly and ask them to register their organisation in the first instance (see Section 4.3).

Please note that only organisation admins can request to become an agent for another organisation. To become an agent for another organisation, please contact your organisation's admin. If you are unable to reach the admin, please contact MNR@jncc.gov.uk with your request.

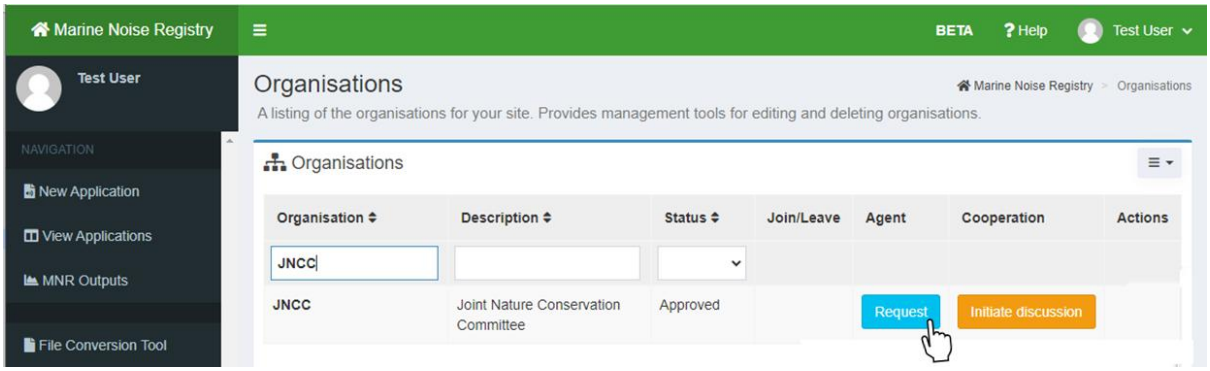

Figure 25. Example of selecting the 'Request' button on the 'Organisations' page to become an agent for another organisation.

A pop-up window will open asking you to confirm your request.

- Select 'Yes, create request' to confirm your request to become an agent.
- Select 'Cancel' if you wish to cancel your request.

After you have requested to become an agent for an organisation, a notification email will be sent out to the administrator of that organisation. Once they have approved or rejected your request, you will receive a notification email informing you of their decision.

4.2.1. Withdraw As An Agent

To withdraw as an agent:

- Select 'My Organisation' from the navigation menu panel.
- Navigate to the 'Organisations You Are An Agent For' panel.
- Select the 'Actions' button underneath the 'Actions' header.
- Select 'Withdraw as an agent' from the drop-down menu.

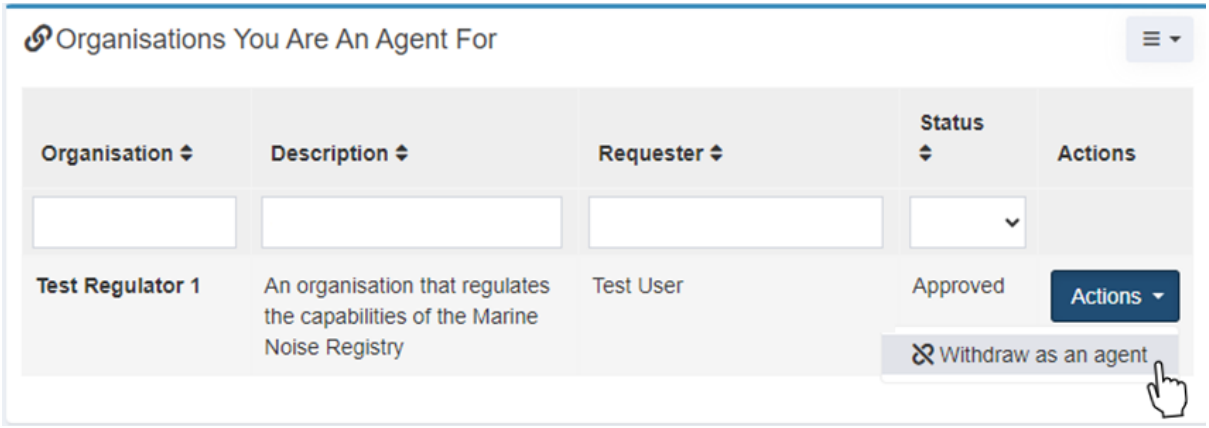

Figure 26. Example of withdrawing as an agent for an organisation from the 'My Organisation' page.

Alternatively:

- Select the ‘Organisations’ tab from the navigation menu on the left.
- Search the table for the organisation you wish to leave as an agent.
- Select the red ‘Withdraw’ button under the ‘Agent’ header.

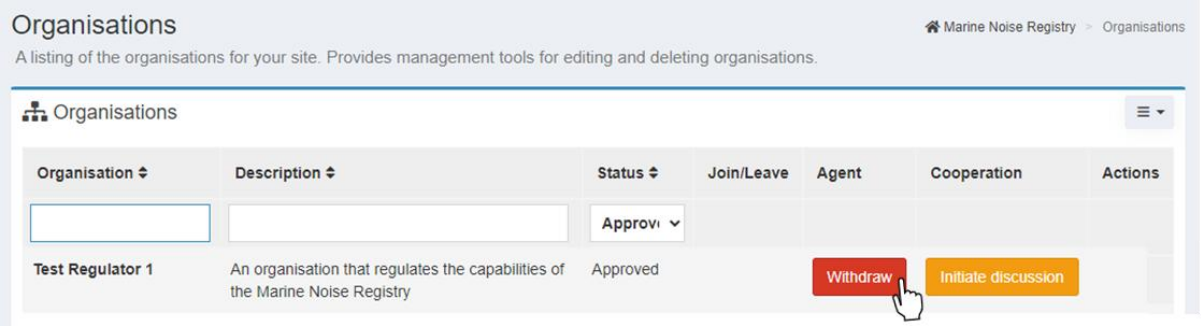

Figure 27. Example of withdrawing as an agent for an organisation from the ‘Organisations’ page.

In both cases, a pop-up window will open asking you to confirm your decision to withdraw.

- Select ‘Yes, withdraw’ to leave the organisation as an agent.
- Alternatively, select ‘Cancel’ if you wish to cancel your action

Please note that this action will not only remove yourself but also your whole organisation from being an agent. Please only perform this action if you are sure that your organisation will not be uploading activities on behalf of the lead organisation in the future.

4.3. Register Organisation

Users are only able to create a new organisation if they are not a member of another organisation yet, for example in cases where their organisation is not registered yet If you are an agent planning to submit data on behalf of an unregistered organisation (see Section 4.2), you will need to contact the organisation directly and ask them to register in the first instance.

Please note that when registering a new organisation, you will automatically become the organisation administrator. If you wish to share this role, you can promote other members to administrator (see Section 4.4.3).

To register a new organisation:

- Select the ‘Organisations’ tab from the navigation menu on the left.
- Select the ‘Register organisation’ button at the bottom of the page.

It is advised that new organisations are registered by users who share the organisation’s email domain. Please note that JNCC will monitor organisation administrators to ensure that lead organisations are registered themselves and not through consultants. Administrators who do not share the organisation’s domain will be contacted to confirm their association.

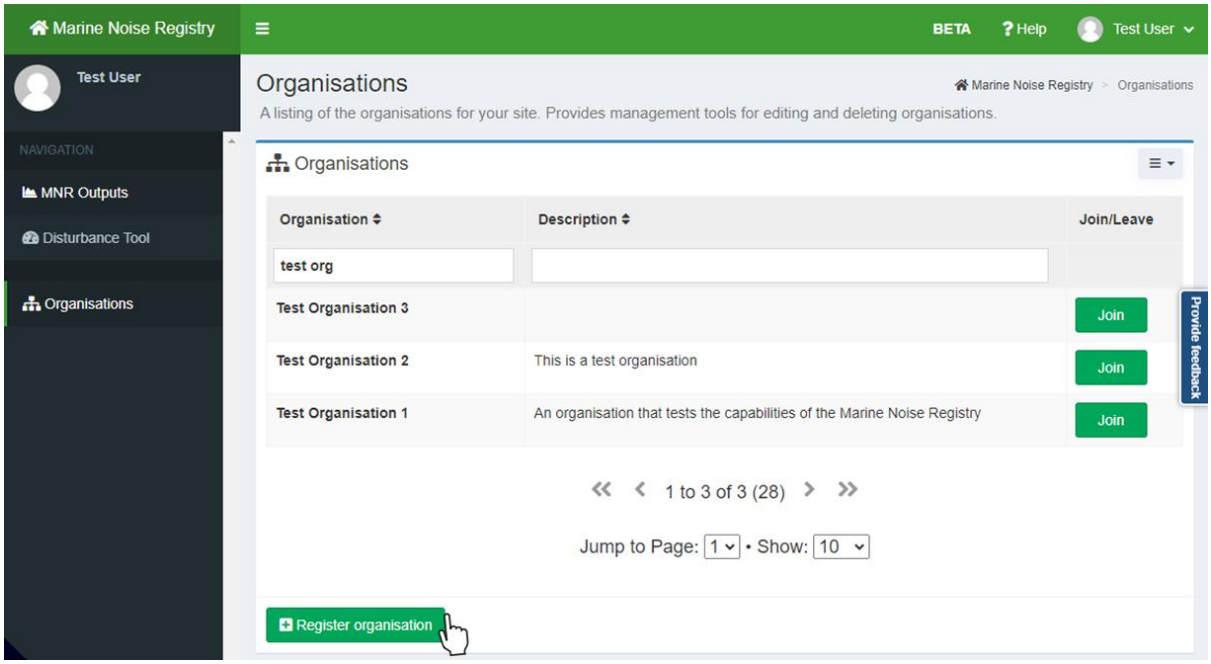

Figure 28. Navigation **to** the 'Register organisation' button to register a new organisation.

A pop-up window will open. Please provide the following details:

- Under 'Organisation name' enter the name of your organisation that is most used.
- Under 'Description', enter a suitable description for your organisation.
- Optional: Adjust the organisation slug and select override to save your changes.
- Select 'Register' to confirm the registration or select 'Cancel' to cancel the action.

Please note that if you are best known under an acronym, for example 'JNCC', enter the acronym as your organisation name. If you are better known under your full organisation's name, for example 'Joint Nature Conservation Committee', enter your full organisation name.

After confirming the registration, a MNR system administrator will be notified of your request. While your request is pending, you will be unable to submit any data to the system.

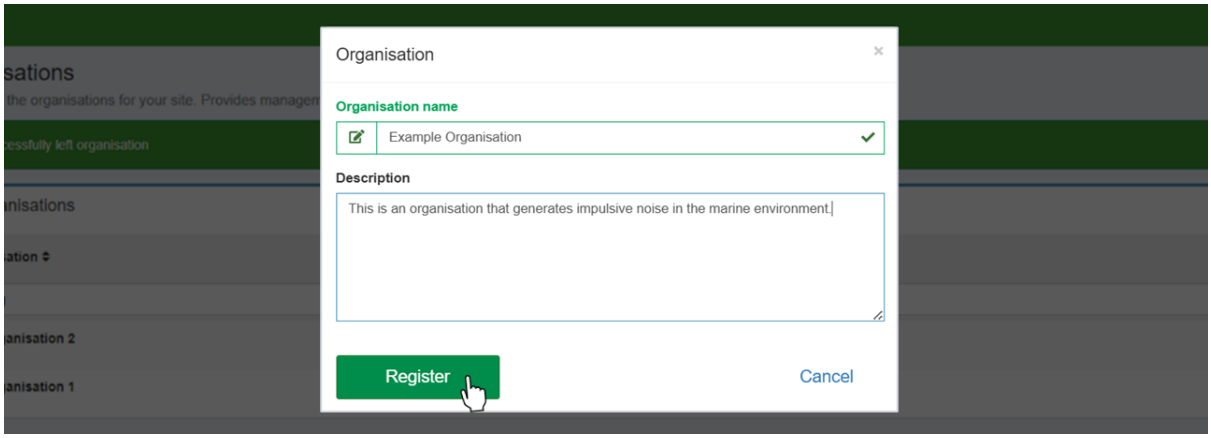

Figure 29. Pop-up window to enter organisation details when registering a new organisation.

4.4. Organisation Administrators

An organisation can have one or multiple administrators with various responsibilities and permissions. Organisation administrators can be identified from the 'Members' panel of the 'My Organisation' page, where their status will be marked as 'Accepted (Administrator)'.

Please contact your existing organisation administrator if you wish to be added as an administrator for your organisation. If the organisation is solely administered by JNCC, please contact MNR@jncc.gov.uk with your request.

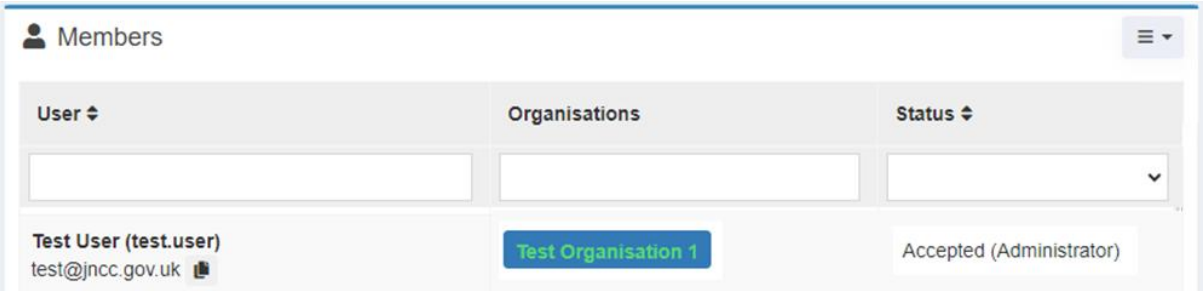

Figure 30. Example view of an organisation administrator within the 'Members' panel.

4.4.1. Edit Organisation Details

To change the details of your organisation as the administrator:

- Navigate to 'Organisations' from the navigation menu on the left.
- Search for your organisation in the 'Organisations' table.
- Navigate to the 'Actions' header in the row of your organisation.
- From the drop-down menu, select 'Edit organisation'.

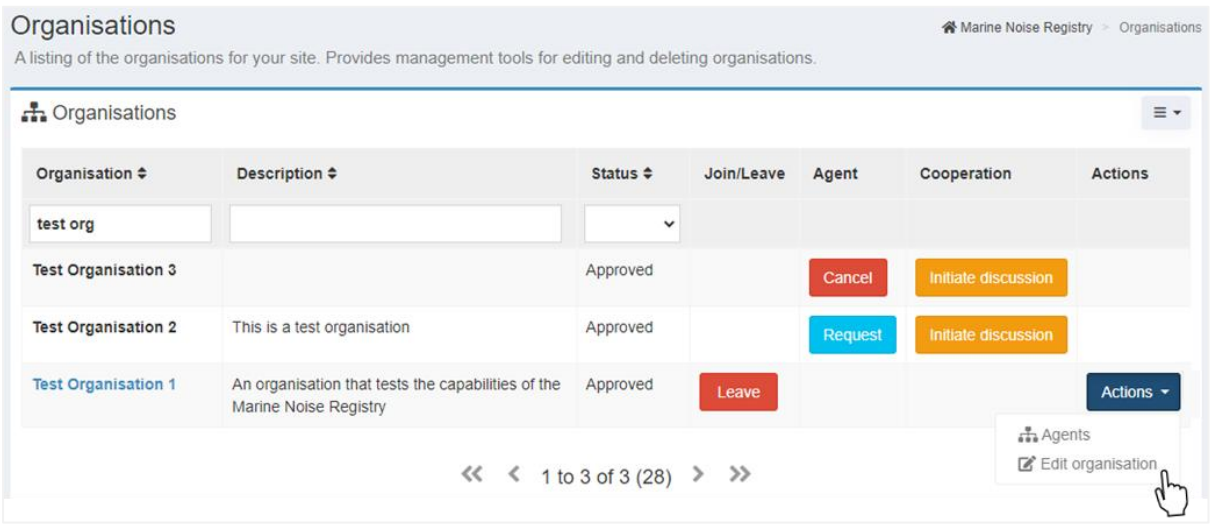

Figure 31. Navigation to the 'Actions' button on the 'Organisations' page to edit organisation's details.

Alternatively:

- Navigate to the 'My Organisation' page from the navigation menu on the left.
- Navigate to the 'Organisation Summary' panel in the top-left corner.

- Select the ‘cog’ icon in the top-right corner of the panel.
- From the drop-down menu, select ‘Edit’.

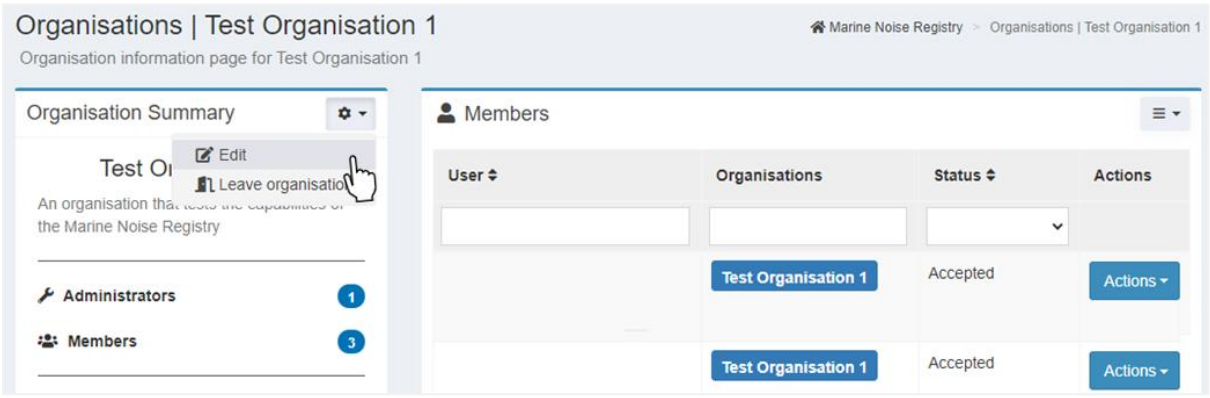

Figure 32. Navigation to the ‘Organisation Summary’ panel of the ‘My Organisation’ page to edit an organisation’s details.

In both cases, a pop-up window with your organisation’s details will open.

- Edit your organisation’s information as required.
- Select ‘Update’ to confirm your changes.
- Alternatively, select ‘Cancel’ to cancel your action.

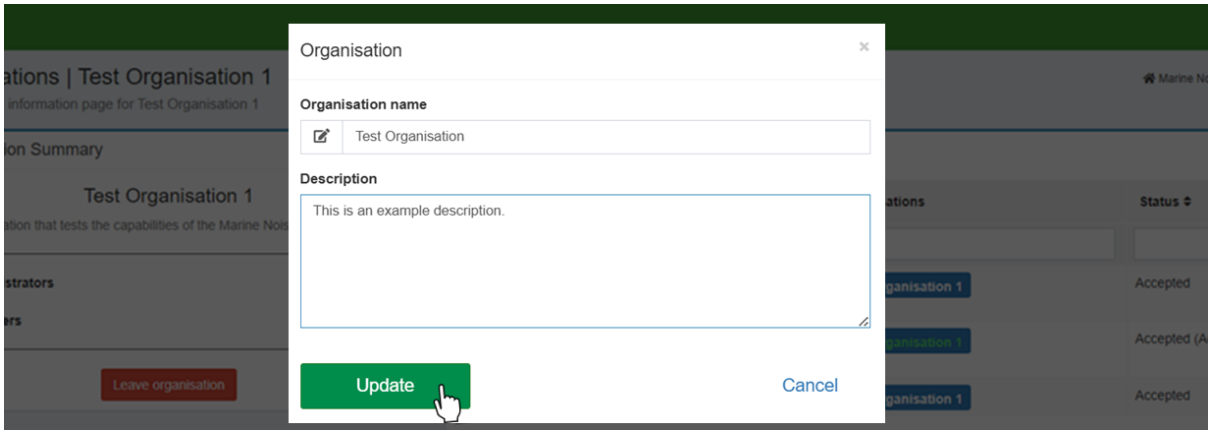

Figure 33. Pop-up window allowing organisation administrators to change their organisation’s details.

4.4.2. Member/Agent Requests

As an organisation administrator, you are responsible for managing membership requests from new members. You will be notified via email if a new request is waiting to be approved. The user who sent the request will be notified of your decision via email.

To manage membership and agent requests:

- Navigate to the ‘My Organisation’ page from the navigation menu on the left.
- Navigate to the ‘Members’ or ‘Agents For Your Organisation’ panel.
- Select the ‘Actions’ button next to the agent/member to open a drop-down menu.
- For member requests, select ‘Accept member request to join’ to accept the request.
- Alternatively, select ‘Reject member request to join’ to reject the request.
- For agent requests, select either ‘Accept agent request’ or ‘Reject agent request’.

Please note that the ‘Status’ column for any outstanding requests will be marked as ‘Pending’. Once accepted, the status will change to ‘Accepted’.

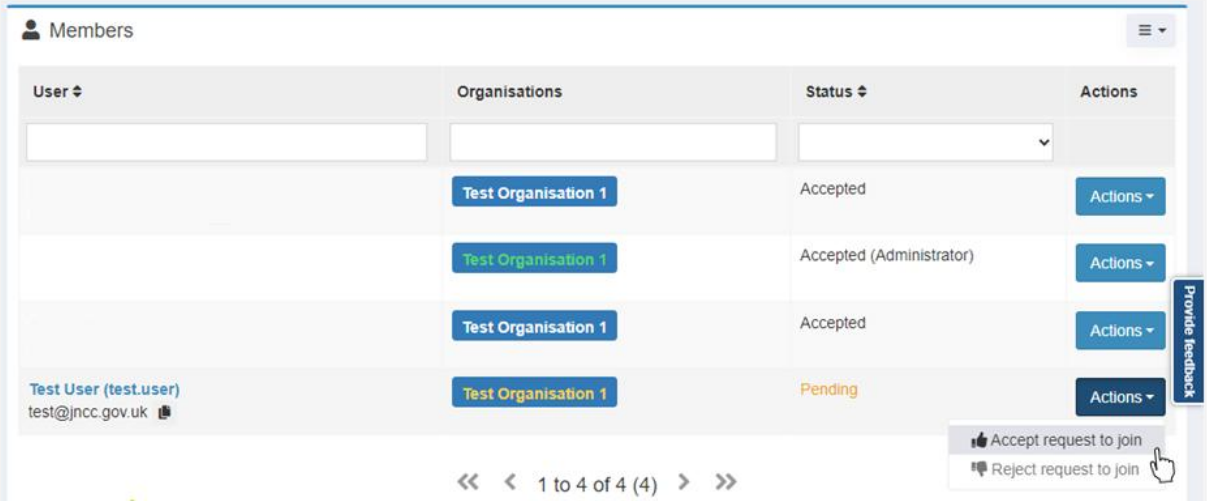

Figure 34. Navigation to the ‘Actions’ button to accept or reject membership requests.

4.4.3. Administrator Promotion/Demotion

Please note that an organisation must have at least one administrator. If an organisation does not have an associated administrator, JNCC will automatically be assigned as administrator.

To add or remove administrators for your organisation:

- Navigate to the ‘My Organisation’ page from the navigation menu on the left.
- Navigate to the ‘Members’ panel.
- Select the 'Actions’ button next to the member you wish to promote/demote.
- Select ‘Promote to administrator’ to add a user as an administrator.
- Select ‘Demote to member’ to remove a user as an administrator.

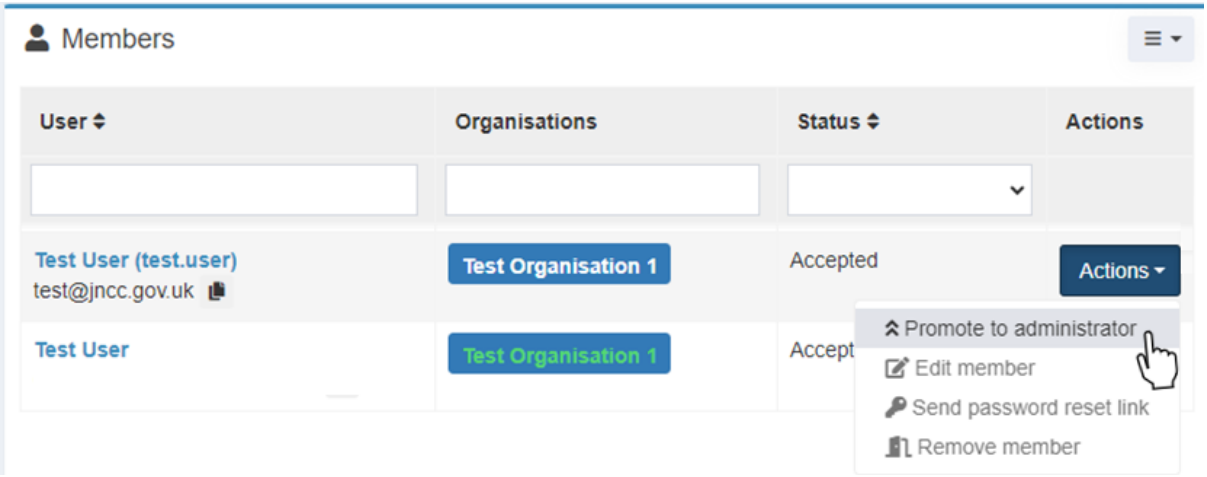

Figure 35. Navigation to the ‘Actions’ button to promote a user to administrator of your organisation.

4.4.4. Remove Member/Agent

To remove a member or an agent:

- Navigate to the ‘My Organisation’ page from the navigation menu on the left.
- Navigate to the ‘Members’ or ‘Agents’ panel.
- Select the’ Actions’ button next to the member or agent you wish to remove.
- From the drop-down menu, select ‘Remove Member/Agent’.

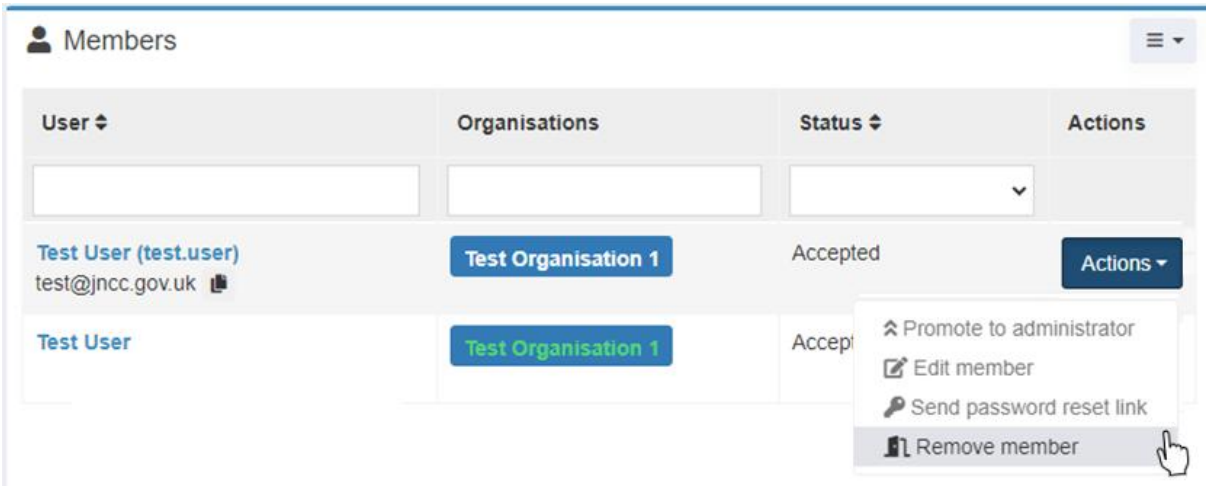

Figure 36. Navigation to the ‘Actions’ button to ‘remove’ a member from your organisation

Please note that administrators should ensure that memberships are up-to-date and remove members/agents that are no longer affiliated with the organisation.

A pop-up window will open asking you to confirm your decision to remove a member.

- Select ‘Yes, remove member/agent’ to confirm your action.
- Select ‘Cancel’ if you wish to cancel your action

4.4.5. Edit Member Details

To edit the details of an organisation member:

- Navigate to the ‘Members’ panel of the ‘My Organisation’ page.
- Select the ‘Actions’ button next to the member you wish to edit.
- Select ‘Edit Member’ from the drop-down menu.

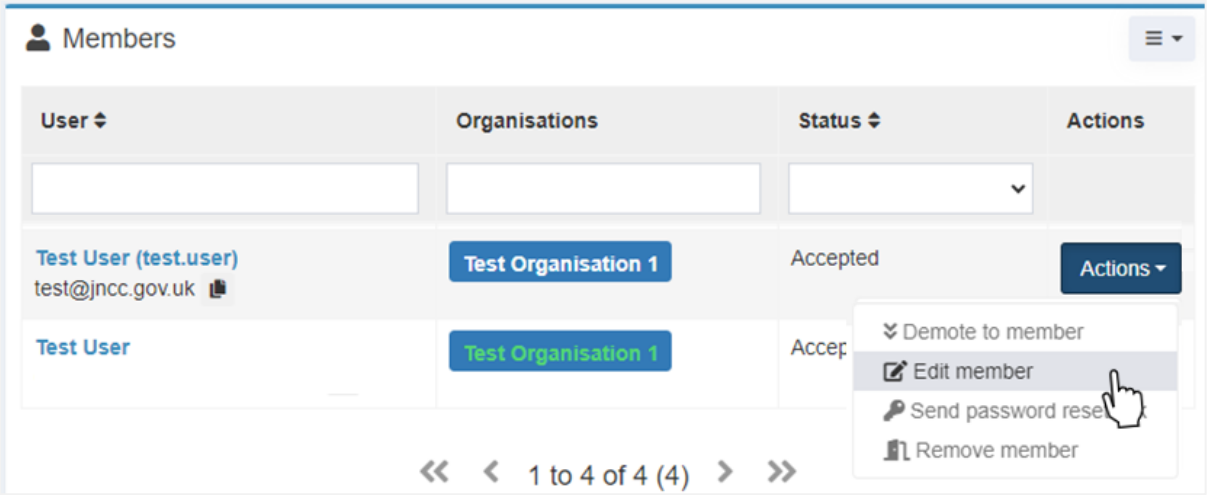

Figure 37. Navigation to the 'Actions' button in the 'Members' panel to edit member details.

A pop-up window displaying the member's details will open.

- Make the required changes to the member's username and contact details.
- Select the 'Update' button to save your changes.
- If you wish to cancel your action, select 'Cancel'.

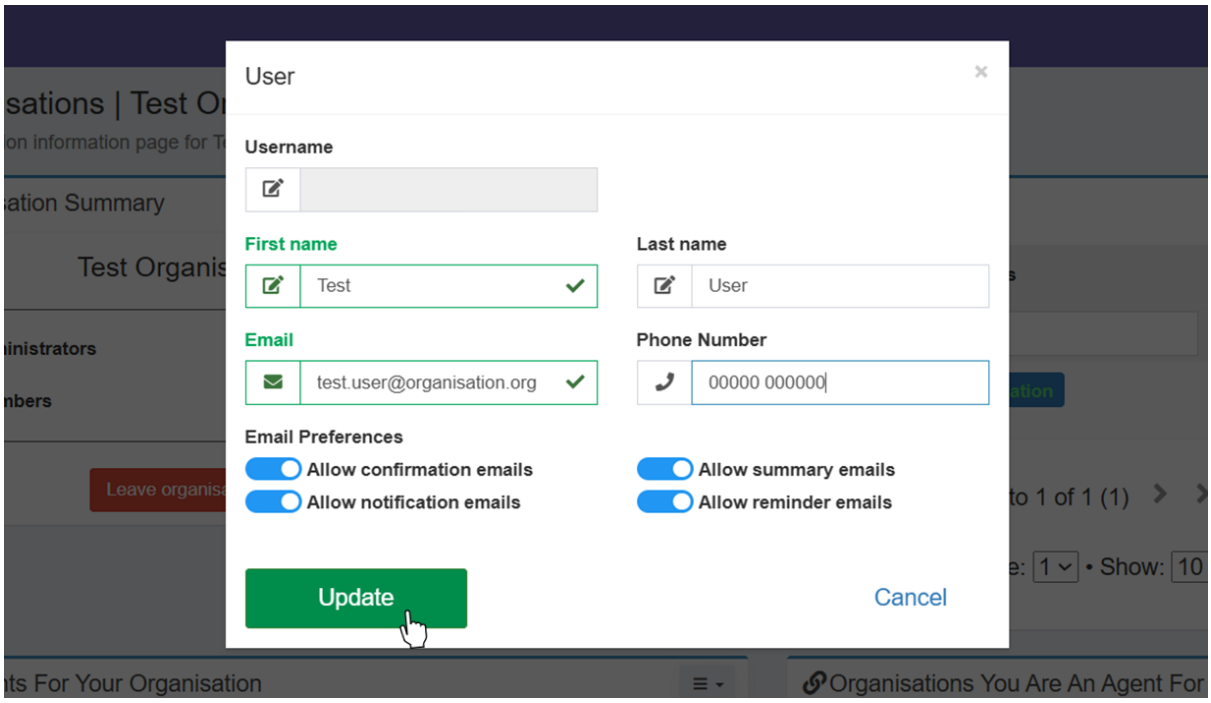

Figure 38. Pop-up window allowing organisation administrators to edit and update user details.

4.4.6. Send Password Reset Link

To send a password reset link to a specific user:

- Navigate to the 'Members' panel of the 'My Organisation' page.
- Select the 'Actions' button next to the member you wish to send the link to.
- Select 'Send password reset link' from the drop-down menu.

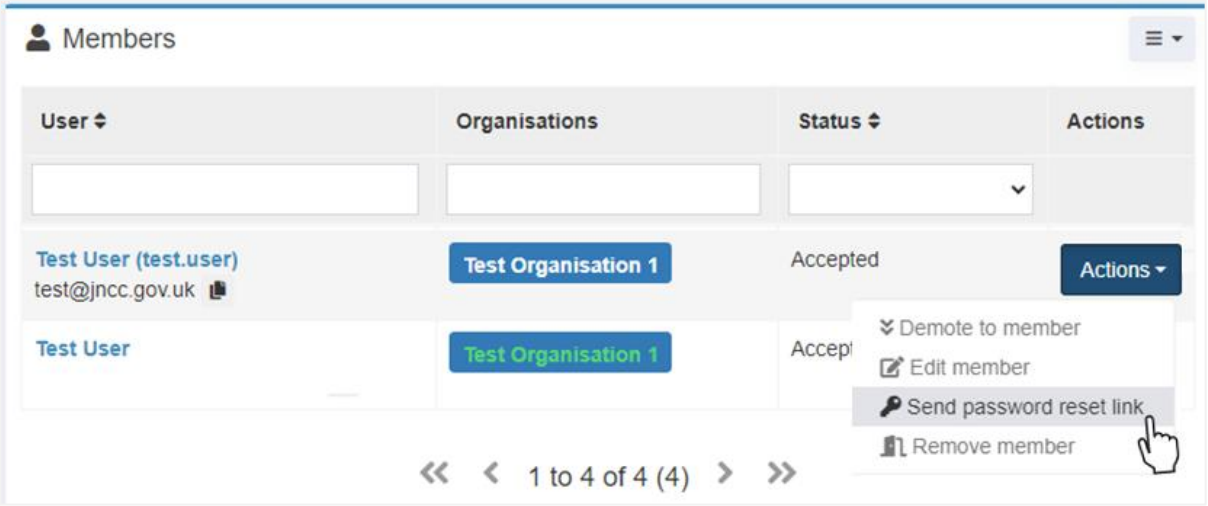

Figure 39. Navigation to the 'Actions' button in the 'Members' panel to send a password reset link.

Upon selection, a pop-up window will open asking you to confirm your action.

- Select 'Confirm' to send a password reset link to the member's email address.
- Select 'Cancel' if you wish to cancel your action.

4.4.7. Manage Edit Permissions

Certain applications may need to be managed by more than one organisation. For example, a lead organisation may submit an application but would like to allow one or multiple agent organisations to be able to edit the application on their behalf.

To give an agent organisation the permission to edit an application:

- Navigate to the 'View Applications' page from the navigation menu on the left.
- Select the button with the arrow icon under the 'Actions' header.

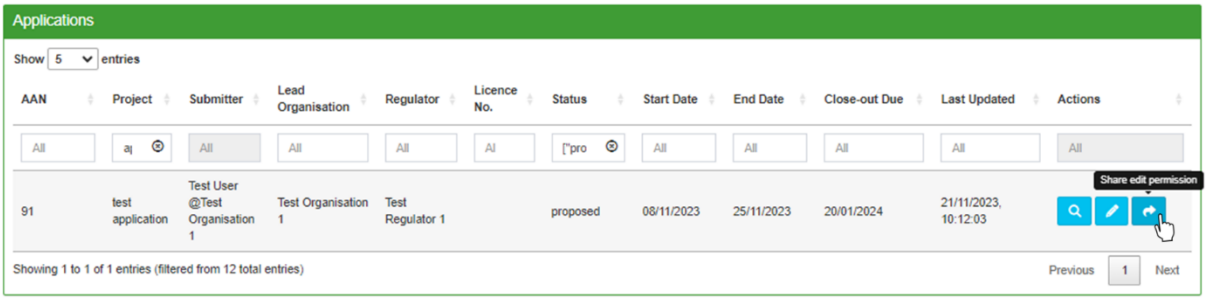

Figure 40. View of the 'Applications' table of the 'View Applications' page with the cursor hovering over the 'Share edit permissions' button.

A pop-up window will open:

- Click into the text field to view all agents for your organisation.
- Select one or multiple agents from the drop-down list.
- Select 'Submit' to share edit permissions with the selected agent(s).

The administrators of the selected agent organisation(s) will receive an email notification.

Please note that once an agent organisation has received editing permissions, it can manage all aspects of the application. This also includes sharing or removing edit permissions for additional agents that are listed for the lead organisation. Through this functionality, agents can also remove their own permission to edit an application.

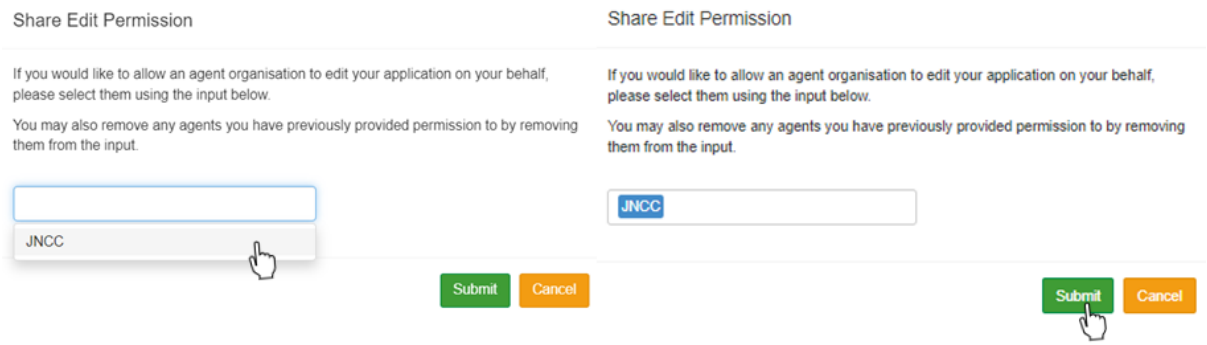

Figure 41. View of the pop-up window to share edit permissions for an application with an agent.

To remove the edit permission for certain agent(s):

- Select the label for the agent you wish to remove from the text field.
- Select the back arrow on your keyboard to delete the agent.
- Select 'Submit' to save your changes.

Please note that if a lead organisation removes an agent organisation (see Section 4.4.4), access to all edit permission shares that have been previously granted by the lead organisation will also be revoked.

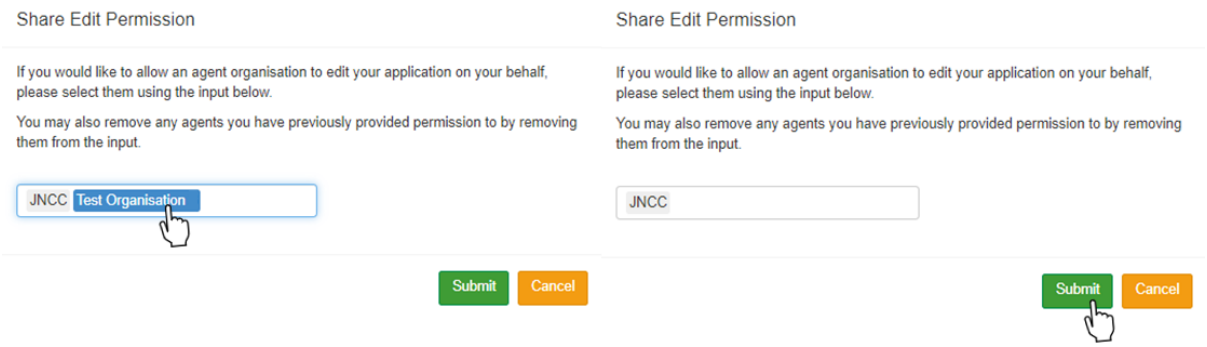

Figure 42. Process of removing edit permissions from an agent for an application.

5. Application Management

As an application progresses within the MNR, it is assigned different statuses:

- New – A new application which has not been saved yet.
- Draft – An application and/or activity that has been saved but not yet submitted.
- Proposed – An application and/or activity that has been submitted detailing one or multiple planned noise-producing activities
- Notified – A planned application and/or activity that is a voluntary noise submission and has no official licence number associated with it. This also includes activities that have an exemption number.
- Consented – A planned application and/or activity that has an official licence number associated with it as supplied by the respective regulatory body.
- Cancelled – An application and/or activity that was planned but did not occur.
- Interim – An application for which close-out data has only been partially submitted.
- Closed - An application and/or activity for which all close-out data has been submitted.
- What-If – An application and/or activity which can be used to assess potential disturbance of a planned or hypothetical activity within the Disturbance Tool.

The most common way an application will progress through the MNR is from ‘new’ to ‘proposed’ to ‘consented’ or ‘notified’ and finally ‘closed’ (Figure 43). There is, however, the option to save a new application as a 'draft' whilst activity specifics are still being worked out (see Section 5.1.4). Draft applications must be updated to ‘proposed’ when the activity parameters have been confirmed (see Section 5.1.5) and then marked as ‘notified’ (see Section 5.1.5.1) or ‘consented’ (see Section 5.1.5.2) in line with the licensing requirements that may apply to the application.

Users also have the ability to save an application as 'Interim’ (see Section 5.2.3) where partial close-out information has been uploaded, but the application has not been officially closed yet. In order to close an application on the MNR, close-out data detailing the locations and dates the activity or activities specified in the application must be submitted. If an activity was planned but did not occur, users have the ability to cancel an activity (see Section 5.5.3) or the entire application (see Section 5.6) instead.

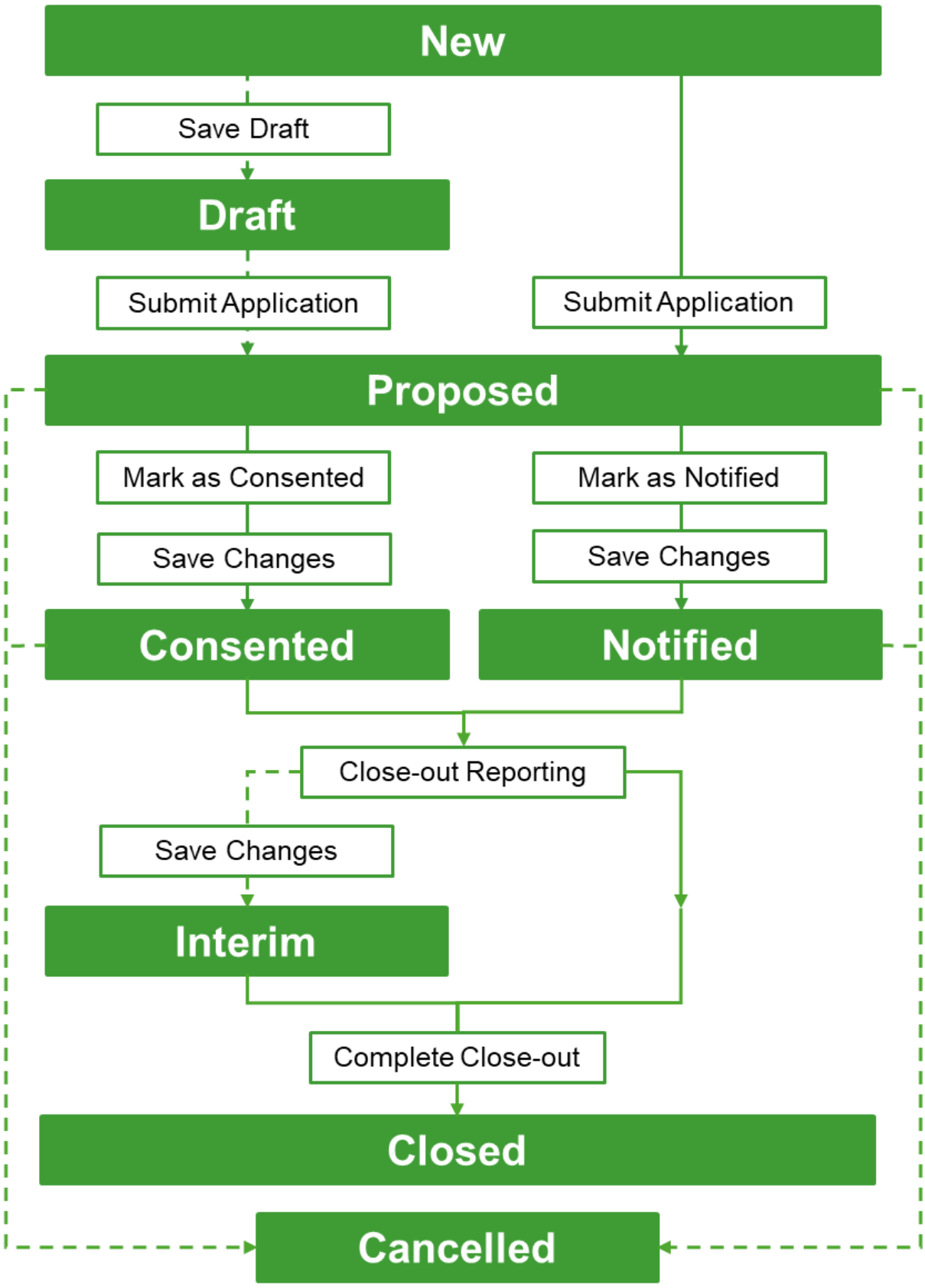

Figure 43. A flow diagram visualising how an application progresses through the MNR. Boxes with a solid fill show different application statuses, boxes with a transparent fill are user actions. Solid lines are mandatory steps, dotted lines are optional actions a user can perform.

5.1. New Application

To create a new application:

- Navigate to the ‘New Application’ page from the navigation menu on the left.

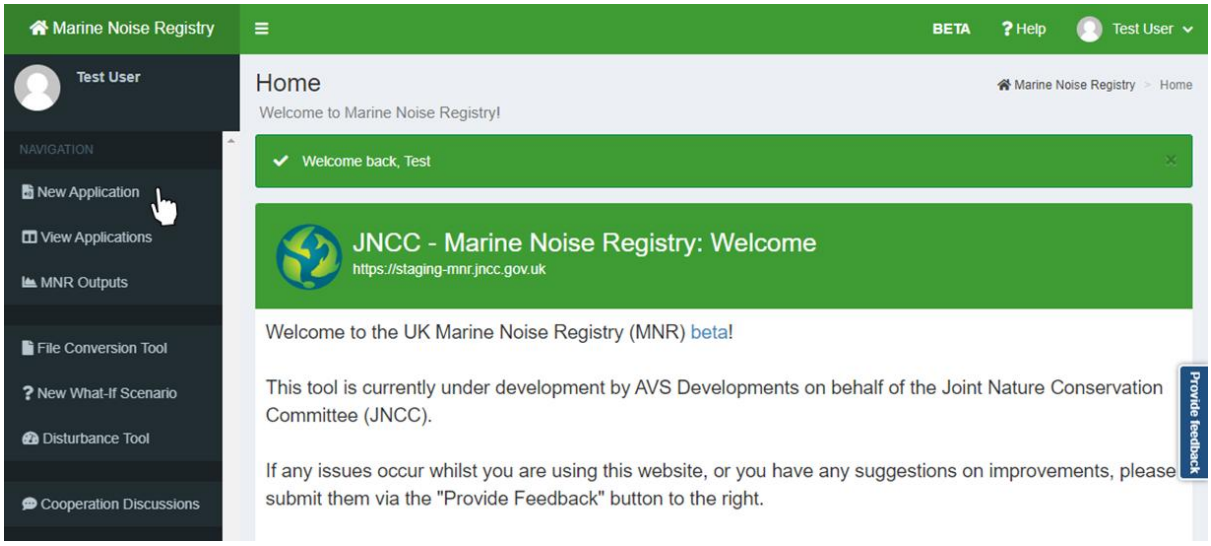

Figure 44. Navigation to the ‘New Application’ page from the navigation panel.

Alternatively:

- Navigate to the ‘View Applications’ page from the navigation menu on the left.
- Navigate to the bottom-right corner below the ‘Applications’ table.
- Select the ‘New Applications’ button in the bottom-right corner.

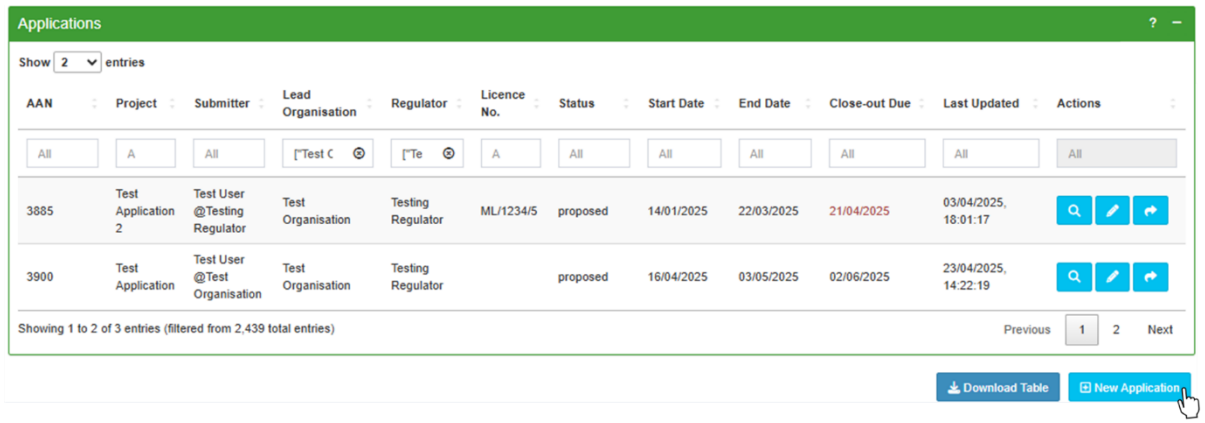

Figure 45. Navigation to the ‘New Application’ button on the ‘View Applications’ page.

In both cases, a blank application form will open in a new window. The application form includes several panels in which you can start entering your data:

- Application Details – A panel to enter general information about the application including the lead organisation, timeframe, and project name (see Section 5.1.1)

- Licence Details – A panel to enter information on the appropriate regulator and licensing details if applicable (see Section 5.1.2).

- Proposed Activities – A panel to add one or multiple activities to the application including their timeframe, locations, and noise parameters (see Section 5.1.3).

Please note that any field marked with an asterisk (*) is mandatory. You will be unable to submit your application unless these fields are completed.

Upon the filling out all mandatory fields within each panel, users are then able to submit their application (see Section 5.1.5). Alternatively, users may wish to initially save their application as a draft (see Section 5.1.4) for which mandatory fields can remain blank.

Please note that no data will be saved unless you save or submit your application.

5.1.1. Application Details

In the ‘Application Details’ panel, users are required to provide information on the management and timescales of their application.

Navigate to the ‘Application Details’ panel and insert the following information:

- Project Name * – Enter the name of the project that the application is a part of. This can be an official project name or a custom name of your choosing.

- Lead Organisation * – Select the name of the organisation undertaking the activity from the drop-down menu. The menu will display your own organisation and any organisations you are an agent of.

Please note that if you are a consultant organisation submitting the activity on behalf of another organisation, you must name the organisation responsible for undertaking the activity (not your own consultancy organisation) as the lead organisation.

- Earliest Start – Latest Finish * – Enter the earliest and latest potential date where application activities may occur (or the date on which the licence issue expires). Please input the timeframe of your application in dd/mm/yyyy format or select dates from the calendar pop-up box.

Please note that applications spanning several years are no longer required to be submitted separately. Please enter the entire timeframe of an application. Once the activities specified in an application have commenced or have been completed, users are encouraged to amend the overall applications’ start and end date accordingly (see Section 5.5).

- Total Est. Duration (Days) * – Enter the estimated number of days on which the activities specified within the application will occur. Please input whole number values. If the duration is unknown, select the ‘Max’ button to automatically populate the field with the number of days between the start and finish date.

- Notes & Explanations – In this field, please enter any additional information that may be deemed relevant or important. This is an optional free text box (maximum 600 characters).

If custom maximum daily footprint or Effective Deterrence Ranges calculations are available for specific activities, users are encouraged to provide their figures in the 'Notes & Explanations' field (see Section 5.1.1) of the application.

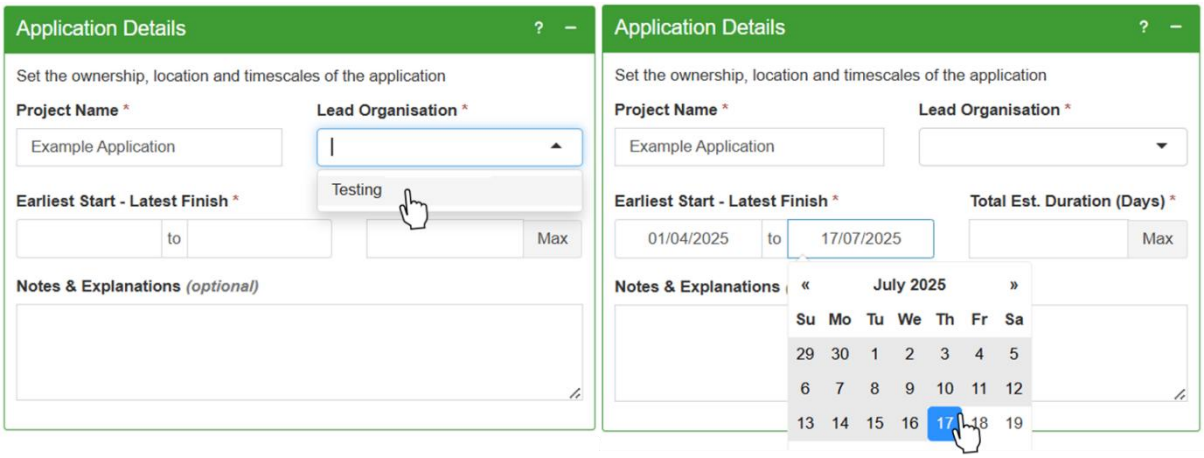

Figure 46. Example of completing the 'Application Details' panel with information.

5.1.2. Licence Details

In the 'Licence Details' panel, users are required to specify the licensing conditions of their application such as the appropriate regulatory body, licence and/or exemption number.

Please note that users must either mark their application as 'notified' (see Section 5.1.5.1) or 'consented' (see Section 5.1.5.2). This functionality becomes available in the 'Licence Details' panel once the applications has been submitted.

- Regulator * – Select the regulator that is issuing your licence and/or exemption number from the drop-down menu. If you are unsure who the regulator for your application is, please refer to Table 1 for the coarse geographic remits of different regulators.

- Licence Application/Exemption Reference(s) – If your activity is licensed, enter your licence number into the text field. If your activity is exempt, enter the exemption number provided by your regulator body. If your application is a voluntary submission and you don't have an exemption number, leave the text field left blank.

Examples of common licence number formats include: GS/1234/1 (for OPRED licences), MLA/2023/00001 (for MMO licences), MS/EPS/01/2023/1 (for MD-LOT licences).

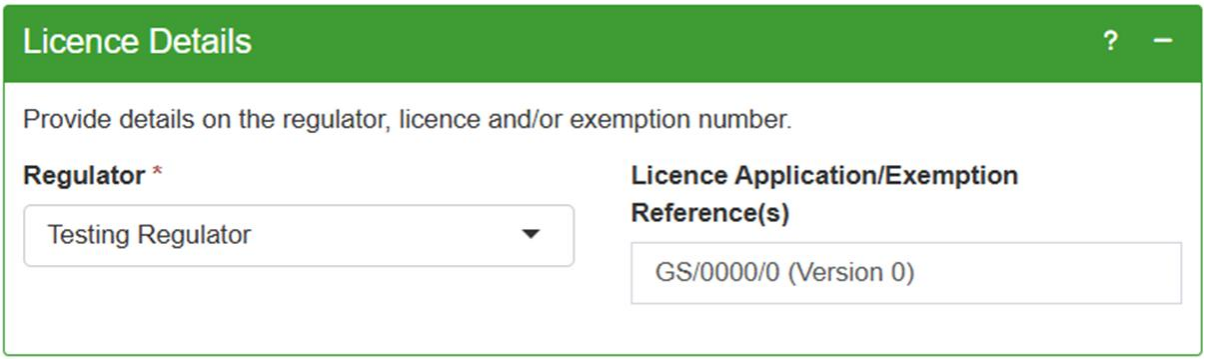

Figure 47. Example of completing the 'Licence Details' panel with information.

Table 1. Geographic remits of different regulatory bodies. Inshore: From low-water mark to 12 nautical miles. Offshore: Beyond 12 nautical miles.

Location	Regulator
English inshore	Marine Management Organisation
English offshore	Marine Management Organisation
Northern Irish inshore	The Department of Agriculture, Environment and Rural Affairs
Northern Irish offshore	Marine Management Organisation
Scottish inshore	Marine Directorate
Scottish offshore	Marine Directorate
Welsh inshore	Natural Resources Wales
Welsh offshore	Natural Resources Wales

5.1.3. Proposed Activities

In the 'Proposed Activities' panel, users can specify one or multiple different activities that are part of the application, including their timeframe, location, noise parameters, and any mitigations or abatements.

Please note that if multiple noise sources are provided within one application, they are automatically saved as linked activities under a shared AAN and are distinguishable by a suffix. For example, for AAN 42 linked activities are named '42_1', '42_2', etc.

To add a new activity to an application:

- Select the 'Details' tab and enter the required data (see Section 5.1.3.1).
- Select the 'Location' tab and enter the required data (see Section 5.1.3.2).
- Select the 'Mitigations/Abatements' tab and enter the required data (see Section 5.1.3.3)
- Select the 'Sound Parameters' tab and enter the required data (see Section 5.1.3.4)
- Select the 'Add' button to add the activity to the application.

Repeat the steps outline above to add additional activities to the application.

While entering data, users can freely navigate between the different tabs by selecting a tab directly or by selecting the 'Previous' and 'Next' button. The 'Add' button can be selected at any time when entering information. However, if the information is till incomplete, users will need to select the activity in the table to update the added entry with additional information (see Section 5.5.1).

5.1.3.1. Activity Details

Navigate to the 'Details' tab of the 'Proposed Activities' panel and provide the following information on the noise sources that are expected to be used:

- Noise source * – Select the activity type from the drop-down menu. See Table 2 for available options.
- Sub-type * – Select the sub-type of your noise source from the drop-down menu. The menu will only display options relevant to the noise source that is selected. Please see Table 2 for available options.

Please note that when selecting 'Other' as a subtype additional information will need to be provided (e.g. the type of equipment used).

Table 2. Activity noise sources and available sub-type options.

Noise Source	Sub-type
Acoustic Deterrent Device	Other
Military Sonar	Anti-Submarine Warfare (ASW) Sonar; ASW Sonar Check
Explosive	Open Water (< 2 kg, > 2 kg); UXO (Low Order, High Order); Within 100 m of mudline (< 2 kg, > 2 kg); Other
Multibeam Echosounder	Any
Impact Pile Driving	Conductor; Mono; Pin; Sheet; Other
Seismic Survey	Ocean Bottom; Regional; Reservoir; Route; Vertical Profile; Site; Mini Airgun; Other
Sub-bottom profiler	Boomer; Chirp; Parametric; Pinger; Sparker; Imager

- Earliest Start – Latest Finish – Enter the earliest date and the latest potential date where the activity may occur. Please input values in dd/mm/yyyy format or select dates using the calendar pop-up box. This information is optional but may be useful if there are activities with different planned dates, e.g. separate piling campaigns, sequential geophysical surveys.
- Estimated Duration (Days) – Enter the estimated number of days across which the activity will occur. This should only be as high as the estimated number of days you have provided in the 'Application Details' panel. If the duration is unknown, please select the 'Max' button to automatically populate the field with the number of days between the start and finish date. This information is optional.

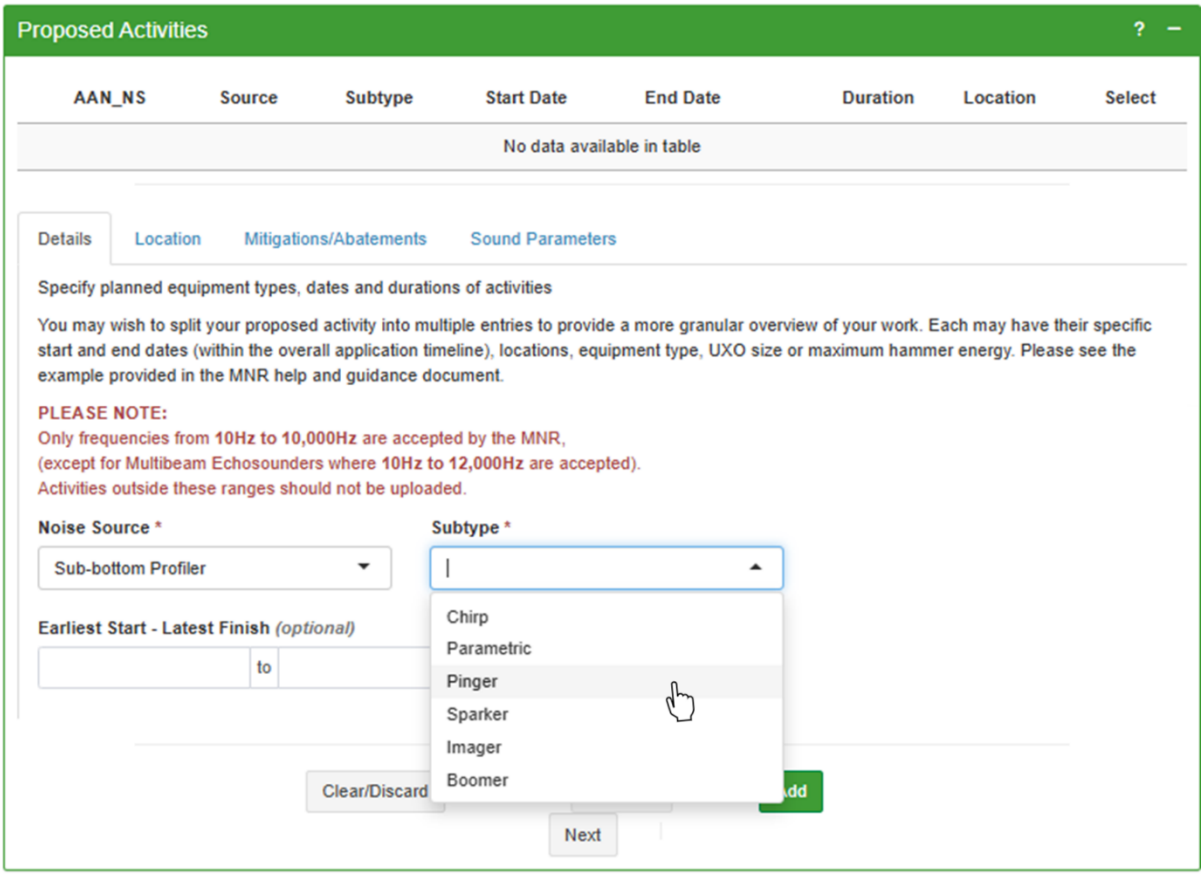

Figure 48. Data input section for detailing different activities and their sub-types.

Please note that users have the ability to split up a specific activity into multiple entries to provide a more granular overview of their planned operations.

While the provision of an earliest start and latest finish for activities is optional, it enables users to provide a more granular overview of their planned activity by dividing their planned operations into multiple activities with discrete start and end dates within the overall application start and end dates.

This may specifically be relevant for:

- Operations that span multiple years or seasons where users can enter a separate activity per year and/or season (see example in Figure 49).
- Operations that have a defined work schedule, for example a survey or piling schedule, where operations are planned to occur over a specific time periods within the overall licencing period (see example in Figure 50).
- Operations that involve only one activity type but with different specifications, for example a UXO clearance campaign that involves UXO with different explosive charges.

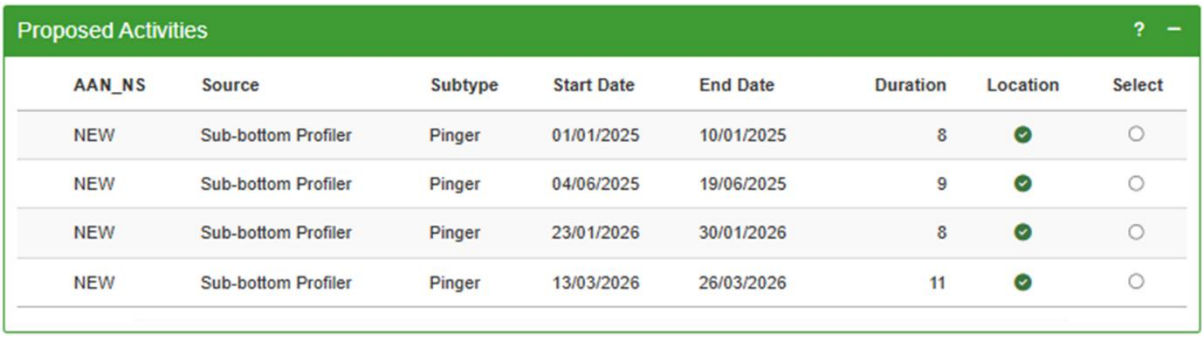

Figure 49. Example view of the 'Proposed Activities' panel of an application for which multiple entries for the same activity spanning over multiple years were added.

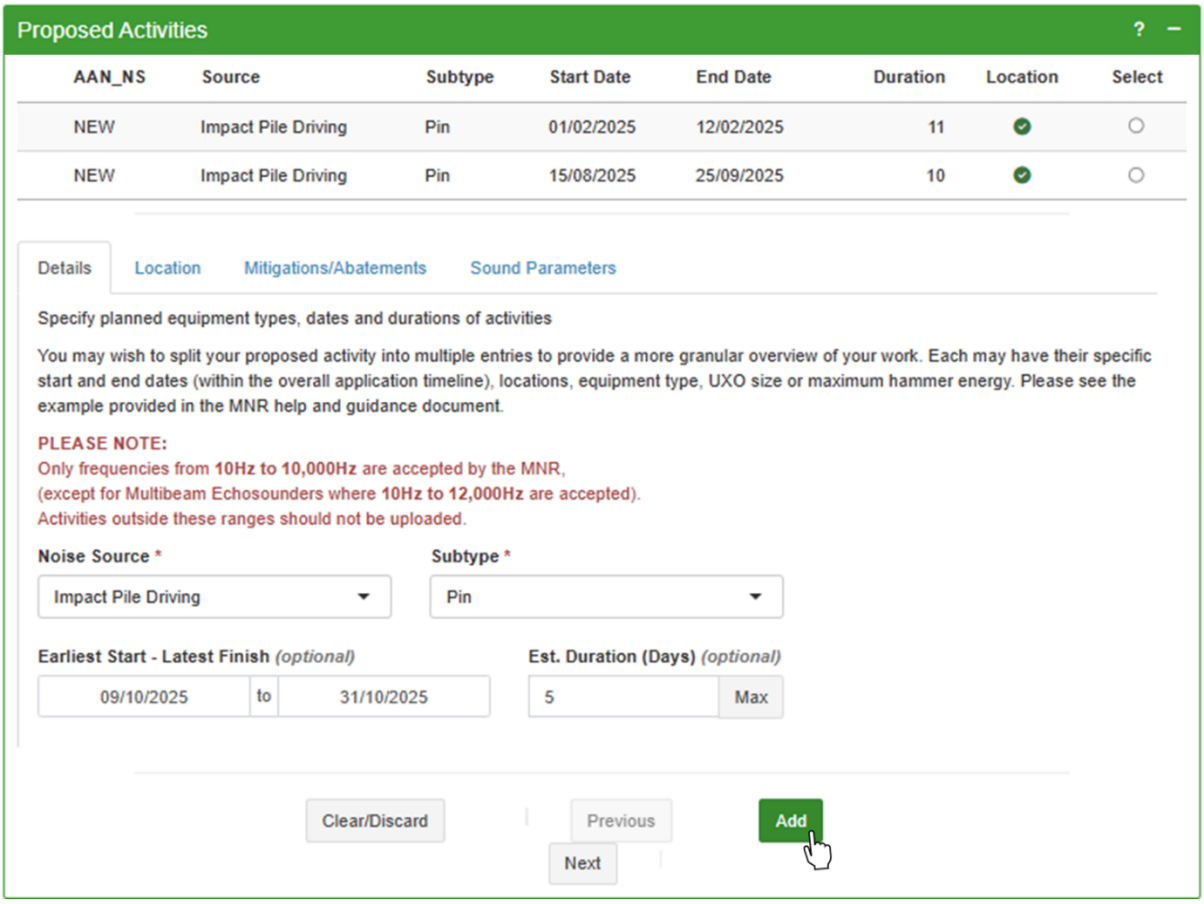

Figure 50. Data input example for submitting multiple entries for the same activity with different start and end dates to provide a more granular overview of the timing of planned operations.

5.1.3.2. Activity Location

For proposed activities, an approximate location suffices. Detailed locations will need be provided during close-out reporting. If you wish to save your application as a draft instead, location information is not required until you wish to officially submit the application.

Please note that users are only able to submit location data that fall within UK international waters.

Users are able to submit unique locations per activity. To enter proposed activity locations:

- Navigate to the 'Location' tab.
- Select the type of location information you will be submitting from 'Area type'.

Activity locations can be entered as Oil & Gas Blocks (see Section 5.1.3.2.1), coordinates (see Section 5.1.3.2.2), or using a shapefile (see Section 5.1.3.2.3). Block references and coordinates can be manually entered or by uploading a file.

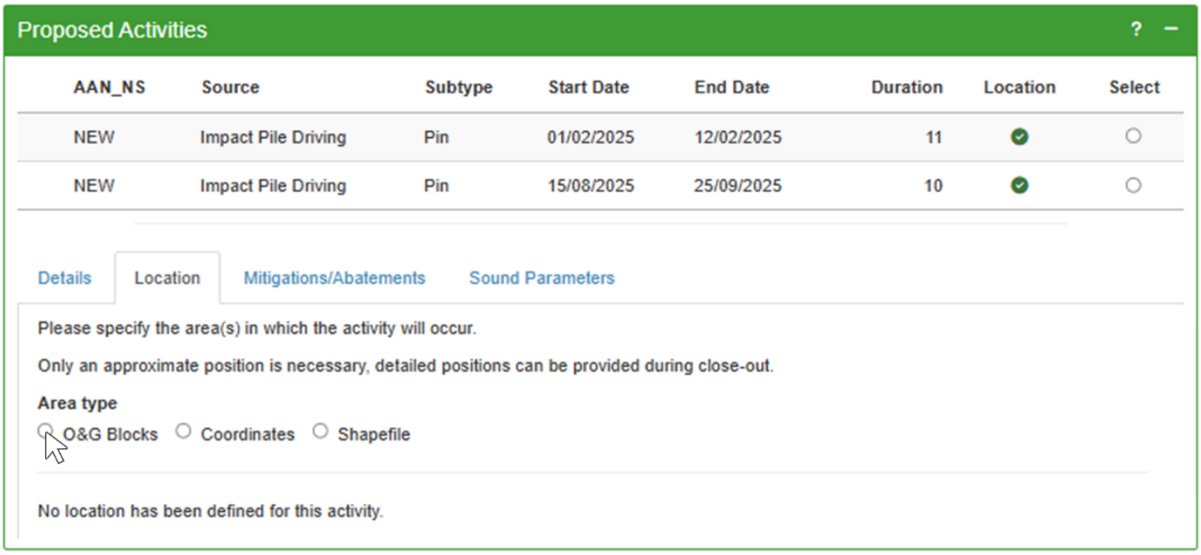

Figure 51. The 'Location' tab of the 'Proposed Activities' panel is selected displaying the option to input data as either Oil and Gas Blocks, coordinates, or as a shapefile.

5.1.3.2.1. Oil And Gas Blocks

To manually add oil and gas block references:

- Select 'O&G Blocks' underneath 'Area type'.
- Select the 'Manual Entry' tab.
- Click into the 'Block References' text field.
- Select the applicable block code(s) from the drop-down list.
- Select the 'Import' button to add the selected locations to the activity.

To upload block references using a XLSX file:

- Select 'O&G Blocks' underneath 'Area type'.
- Select the 'File' tab.
- Optional: Select the 'Download Template (XLSX)' button to download a template file.
- Complete the template with your location data and save it to your files.
- Select the 'Browse' button to open a file from your file explorer.
- If your upload was successful, you will receive an 'Upload complete' notification.

Please note that uploading a file will replace any previously entered location data.

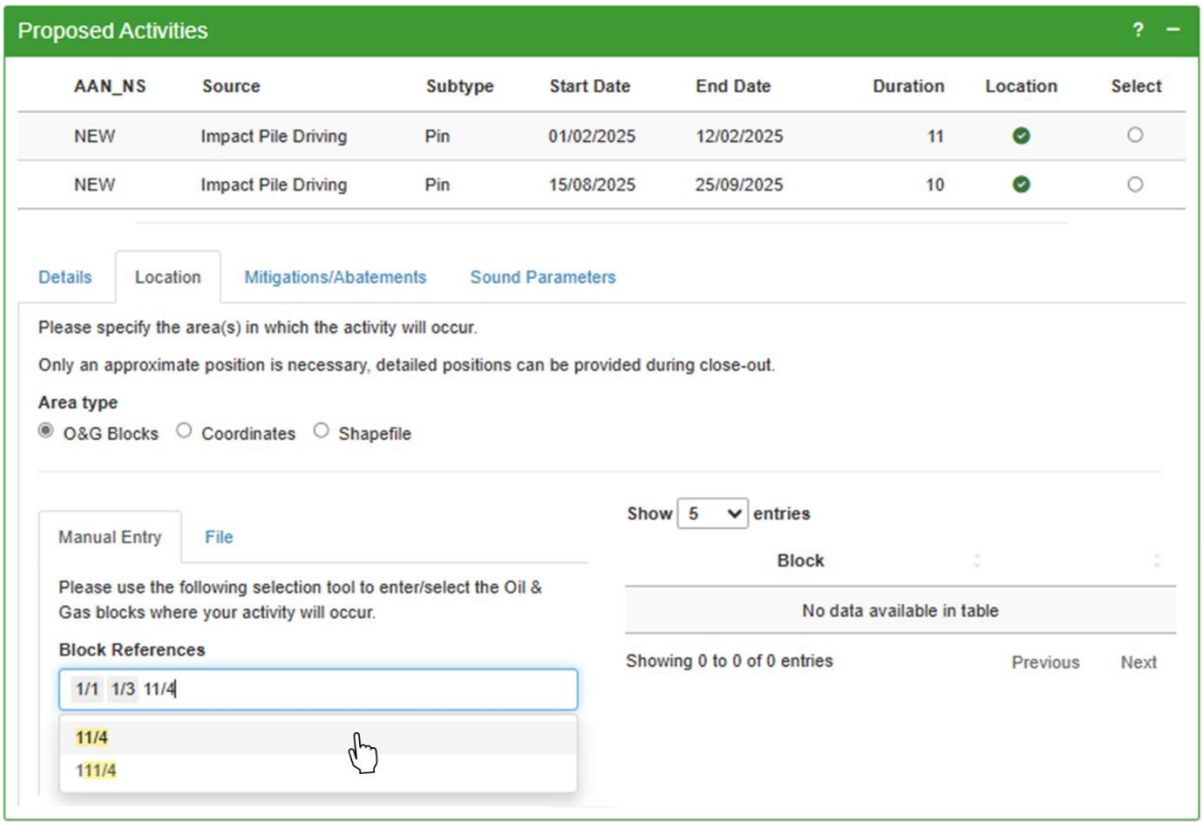

Figure 52. Example of entering and importing activity locations as Oil and Gas Block codes.

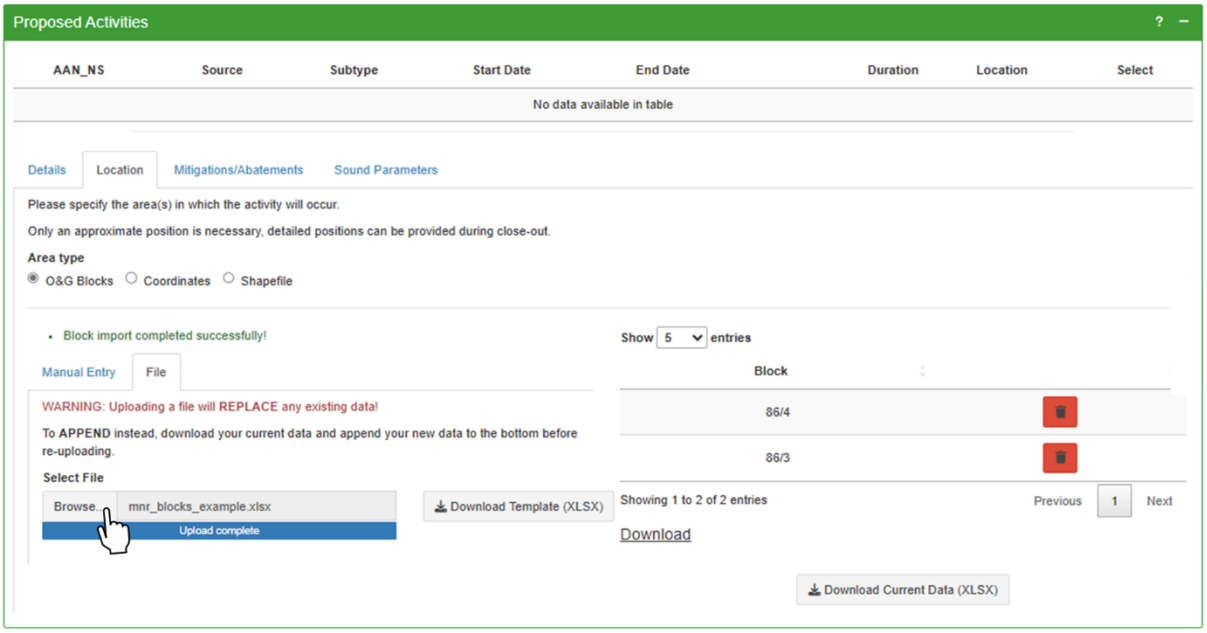

Figure 53. Example of importing activity locations as Oil and Gas Block codes by uploading a file.

5.1.3.2.2. Coordinates

Please note that coordinates must be provided in either decimal degrees or degrees:minutes:seconds.

- Decimal degree latitude/longitude coordinate pairs (WGS84) can be copied from Web mapping tools. Example: 56.105, -2.732.
- Coordinate pairs entered as degrees:minutes:seconds must be in dd:mm:ss format, where dd, mm, ss are two-digit integers representing degrees, minutes, and seconds respectively. Additionally, the cardinal direction (North, East, South, West) must be provided as a single capital letter. Example: 56N:06:18, 2W:43:55.

To manually enter your locations as coordinates:

- Select ‘Coordinates’ underneath ‘Area type’.
- Select the ‘Manual Entry’ tab.
- Click into the ‘Enter Location(s)’ text box.
- Input your coordinates in either decimal degrees or degrees:minutes:seconds.
- Select ‘Import’ to add your activity locations.

Please note that, during manual entry, coordinates within a coordinate pair must be separated by a comma to be read correctly. Press ‘Enter’ on your keyboard to add the next coordinate pair in a new line.

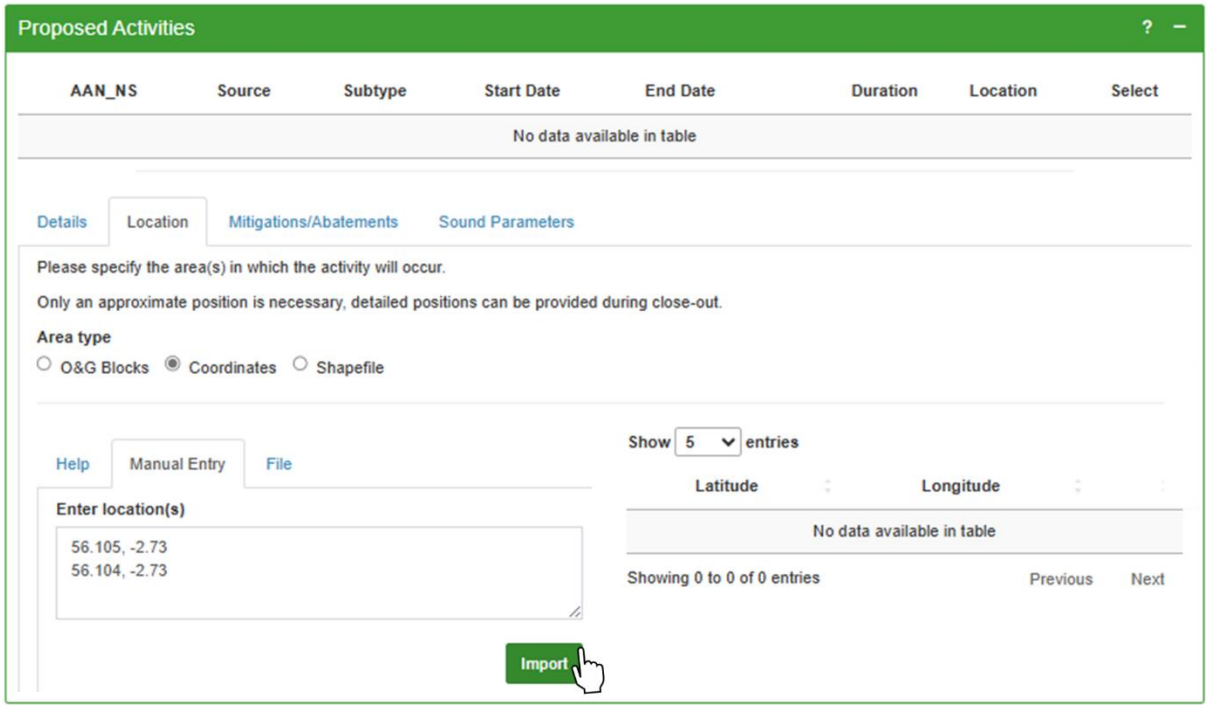

Figure 54. Example of manually imported activity locations as coordinates in decimal degrees.

To upload coordinates using a XLSX file:

- Select ‘Coordinates’ under ‘Area type’.
- Select the ‘File’ tab.
- Optional: Select ‘Download Template (XLSX)’ button to download a template file.
- Complete the template with your location data and save it to your files.
- Select the ‘Browse’ button to open a XLSX file from your file explorer.
- If your upload was successful, you will receive an ‘Upload complete’ notification.

Please note that XSLX files must contain separate columns for latitude and longitude to be read correctly.

	A	B	C
1	Latitude	Longitude	
2	56.105	-2.732	

	A	B	C
1	Latitude	Longitude	
2	56N:06:18	2W:43:55	

Figure 55. Example layout of a XLSX file with coordinates pairs entered in degrees:minutes:seconds (right) and decimal degrees (left).

5.1.3.2.3. Shapefile

To upload activity locations as a shapefile:

- Select the ‘Shapefile’ option underneath ‘Area type’.
- Select the ‘Browse’ button to load your file explorer.
- Navigate to where your shapefile is saved.
- Select and open the zip folder containing the shapefile.
- If uploaded successfully, you will receive a ‘Shapefile import completed!’ notification.

Please note that shapefiles must include polygons or points and must be zipped into one file that include a .shp, .prj, and .dbf file as a minimum.

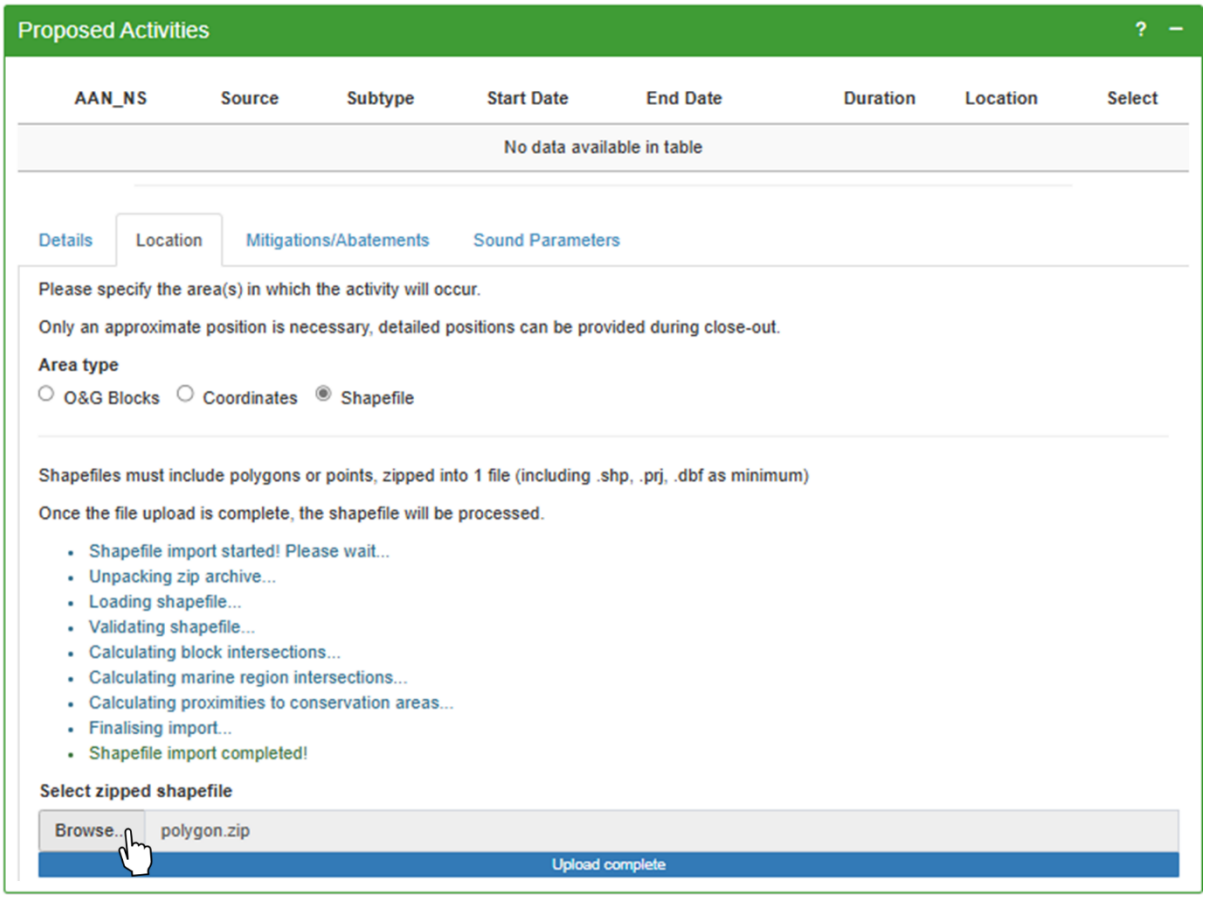

Figure 56. Example of a successful upload of a zipped file containing activity locations as a shapefile.

5.1.3.3. Mitigations/Abatements

To specify any mitigations or abatements that may be used during the activity:

- Navigate to the ‘Mitigations/Abatements’ tab.
- Click into the text field and select one or multiple of the options provided.

For impact pile driving and UXO clearance activities, users are required to specific if their activity is planned with or without abatements.

If no abatements are planned to be used:

- Select ‘Without abatements’ underneath the ‘Activity is planned…’ heading.
- Select the tick box next to ‘I confirm that no abatements are planned for this activity’.

If abatements are planned to be used:

- Select ‘With abatements’ underneath the ‘Activity is planned…’ heading.
- Click into the text fields and select one or multiple options provided.

Please note that to add Acoustic Deterrent Devices (ADD) as a mitigation, you must select ‘Other’ from the drop-down menu and specify it in the text field. If you are using an ADD for any other purpose, add it as a noise source in the ‘Details’ tab and specify the type of ADD that is used.

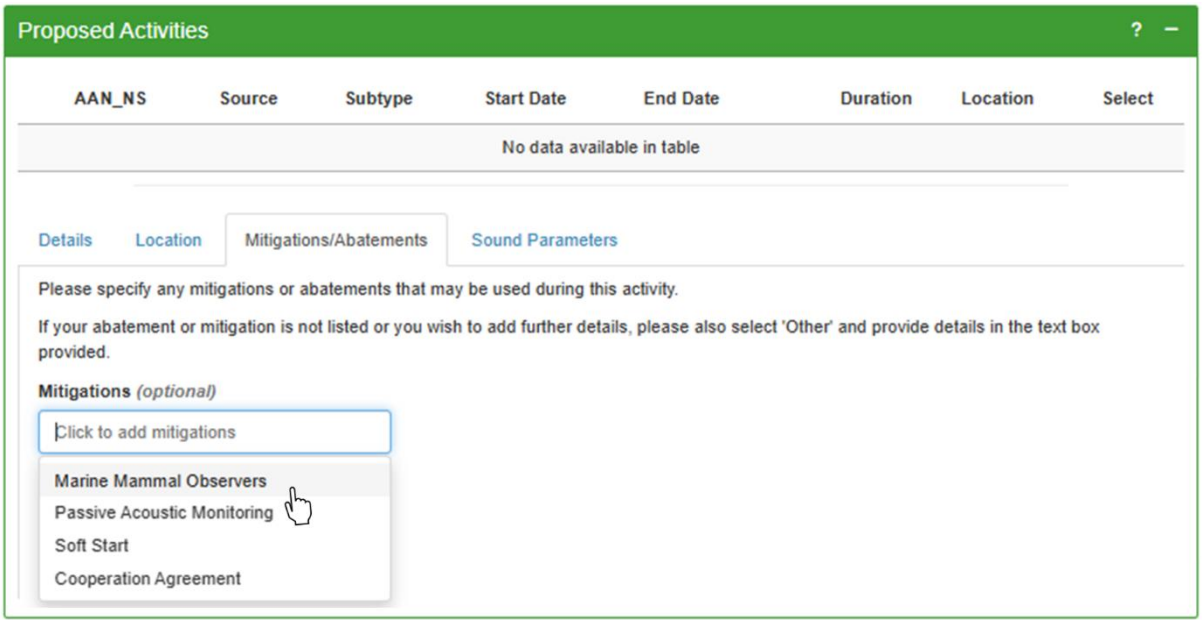

Figure 57. Example of adding information on mitigations to a specific noise source.

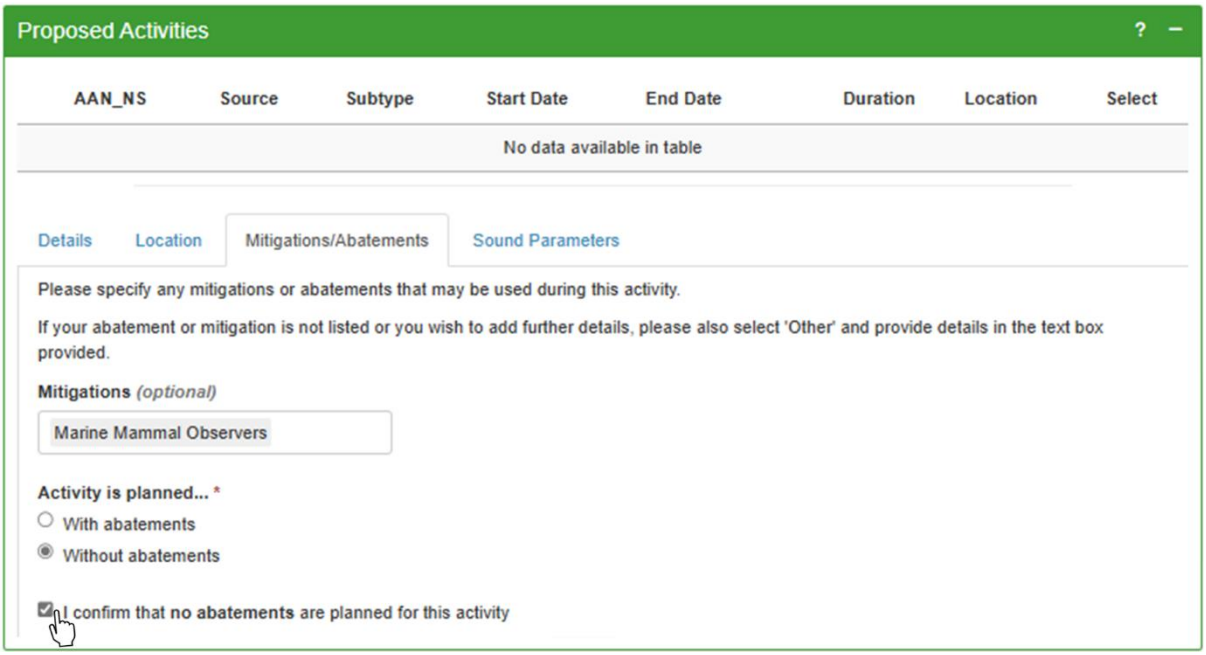

Figure 58. Example of adding information on abatements to a specific noise source.

5.1.3.4. Sound Parameters

Please note that the MNR only records activities that fall within specified parameters' ranges. Please refer to Table 3 for accepted data ranges per parameter. Activities that fall outside the ranges should not be uploaded.

To add sound parameters to an activity:

- Navigate to the 'Sound Parameters' tab.
- Enter the parameters values into their respective fields.

Table 3. Accepted data ranges for different activity noise source parameters.

Parameter	Unit	Min	Max	Supplementary information
Frequency	Hz	10	10,000	10–12,000 Hz for Multibeam Echosounders.
Sound Pressure Level	dB	120	300	
Sound Exposure Level	dB	140	360	
Maximum Airgun Volume	in^3	-	8,000	Seismic Survey only.
TNT Equivalent	kg	-	1,000	Explosives only.
Maximum Hammer Energy	kJ	-	6,000	Impact Pile Driving only.
Pile Diameter	m	0	15	Impact Pile Driving only.
Survey Dimension	-	2	4	2D, 3D, or 4D. Seismic Survey only.

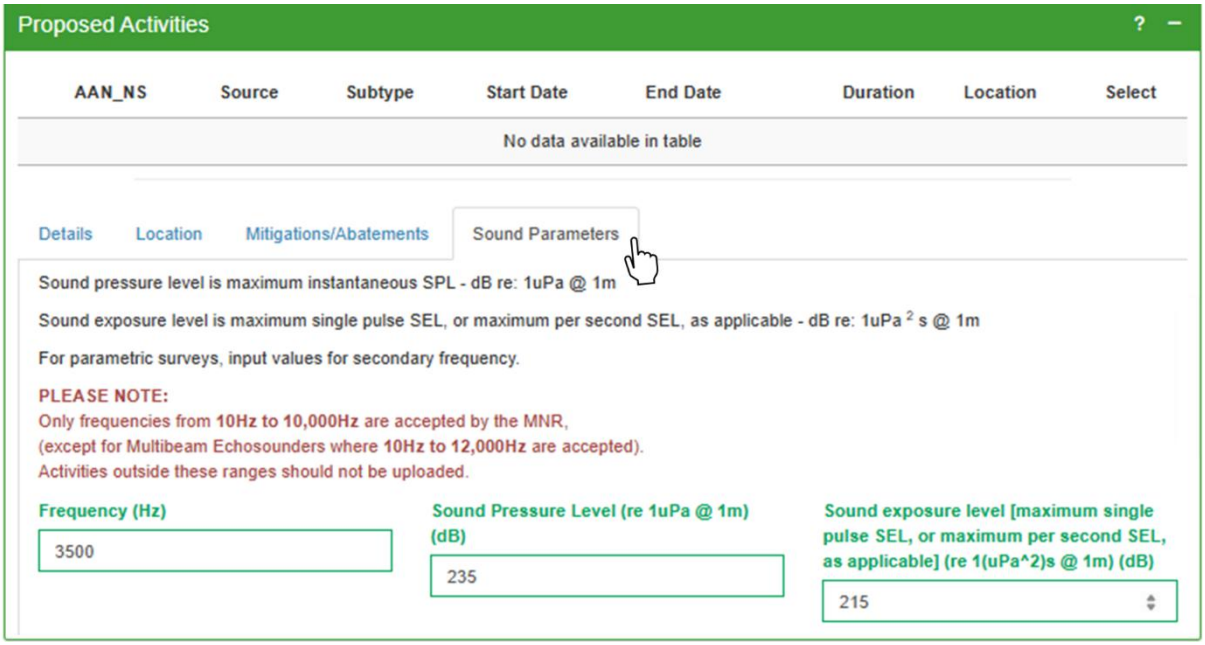

Figure 59. Example of adding sound parameters to an activity.

5.1.3.5. Download Current Data: Proposed

Users can download submitted activity locations from the ‘Locations’ tab of the ‘Proposed Activities’ panel. This function is useful when users wish to append additional data to previously uploaded data.

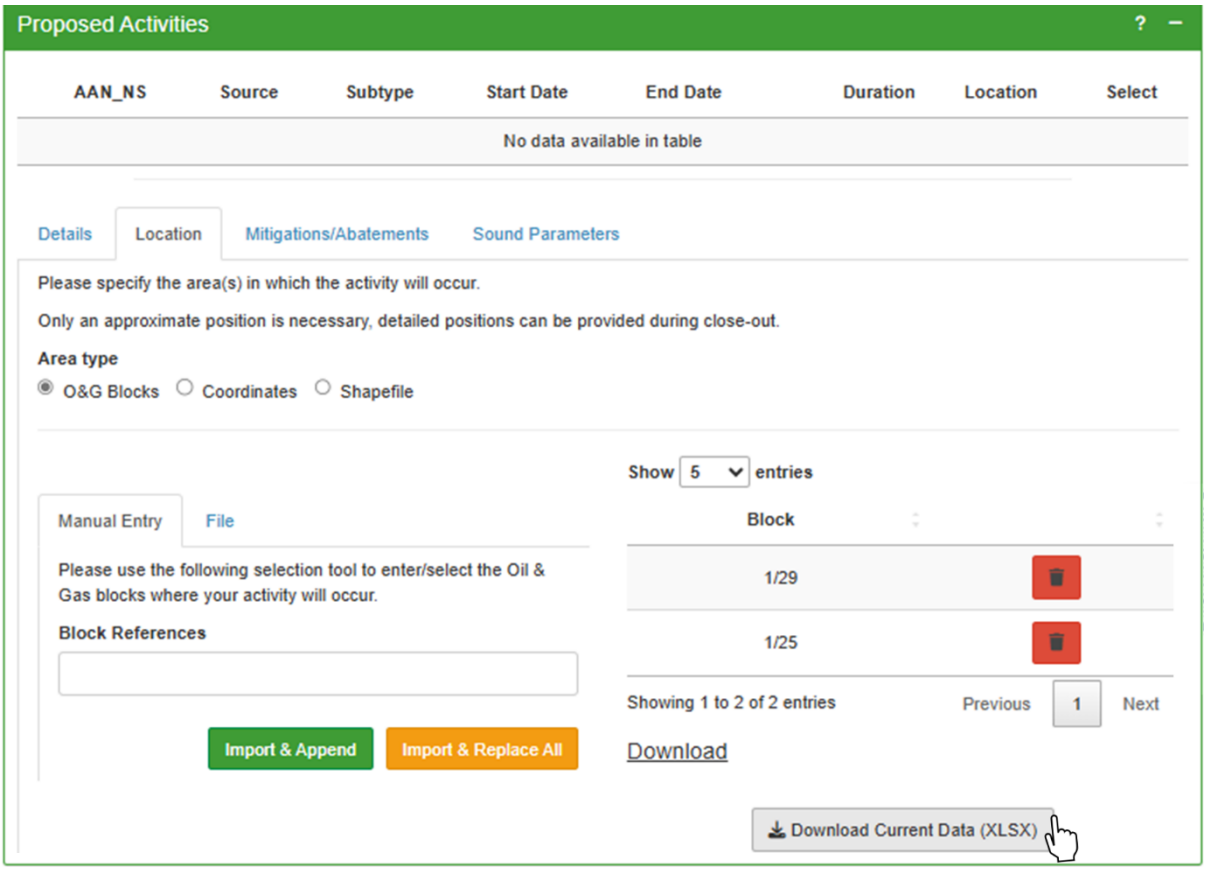

Figure 60. Navigation to the ‘Download Current Data (XLSX)’ button in the ‘Location’ tab.

Please note that it is not possible to download current location data that was submitted as a shapefile.

To download current activity location data as an XLSX file:

- Navigate to the ‘ Proposed Activities’ panel.
- Select the activity you wish to download data for from the table.
- Select the ‘Location’ tab.
- Select the ‘Download Current Data (XLSX)’ button at the bottom of the panel.
- Upon selecting the button, the download of a date-stamped XLSX file will initiate.

5.1.4. Save Draft Application

To save a draft application:

- Navigate to the top-right corner of the page of a new application form
- Select the ‘Save Draft’ button.
- If successful, the status message at the top will change from **NEW** to **DRAFT**.
- A pop-up window will open if your application was successfully saved.
- Select ‘Ok’ to confirm.

Please note that all mandatory ‘Application Details’ fields (see Section 5.1.1) must be completed to be able to save a draft application. If a mandatory field in missing, an error message will appear at the bottom-right of the screen specifying the type of information that is missing.

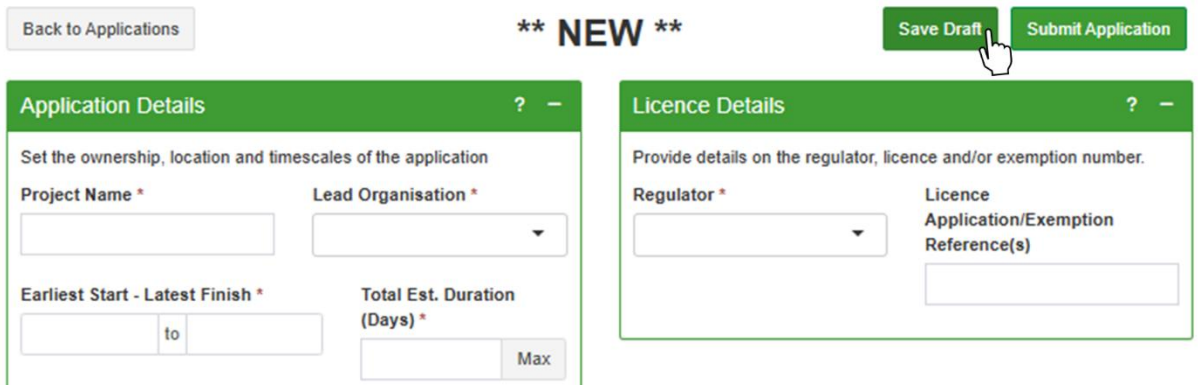

Figure 61. Navigation to the ‘Save Draft’ button to save an application as draft.

5.1.5. Submit Application

Please ensure that the submitted data is correct. Once submitted as proposed, an application will become publicly visible.

To submit an application as proposed:

- Navigate to the top-right corner of the page of a new or draft application form
- Select the ‘Submit Application’ button.

You will be prompted with a pop-up window:

- Select ‘Yes’ to confirm your submission.
- Select ‘No’ to keep your application in draft stage.
- The status message at the top will change to **PROPOSED**.

Please note that all mandatory fields in the ‘Application Details’ (see Section 5.1.1), ‘Licence Details’ ‘ (see Section 5.1.2), and ‘Proposed Activities (see Section 5.1.3) panels must be completed to be able to submit an application. If a mandatory field in missing, an error message will appear at the bottom-right of the screen specifying the type of information that is missing.

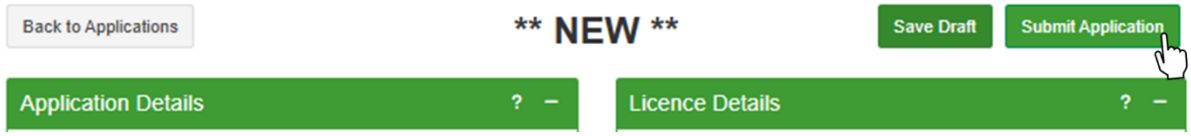

Figure 62. Navigation to the ‘Submit Application’ button to submit an application as proposed.

5.1.5.1. Mark as Notified

If your application is a voluntary submission or is exempt from licensing, users should mark their proposed application form as notified and provide an exemption reference if applicable.

To mark a proposed application as notified:

- Navigate to the ‘Licence Details’ panel.
- Optional: Select the ‘Licence Application/Exemption References(s)’ field.
- Optional: Enter the exemption reference as provided by your regulator.
- Select the ‘Mark as Notified’ button at the bottom of the panel.
- Select ‘Save Changes’ in the top-right corner of the page.
- If successful, the status message at the top will change to **Notified**.

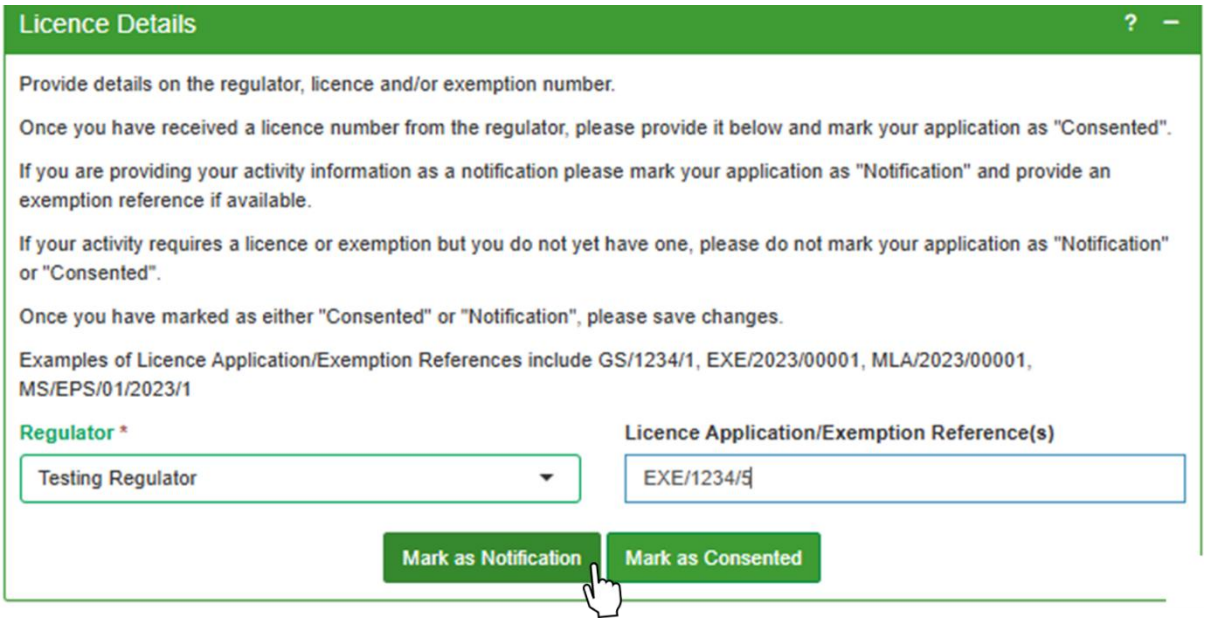

Figure 63. Navigation to the ‘Mark as Notification’ button to mark an application as notified.

Please note that close-out data can only be submitted once an application has been marked as either consented or notified.

5.1.5.2. Mark as Consented

Most activities submitted to the MNR are subject to being consented by different regulatory bodies. Once a licence reference has been received by the respective regulator, users should update their proposed application form with the licence reference and mark the application as consented.

To mark a proposed application as consented:

- Navigate to the ‘Licence Details’ panel.
- Select the ‘Licence Application/Exemption References(s)’ field.
- Enter the licence reference as provided by your regulator.
- Select the ‘Mark as Consented’ button at the bottom of the panel.
- Select ‘Save Changes’ in the top-right corner of the page.
- If successful, the status message at the top will change to **CONSENTED**.

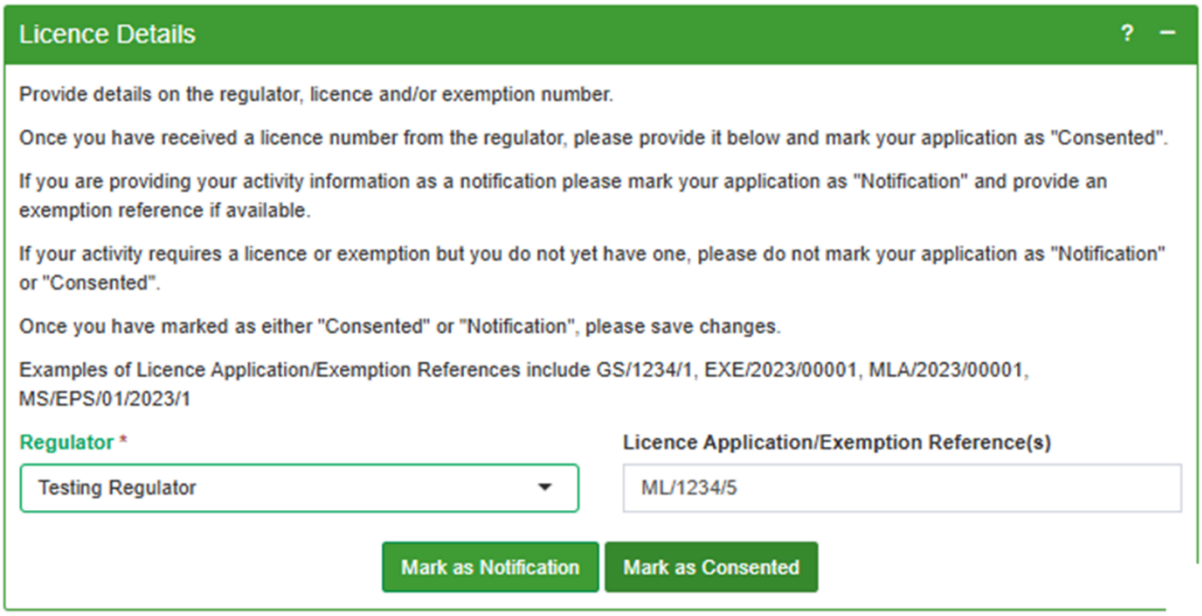

Figure 64. Navigation to the ‘Mark as Consented’ button to mark an application as consented.

Please note that close-out data can only be submitted once an application has been marked as either consented or notified.

To change an application from notified to consented:

- Navigate to the ‘Licence Details’ panel.
- Enter the licence reference as provided by your regulator.
- Select the ‘Change to Consented’ button.
- Select ‘Save Changes’ in the top-right corner of the page.
- If successful, the status message at the top will change to **CONSENTED**.

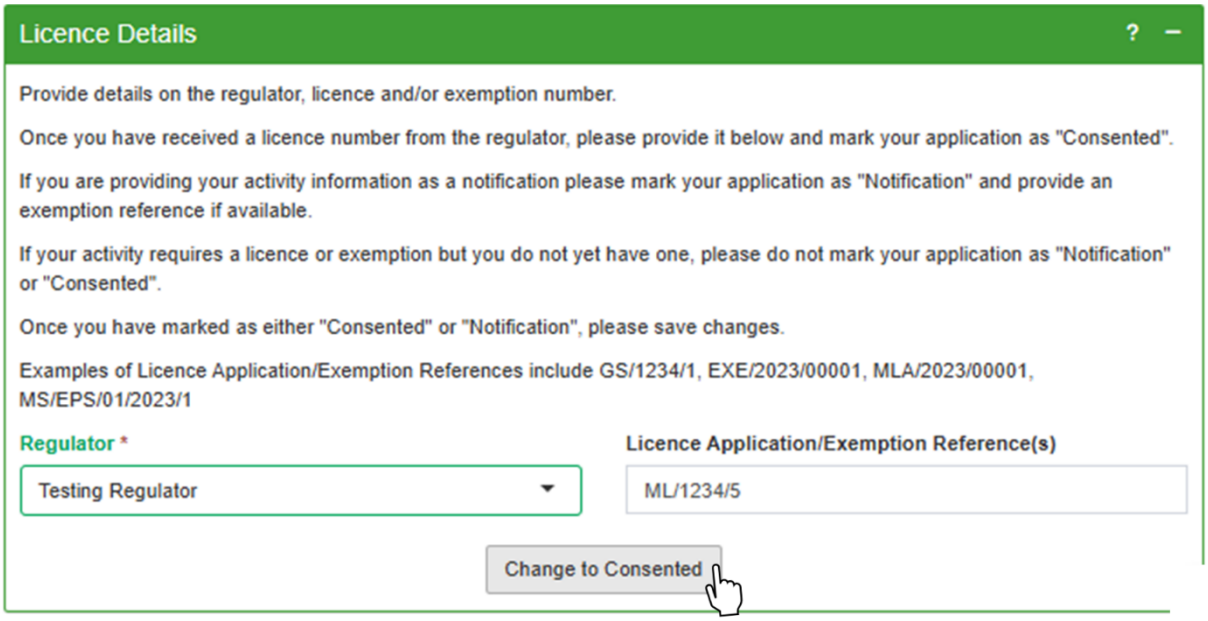

Figure 65. Navigation to the 'Change to Consented' button to change an application to consented.

5.2. Close-out Reporting

A close-out report is an accurate account of an activity after it has been completed and must be finalised by the close-out due date. An application must have been submitted as proposed and updated to consented or notified before a close-out report can be completed.

To submit close-out data:

- Select 'View Applications' from the navigation menu.
- Select the button with the pen icon to open your application in Edit mode.
- Scroll down to the 'Close-out reporting' panel.

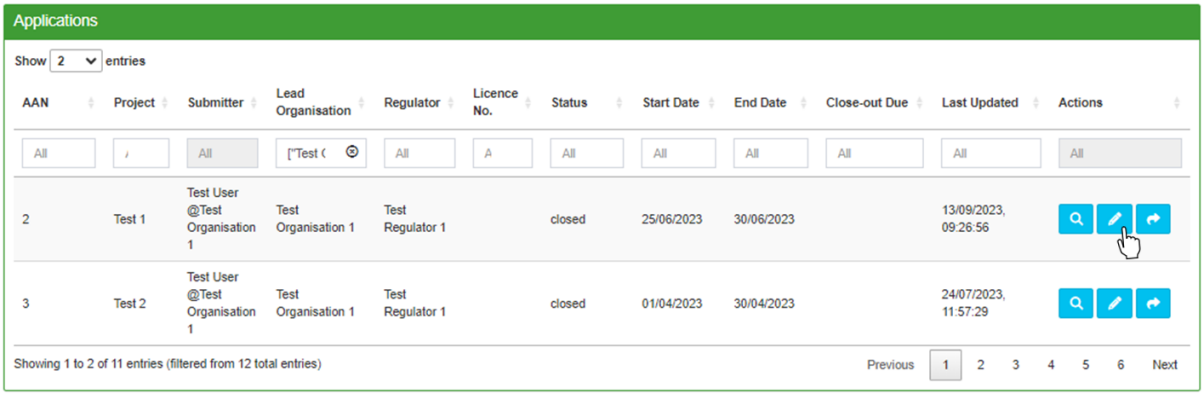

Figure 66. Navigation to the edit button in the Applications table which is denoted by a pen icon.

To enter close-out locations and dates to an activity:

- Navigate to the 'Close-out Year' drop-down menu in the top-left corner of the panel
- Select 'New Submission' from the drop-down menu

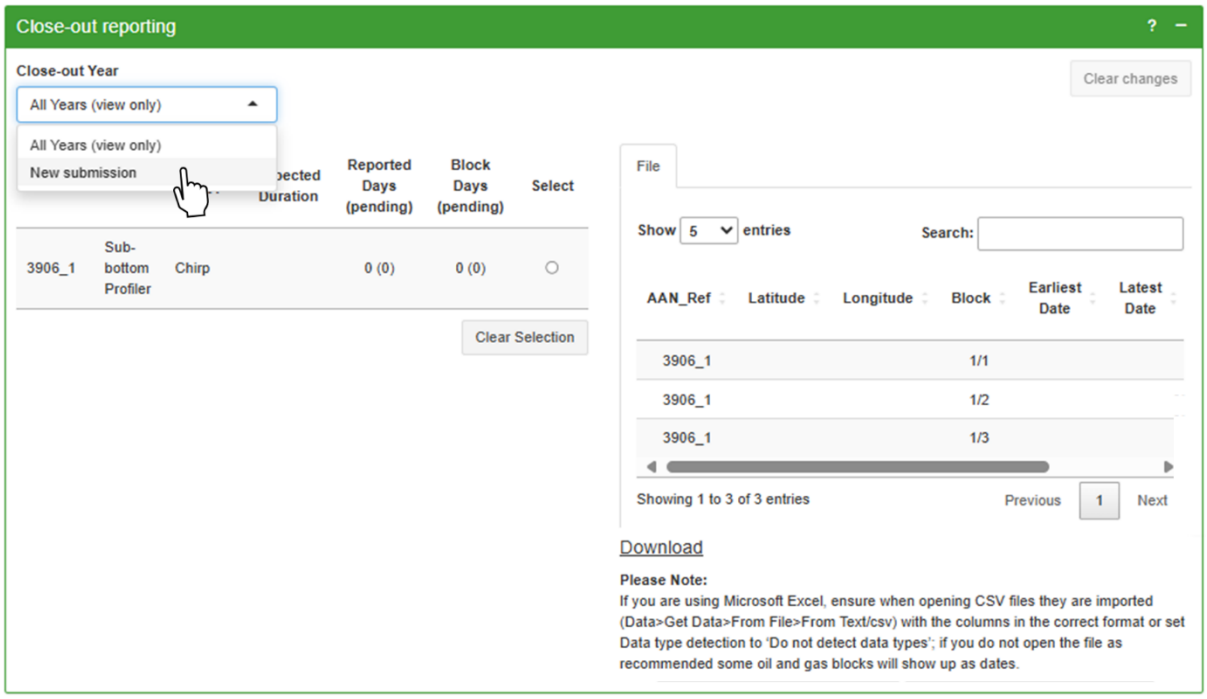

Figure 67. Example of selecting the 'New submission' option in the 'Close-out reporting' panel of an application to enter close-out locations and dates.

5.2.1. Actual Locations and Dates

Please note that it is not possible to upload shapefiles at the close-out reporting stage. Multipoints, points, linestrings, and multilinestrings that were uploaded as shapefiles at the proposed stage are converted into their unique coordinates to populate the locations table of the close-out reporting panel. Proposed locations uploaded as polygons cannot be converted to coordinates and, therefore, will need to be manually added to the locations table during close-out reporting, either as coordinates or O&G blocks.

For each activity, actual locations and dates can be provided as either Oil and Gas Blocks or coordinates. These can be submitted either manually or uploaded as a CSV or XLSX file. If your survey has an associated P1/11 file, please use the File Conversion Tool (see Section 7) to generate a XLSX file which is pre-formatted for upload to the MNR. This will ensure a more accurate plotting of the survey locations and avoids overestimating the noise impact.

To manually add close-out data for an activity:

- Select an activity in the table on the left.
- Select either the 'O&G Blocks; or 'Coordinates' tab as required.
- To add dates to a location, select the respective row in the 'Select 'column.
- The 'O&G Block' or 'Latitude/Longitude' fields will auto-populate with your selection.
- Click into the 'Activity Dates' field.
- To add dates, manually type or click on the respective date(s) in the pop-up calendar.
- Once completed, select the 'Update' button to add the dates to the table.
- Repeat the same process for each location in the table.

Please separate each date with a comma if there a multiple dates per location.

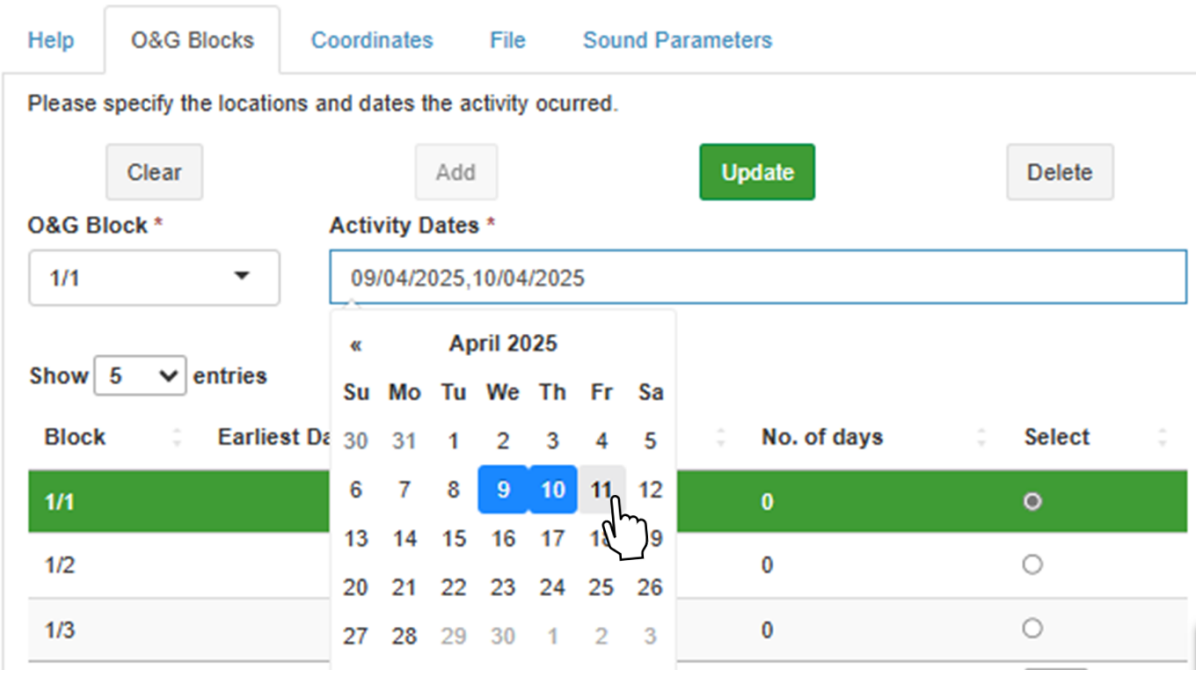

Figure 68. Example of selecting activity dates using the pop-up calendar.

If additional locations need to be added:

- Click into the ‘O&G Block’ or ‘Latitude/Longitude’ fields and enter new locations.
- Manually or by using the calendar pop-up add activity dates for the location
- Select the ‘Add’ button to add the data to the table.

Please note that the table will automatically be filled in with the earliest and latest date and the total number of days on which the activity occurred.

To enter close-out data via uploading a XLSX or CSV file:

- Select the activity in the table.
- Select the ‘File’ tab.
- Select ‘Selected only’ to upload close-out data for the selected activity only.
- Alternatively, select ‘All noise sources’ to upload combined close-out data for all activities of the application.

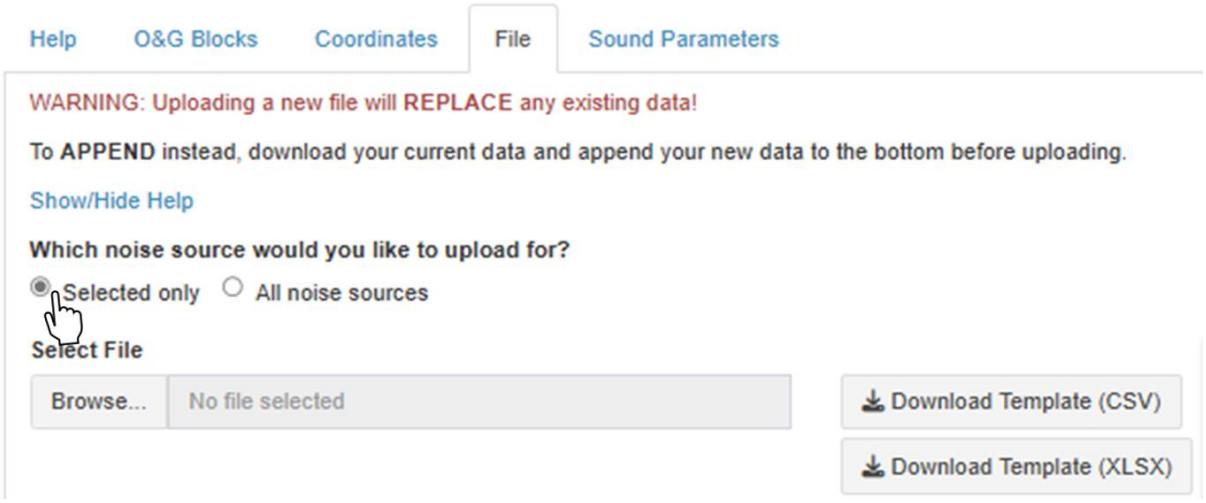

Figure 69. Options to upload a CSV or XLSX file for all noise sources or only a selected noise source.

A close-out file must contain the following columns to be read correctly by the system:

- AAN_Ref – Unique noise source reference (e.g. 82_1, 82_2).
- Block – Oil and Gas Block reference (e.g. 87/3, 347/26).
- Date – Dates of the activity occurred in dd/mm/yyyy format. If the activity occurred on multiple dates at the same location, a unique row needs to be added per date.
- Latitude – Latitude as decimal degrees or degrees:minutes:seconds.
- Longitude – Longitude as degrees:minutes:seconds or decimal degrees.

Please see Section 5.1.3.2.2 for guidance on the required format of coordinates.

	A	B	C	D	E
1	AAN_Ref	Latitude	Longitude	Block	Date
2	84_1	60.7529	-0.7363		02/02/2023
3	84_1	56.94802	-1.85924		03/02/2023
4					
5					

	A	B	C	D	E
1	AAN_Ref	Latitude	Longitude	Block	Date
2	84_1			83/3	02/02/2023
3	84_1			83/4	03/02/2023
4	84_2			102/15	05/03/2023
5					

Figure 70. Example of a XLSX with location data as coordinates (left) and Oil and Gas Blocks (right).

If you wish to download a template CSV or XLSX file with the required columns:

- Select the ‘Download Template (CSV)’ or ‘Download Template (XLSX)’ button.
- Complete the selected file template with your data and save it to your files.

To upload your completed file from your device:

- Select the ‘Browse’ button.
- Open the file from your file explorer.

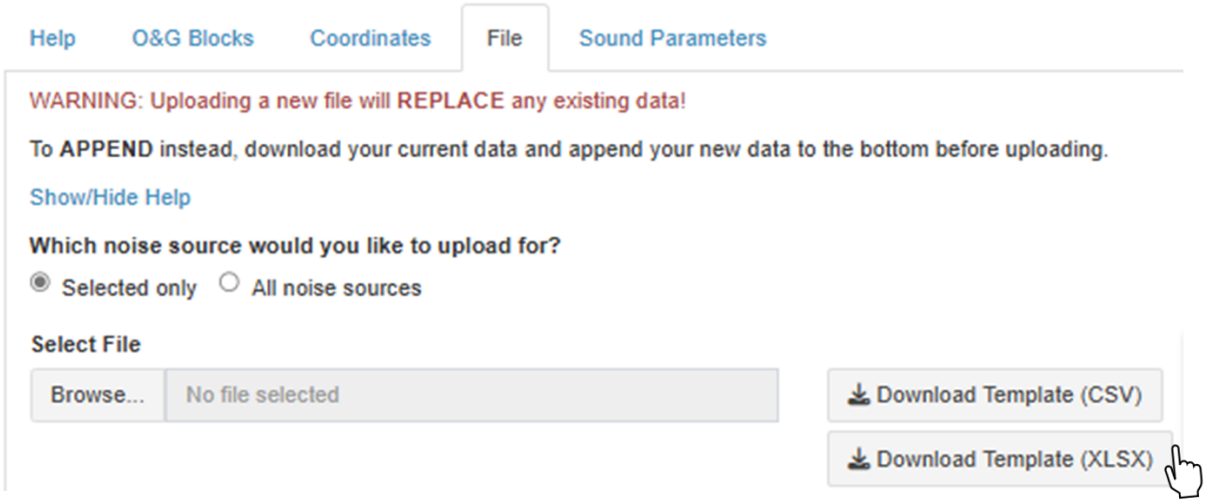

Figure 71. Navigation to the 'Download Template (XLSX(' button to download a close-out template.

Please note that uploading a CSV or XLSX will replace any existing data (e.g. previously entered through manual entry). If required, a CSV or XLSX file with the current data can be downloaded (see Section 5.2.1.1) to append new data to it.

5.2.1.1. Download Current Data: Close-out

Users can download their submitted close-out data from both interim and closed applications. This function is useful if users wish to append additional data to their existing close-out information or to simply download a record of the data that was submitted.

To download a file containing submitted close-out data:

- Navigate to the 'Close-out reporting' panel.
- Select the 'Download Current Data (CSV)' or 'Download Current Data (XLSX)' button.
- Upon selecting the button, the download is initiated.

Please note that if you are using Microsoft Excel to open CSV files, these should be imported without any data type detection. If you do not open downloaded CSV files as recommended, block references will display as dates.

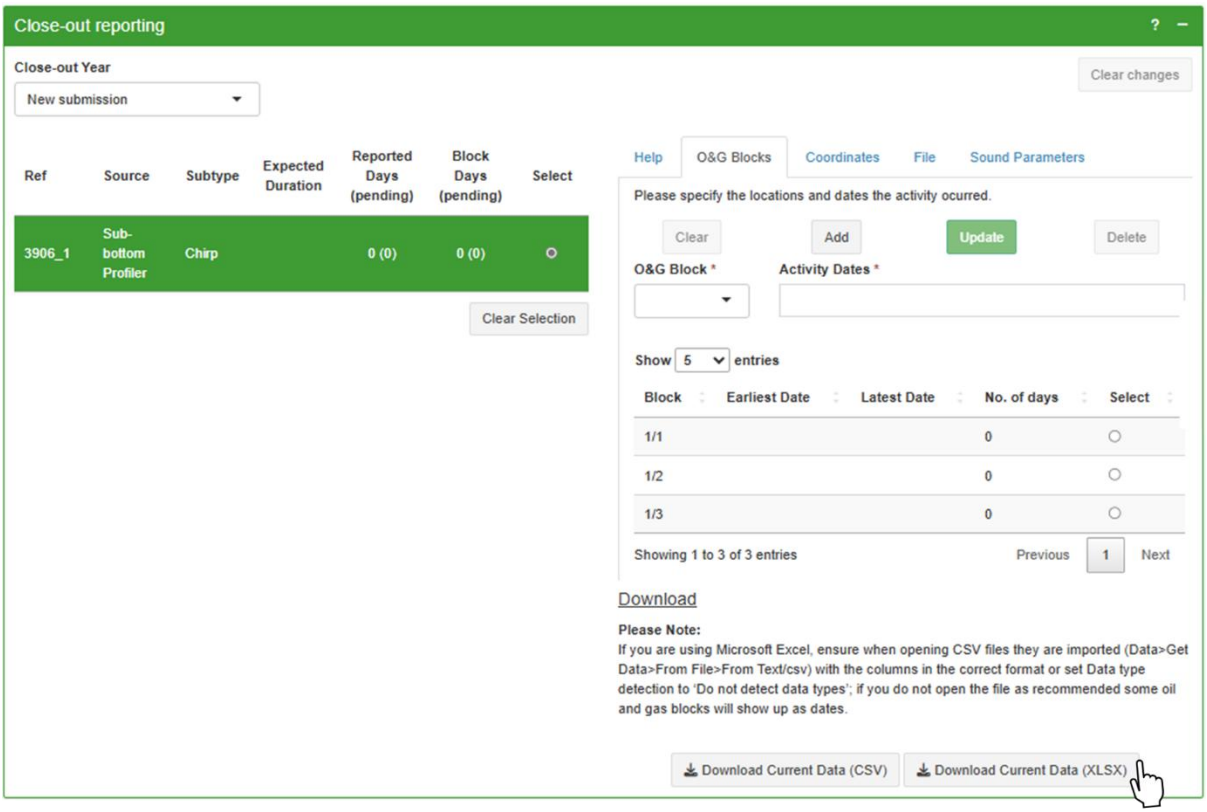

Figure 72. Navigation to the 'Download Current Data (XLSX) button in the 'Close-out reporting panel.

5.2.2. Actual Sound Parameters

In addition to the dates and location on which/where an activity occurred, the MNR also records information on the sound parameters of the activities that were conducted.

Please note that the completion of this section is optional but strongly encouraged.

For each activity type, the MNR only records information on low to medium frequency noise. This means that activities that fall above or below a specific threshold are not recorded.

To enter sound parameters for an activity:

- Select the activity in the table you wish to enter parameters for.
- Select the 'Sound Parameters' tab.
- Enter the values in the respective text boxes.
- Repeat the process for any other activities on the application.

Please note that the system will prompt you with an error message if you attempt to upload data outside the specified data (e.g. frequency) ranges (see Table 3, Section 5.1.2.4).

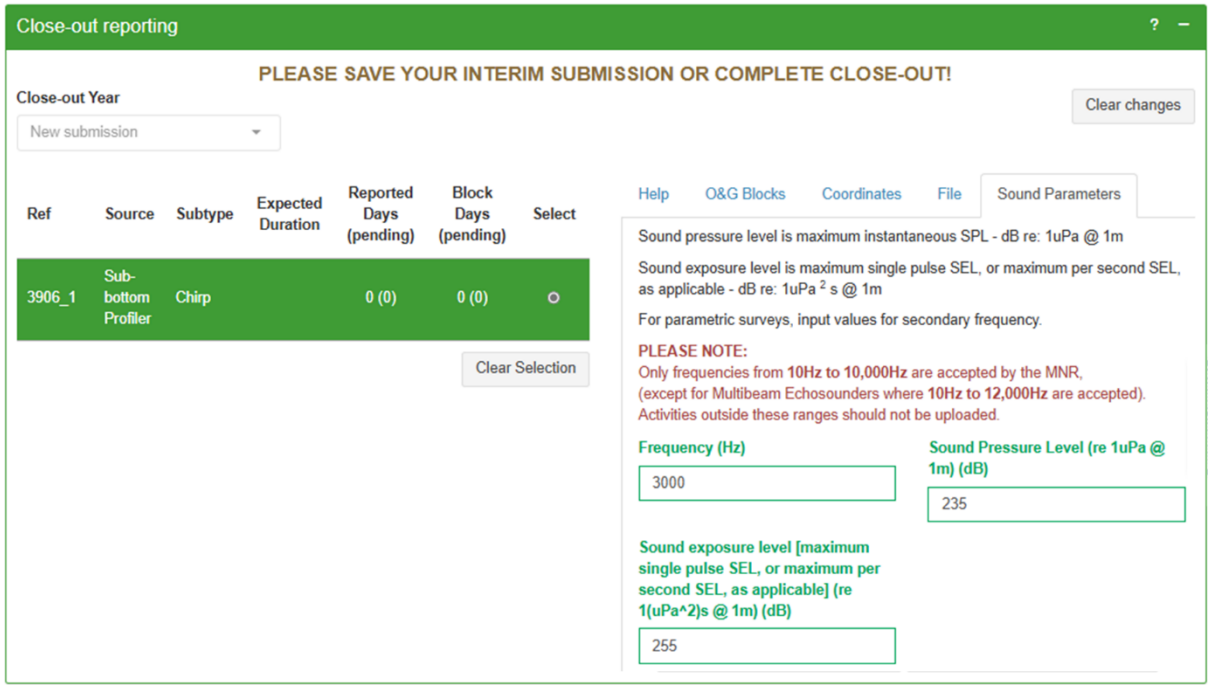

Figure 73. Example of inputting actual sound parameters during close-out reporting.

5.2.3. Submit Interim Close-Out Report

If you wish to save your close-out data prior to your final close-out submission, you can save your application as an interim close-out report. Interim close-outs can be edited until 31 March of the following year if information needs to be updated.

> Please note that interim close-outs do not replace a final close-out submission. Any application must be closed by its close-out due date (see Section 5.2.5).

To save an application as an interim close-out:

- Complete the ‘Close-out Reporting’ panel with the necessary information.
- Navigate to the top-right corner of the page.
- Select the ‘Save Changes’ button.
- A pop-up window will appear if your interim close-out has been successfully saved.
- Select ‘OK’ to confirm.
- If successful, the status message at the top will change to **INTERIM**.

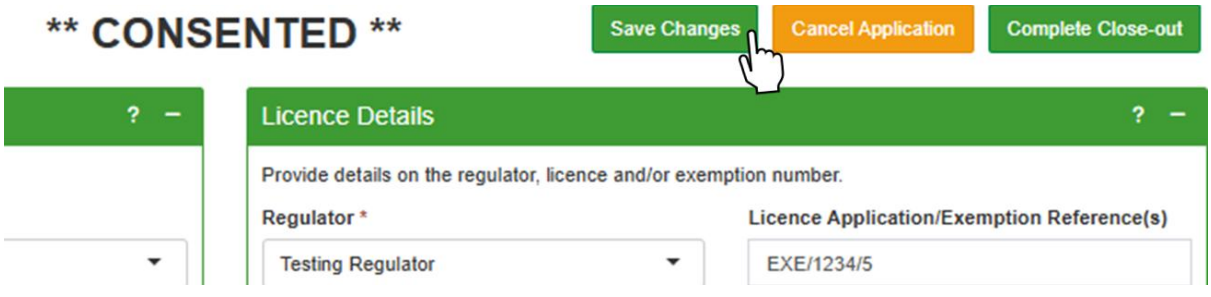

Figure 74. Navigation to the ‘Save Changes’ button to submit an interim close-out report.

5.2.4. Submit Close-out Report

Please ensure that all data is correct before submitting a close-out report.

To submit a final close-out report:

- Complete the 'Close-out Reporting' panel with the necessary information.
- Navigate to the top-right corner of the page.
- Select the 'Complete Close-out' button.
- A pop-up window will appear asking you to confirm your submission.
- Select 'Yes' to confirm your close-out report submission.
- Select 'No' to keep your application in either the proposed or interim close-out stage.
- If successful, the status message at the top will change to **CLOSED**.

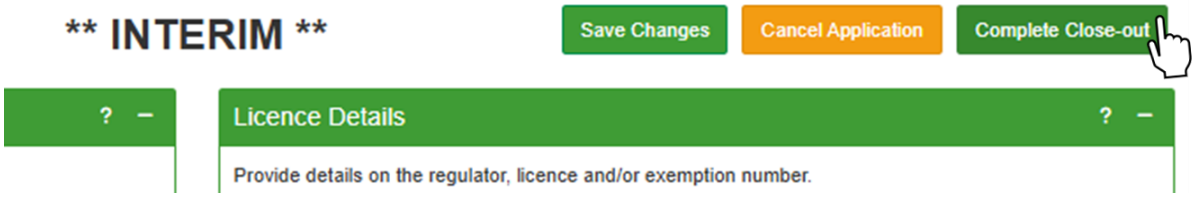

Figure 75. Navigation to the 'Complete Close-out' button to submit a close-out report.

5.2.4.1. Multi-year Close-outs

For applications that span multiple consecutive years, users must submit an interim close-out report for each year of the application. This must be submitted by 31 March of the following year.

Please note that after the deadline (31 March) for a close-out year has passed, submitted close-out data will be locked and no longer editable. Only the current year will be editable. If you require retrospective changes to submitted close-out data, please contact MNR@jncc.gov.uk with your query.

To submit an interim close-out report for a specific year of a multi-year application:

- Follow the same close-out reporting process as for a single year application by entering the locations and dates (see Section 5.2.1) and parameters (see Section 5.2.2) for the year you wish to close-out.
- Navigate to the top-right corner of the page.
- Select the 'Close-out Year' button.
- Repeat this process by the respective deadline for each year of the application.

Please note that even if no activity occurred in a specific year, an empty interim close-out report for the year must be submitted to fulfil your reporting obligation. To submit an empty interim close-out report for a specific year, select the 'Close-out Year' button without having entered any close-out data for the year in the 'Close-out reporting' panel.

Once a year has been closed, the drop-down menu underneath the ‘Close-out Year’ header automatically updates. This allows users to view close-out data per year in a ‘view only’ mode. If no activity occurred, the text will be display as ‘no activity’.

Please note that the ‘Close-out Year’ function does not replace a final close-out report. Once data is available for the final year of the application, the application needs to be updated from interim to closed by submitting a final year close-out report (see Section 5.2.4).

5.2.5. Close-out Due Date

Each proposed activity application will have associated close-out due date which can be found in the ‘Close-out Due’ column of the ‘Applications’ table.

Please note that for multi-year applications there will be a close-out due date for each year (see Section 5.2.4.1). The first due date will be when the interim close-out report for the first year is due (i.e. 31 March of the following year).

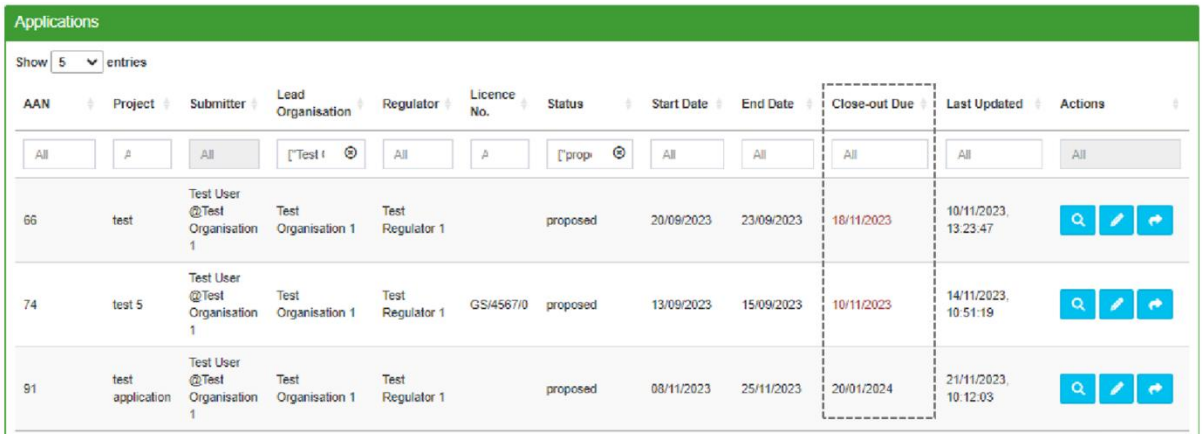

Figure 76. Applications table with the close-out due date column highlighted.

The close-out due date is automatically calculated by adding a set number of days to the latest end date given in the proposed activity application. The exact number of days is decided by the respective regulator that is named within an application.

Please see Table 4 for the close-out periods of different regulators.

Table 4. Regulatory bodies and their associated close-out period and acronyms.

Regulator	Acronym	Close-out period
The Offshore Petroleum Regulator for Environment and Decommissioning	OPRED	12 weeks / 84 days
Marine Management Organisation	MMO	12 weeks / 84 days
Marine Directorate	MD-LOT	12 weeks / 84 days
Natural Resources Wales	NRW	8 weeks / 56 days
The Department of Agriculture, Environment and Rural Affairs	DAERA	8 weeks / 56 days

5.3. Geo Plot

The Geo Plot can be found at the bottom of an application and displays the boundaries of:

- UK continental shelf.
- UK territorial sea (12nm) limit
- UKMS Sub-regions.
- Harbour porpoise Special Areas of Conservation (SACs).
- Oil and Gas Quadrants.

Once an application has been saved or submitted as draft, proposed, interim, or closed, activity locations will be overlaid on the plot. Locations will be displayed as either Oil and Gas Blocks, coordinate points or polygons depending on which type of data was submitted.

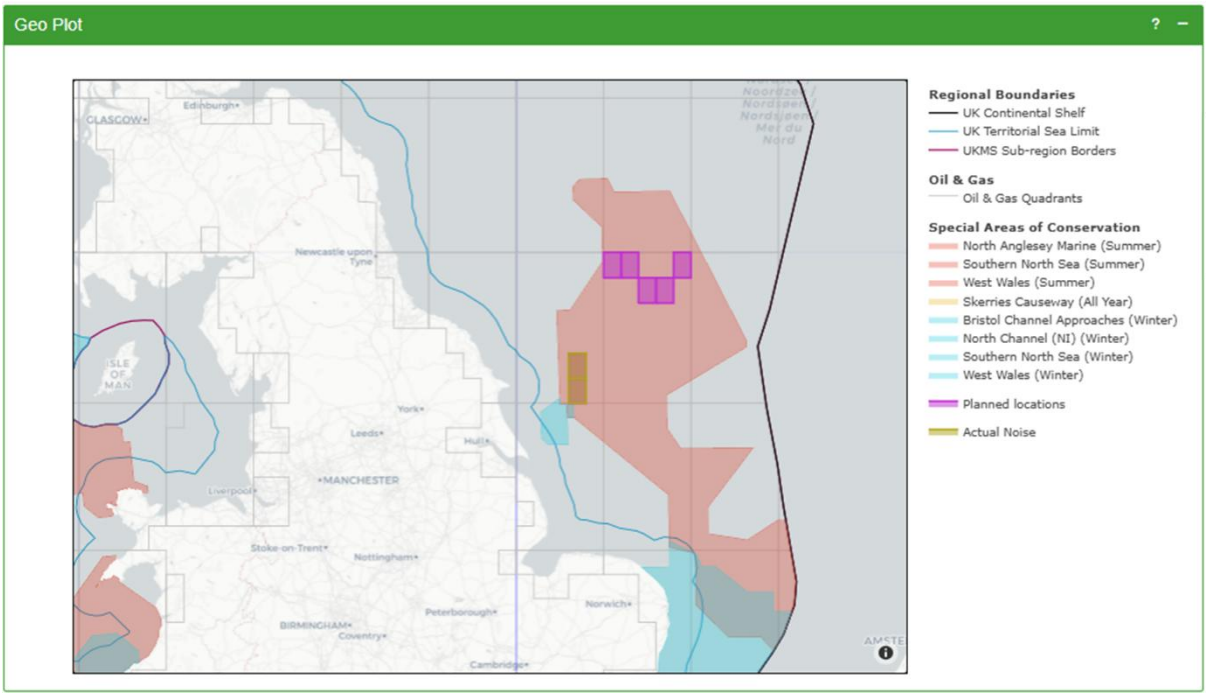

Figure 77. Example of a 'Geo Plot' showing the borders of the UK continental shelf, UKMS sub-regions, and harbour porpoise Special Areas of Conservation (SACs) by season as well as planned and actual activity locations.

Please note that users can apply various plot controls to the 'Geo Plot' which will display when hovering over the top-right corner of the plot (see Section 2.1.4).

Hovering over an Oil and Gas quadrant will display the associated quadrant number.

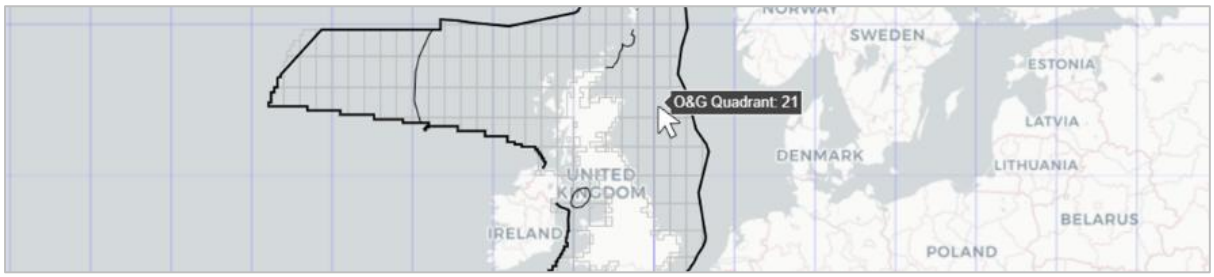

Figure 78. Hovering over a specific Oil and Gas Block will display its associated quadrant number.

Copyright information will display when hovering over the ‘information’ icon in the bottom-right corner of the plot.

Figure 79. Location of the ‘information’ icon found at the bottom-right corner of the Geo Plot to view copyright information.

When hovering over an area that is associated with either submitted activity locations or SACs, the coordinate pair associated with that feature will be displayed.

- For Oil and Gas Blocks, this refers to the boundaries and extent of the enclosed area.
- For coordinates, this is the exact location data submitted.

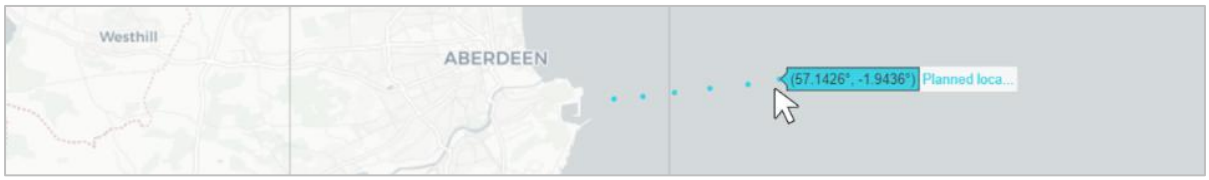

Figure 80. Example of a ‘Geo Plot’ with planned activity locations submitted as coordinates shown as individual points. Hovering over an individual point shows the coordinate pair of the activity location.

5.4. View Application

Applications can be viewed at all stages of the application process. No fields will be editable when an application is opened in View mode.

To view an application:

- Navigate to the ‘View Applications’ page from the navigation menu on the left.
- Select the button with the magnifying glass icon under the ‘Actions’ header.

Please note that registered users are able to view all applications that were submitted to the MNR, including proposed, interim, and closed applications from other organisations (excluding what-if applications).

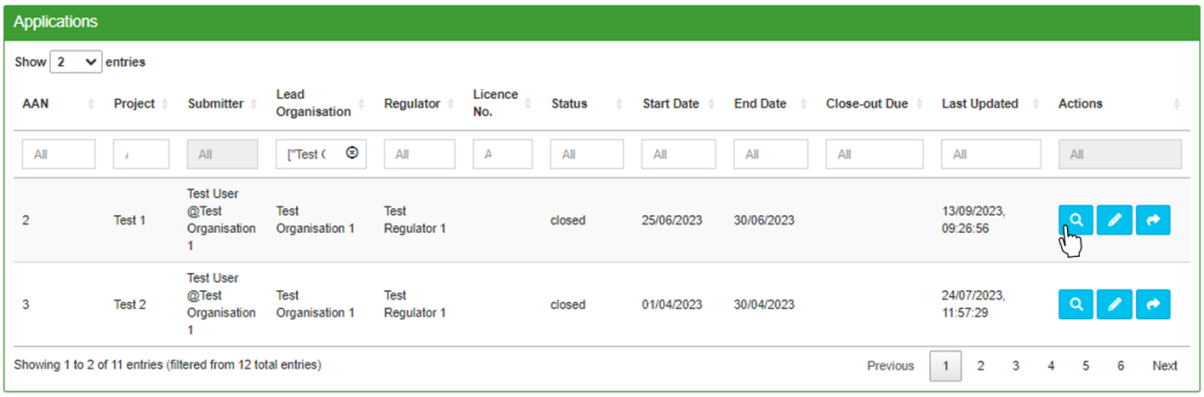

Figure 81. Navigation to the ‘View’ button to open a proposed application in View mode.

5.4.1. Advanced Application Filters

Users can apply advanced filtering options to the ‘Application’ table:

- Navigate to the top of the ‘View Applications page.
- Select the plus icon on the right of the ‘Advanced Application Filters’ bar to expand.
- Apply the different filters as required.
- Optional: Select the ‘Clear Filter’ to return to the default filter settings.

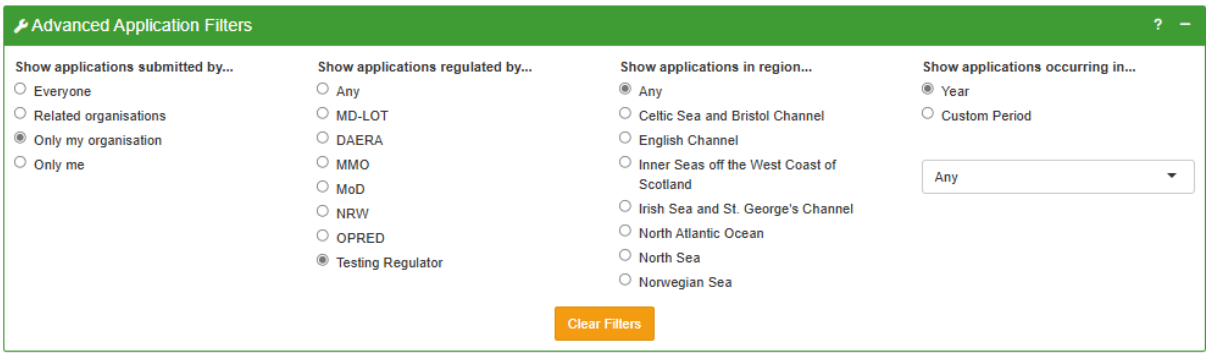

Figure 82. Example of the ‘Advanced Application Filters’ panel to custom filter the ‘Applications’ table.

5.5. Edit Application

Please note that is possible to edit an application across all its stages. Draft, what-if, and proposed, notified, and consented can always be edited, while interim and closed applications will be locked for editing on the 31 March of the following year. Please contact MNR@jncc.gov.uk if require an application to be edited after this deadline.

To edit an application:

- Navigate to the ‘View Applications’ page from the navigation menu on the left.
- Navigate to the ‘Actions’ header of the ‘Applications’ table.
- Select the ‘Edit’ button to open the application you wish to change in edit mode.

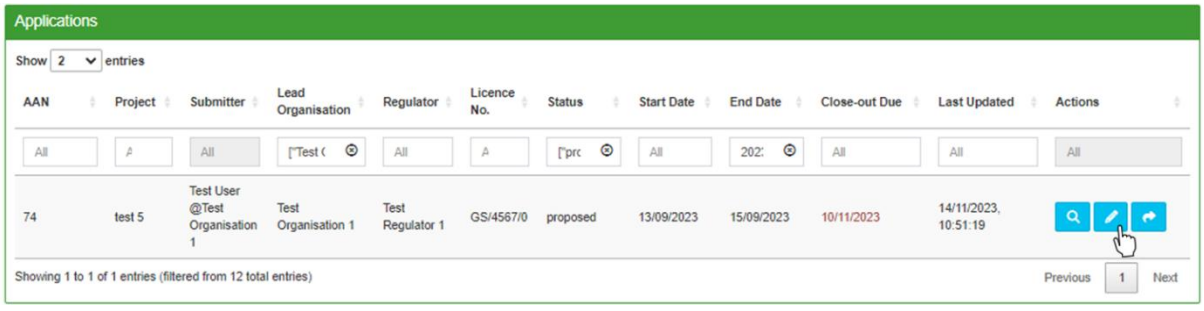

Figure 83. Navigation to the ‘Edit’ button to open an application in edit mode.

Alternatively:

- Navigate to the ‘View Applications’ page from the navigation menu on the left.
- Select the ‘View’ button to open the application in view mode.

- Select ‘Edit Application’ at the top-right corner of the page to switch to edit mode.

In both cases, the application page will open with all the details that were previously input. All fields will be editable when the application is opened in this capacity.

5.5.1. Edit Proposed Activity

To update the specifications of a particular activity:

- Navigate to the ‘Proposed Activities’ panel.
- Navigate to the table row of the activity you wish to edit.
- Select the radio button underneath the ‘Select’ column of the table. The tabs of the panel will autofill with the information of the selected activity.
- Make the required changes to the activity locations, details, mitigations, and/or sound parameters (see Section 5.1.3)
- Once completed, select the ‘Update’ button to update the activity.

Select the ‘Save Changes’ button in the top-right corner of the application for the update to take effect.

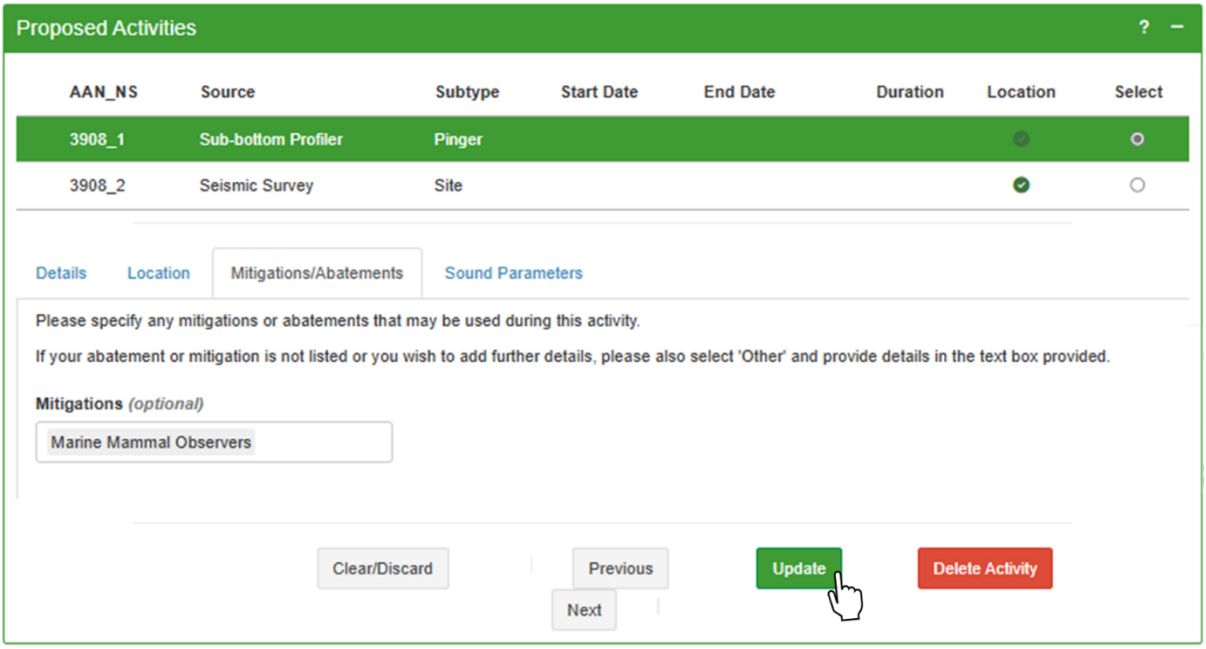

Figure 84. Example of updating a particular noise source of an application by adding a mitigation.

5.5.2. Add Proposed Activity

To add an additional proposed activity to an existing application:

- Add the respective activity details into the data fields (see Section 5.1.3.)
- Select the ‘Add’ button to add the activity (see Section 5.1.3)
- Select the ‘Save Changes’ button in the top-right corner of the application for the addition to take effect.

5.5.3. Cancel Proposed Activity

Please note that an activity should only be cancelled if it was not undertaken or if the actual parameter values fall outside the specified data (e.g. frequency) ranges (see Section 5.1.3.4).

To cancel an activity from a proposed, consented, or notified application:

- Navigate to the ‘Proposed Activities’ panel.
- Select the activity you wish to cancel from the table.
- Select the ‘Cancel Activity’ button at the bottom of the panel.

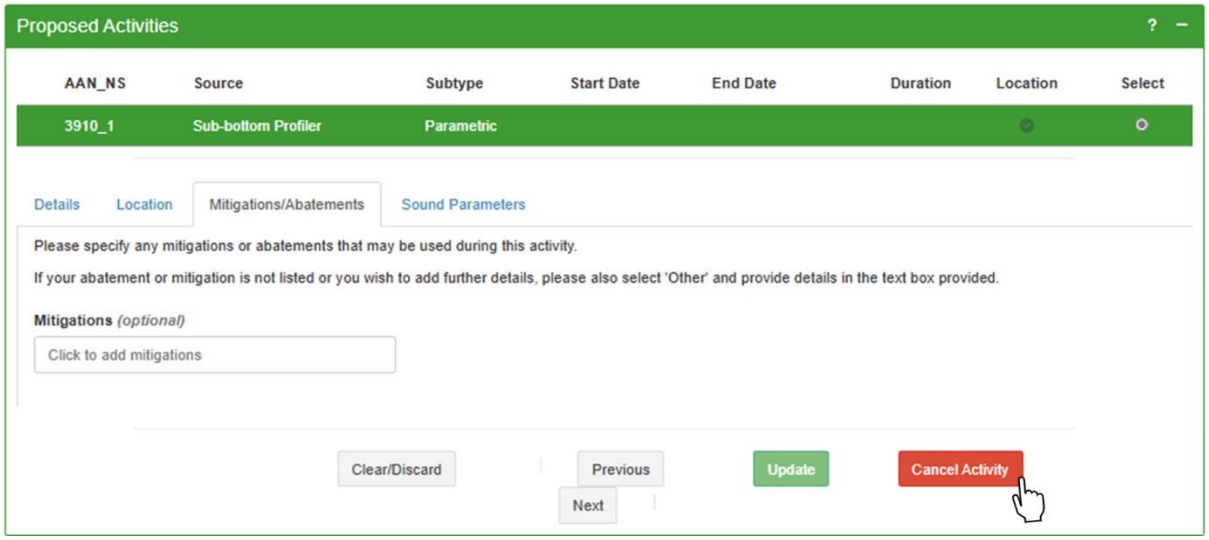

Figure 85. Navigation to the ‘Cancel Activity’ button in the ‘Proposed Activities’ panel.

A pop-up window will open asking you to confirm your action:

- Select ‘Yes’ to cancel the selected activity.
- Alternatively, select ‘No’ to return to the application.

Please note that once an activity has been cancelled, it can no longer be modified. This also means that cancelling an activity cannot be undone. If you mistakenly cancel an activity, it needs to be resubmitted in the ‘Proposed Activities’ panel.

Once cancelled, the activity will appear greyed out and strike-through in the table.

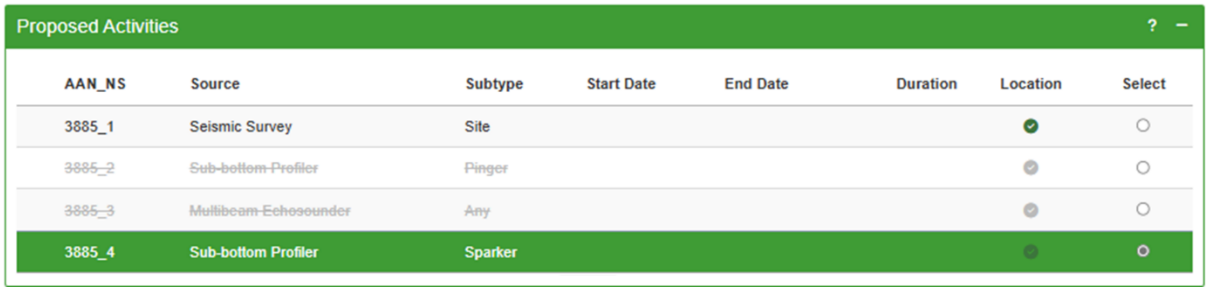

Figure 86. View of the table of the ‘Proposed Activities’ panel with cancelled activities greyed out.

Select the ‘Save Changes’ button in the top-right corner of the application for the cancellation to take effect.

5.5.4. Delete Proposed Activity

To delete an activity within a draft or what-if application:

- Select the activity in the table underneath the ‘Select’ column.
- Select the ‘Delete Activity’ button to delete the selected activity.

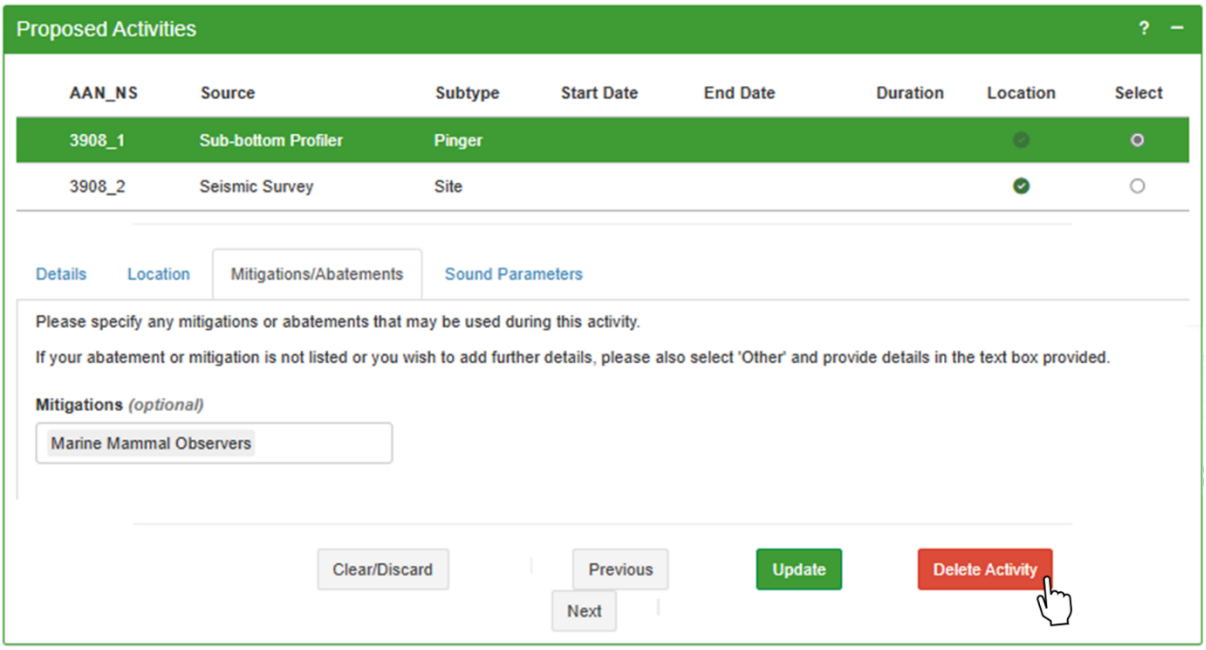

Figure 87. Navigation to the ‘Delete Activity’ button in the ‘Proposed Activities’ panel.

A pop-up window will appear asking you to confirm your action:

- Select ‘Yes’ to delete the selected activity.
- Alternatively, select ‘No’ to return to the application.

Please note that the deletion is permanent, and the AAN suffixes will be reassigned after the deletion. Activities can only be deleted in draft and what-if applications. If you require an activity to be deleted from an application that is in a proposed, interim or closed status, please contact MNR@jncc.gov.uk.

Select the ‘Save Changes’ button in the top-right corner of the application for the deletion to take effect.

5.5.5. Edit Activity Locations

To edit the proposed locations of activities listed in an application:

- Navigate to the ‘Proposed Activities’ panel.
- Select the radio button next to the activity you wish to edit.
- Select the ‘Locations’ tab.

- Select the applicable option under the ‘Area type’ heading.

Please note that the steps below only apply to locations that were submitted as either oil and gas blocks or coordinates. To edit location data, which was originally submitted as a shapefile, user must upload a new shapefile for the activity.

To delete a location or multiple locations:

- Navigate to the table listing all saved locations for the activity.
- Select the ‘bin’ icon next to the location you wish to remove.
- Select the ‘Update’ button.
- Select ‘Save Changes’ in the top-right corner of the application.

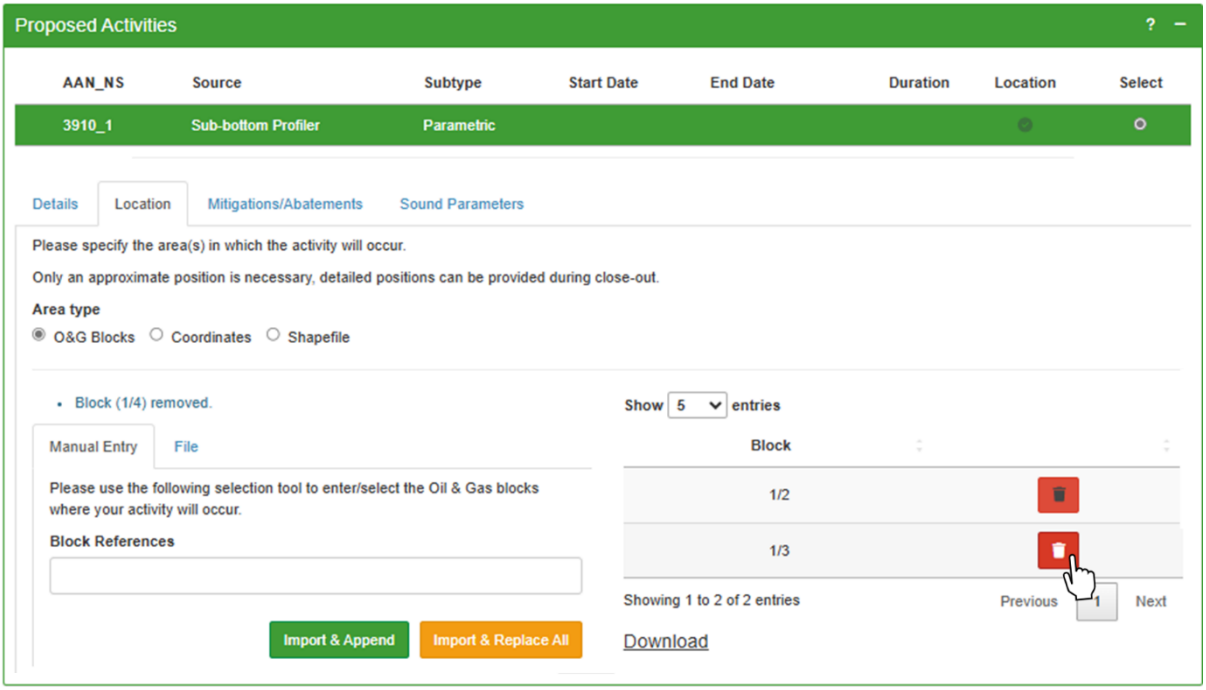

Figure 88. Example of deleting a particular block reference from the saved activity locations.

To add additional locations:

- Navigate to the manual entry tab
- Enter the additional location(s) as required.
- Select ‘ Import & Append’ to append the new locations to your current data.

To replace all locations:

- Navigate to the manual entry tab
- Enter the new location(s) as required.
- Select ‘ Import & Append’ to append the new locations to your current data.

To replace existing location data:

- Navigate to the manual entry tab
- Enter the new location(s) as required.
- Select ‘Import & Replace All’ to import your new locations data.

5.5.6. Edit Close-out Data

Users can only edit close-out data of the year that they are currently in up until 31 March of the following year. After this deadline, close-out data is no longer editable. This means that close-out data that was submitted for a previous year (i.e. as part of a multi-year close-out (see Section 5.2.4.1)) can no longer be edited.

Please contact MNR@jncc.gov.uk if you wish to edit retrospective close-out data outside of the current year.

To update submitted dates and/or activity locations:

- Navigate to the ‘Close-out reporting’ panel.
- Navigate to the ‘Close-out Year’ heading in the top-left corner of the panel.
- Select the year you wish to edit from the drop-down list.
- Select the activity you wish to edit from the table on the right.
- Change the data as required.
- Select the ‘Update’ button to save your changes.
- Select ‘Save Changes’ in the top-right corner of the application.

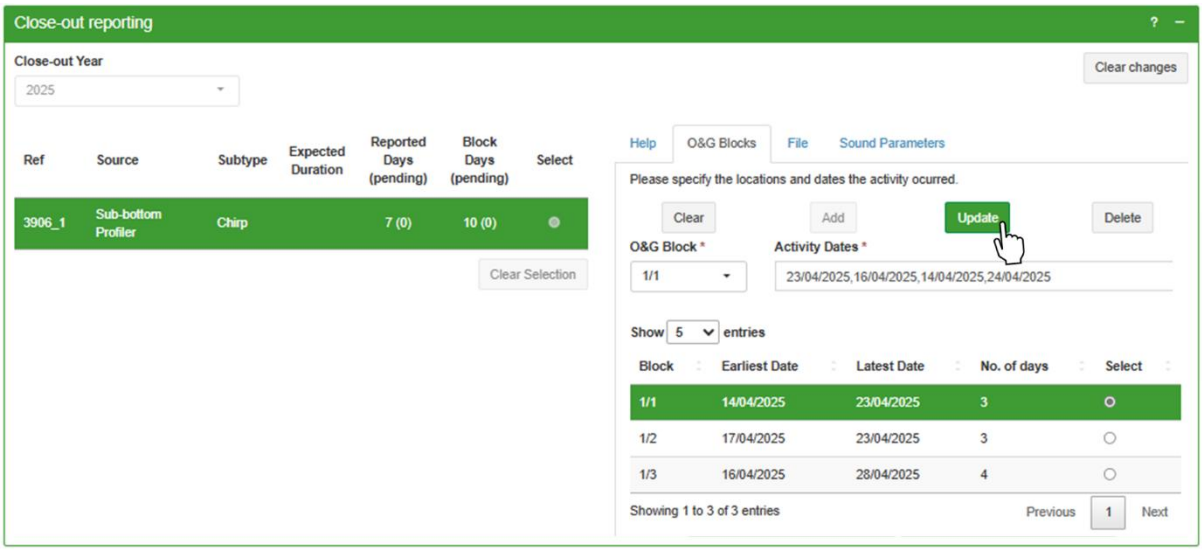

Figure 89. Example of updating the dates submitted for an activity location in the ‘Close-out reporting’ panel of an application.

To delete a submitted activity location and associated dates:

- Select the activity you wish to delete from the noise source table.
- Select the ‘Delete’ button to delete the activity location.

To add an additional activity location:

- Enter the respective location and dates (see Section 5.2.1).
- Select the ‘Add’ button to add the additional activity.

5.6. Cancel Application

Please note that proposed applications should only be cancelled if all of the outlined activities were not undertaken or if the actual parameter values fall outside the specified data (e.g. frequency) ranges (see Section 5.1.3.4).

To cancel a proposed application:

- Open the application in edit mode.
- Select the ‘Cancel Application’ button in the top-right-hand corner of the page.

A pop-up box will appear asking if you are sure you want to cancel the application.

- Select ‘Yes’ to cancel the application.
- Alternatively, select ‘No’ to return to the application.

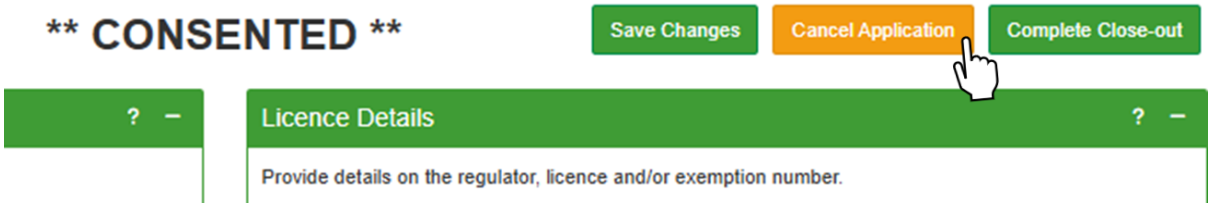

Figure 90. Navigation to the ‘Cancel Application’ button of a consented application.

Please note that cancelling an application also cancels all the activities that are specified. To only cancel specific activities, users can edit the proposed activities of an application (see Section 5.5.1).

5.7. Delete Application

Please note that users can only delete draft and what-if applications. Please contact MNR@jncc.gov.uk if you require a proposed, interim, or closed application to be deleted (i.e. due to a wrongful submission).

To delete a draft or what-if application:

- Open the application in edit mode.
- Select the ‘Delete Draft’ or ‘Delete What-If’ button in the top-right-hand corner of the page.

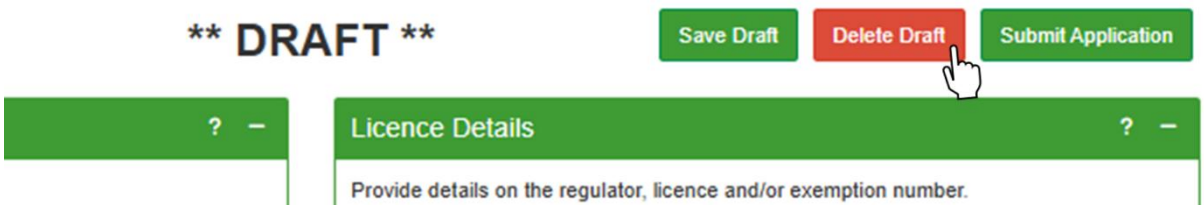

Figure 91. Navigation to the ‘Delete Draft’ button of a draft application.

A pop-up box will appear asking if you are sure you want to delete the application.

- Select ‘Yes’ to proceed.
- Alternatively, select ‘No’ to return to the application.

6. MNR Outputs

MNR users can obtain information about submissions made to the MNR as well as download custom data outputs via the ‘MNR Outputs’ page. The MNR Outputs page and download function is available to the general public and can be viewed without having a registered account on the MNR.

To view and/or download activity outputs as a registered and unregistered user:

- Navigate to https://mnr.jncc.gov.uk/.
- Select ‘MNR Outputs’ from the top menu bar.

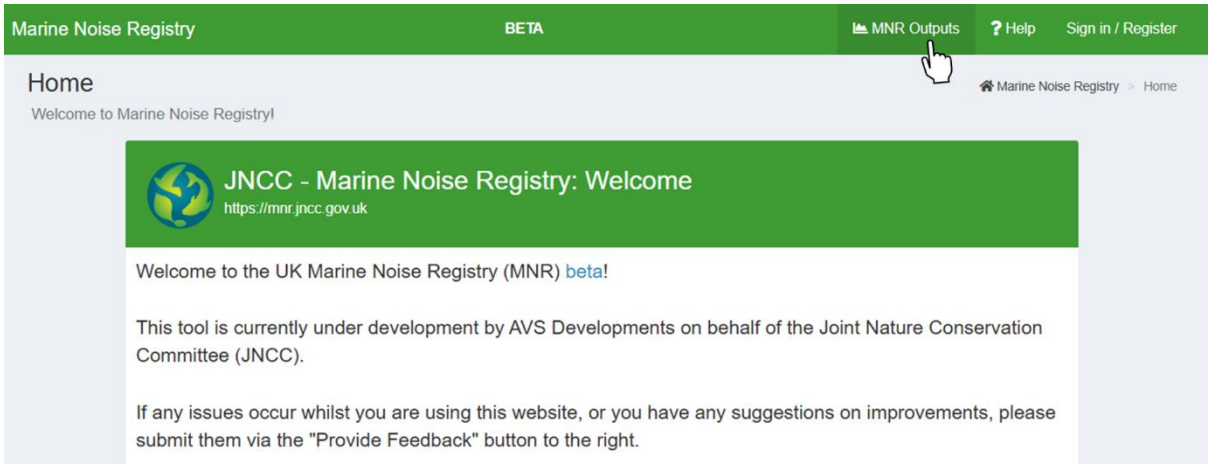

Figure 92. Navigation to the ‘MNR Outputs’ page as an unregistered user via the top menu bar.

To view and/or download activity outputs as a registered user:

- Sign into you user account (see Section 3.2).
- Select ‘MNR Outputs’ from the navigation menu panel on the left-hand side.

Figure 93. Navigation to the ‘MNR Outputs’ page from the navigation menu panel. Users can view data on the ‘MNR Outputs’ page as either a ‘GIS Plot’ or as a ‘Data Table’.

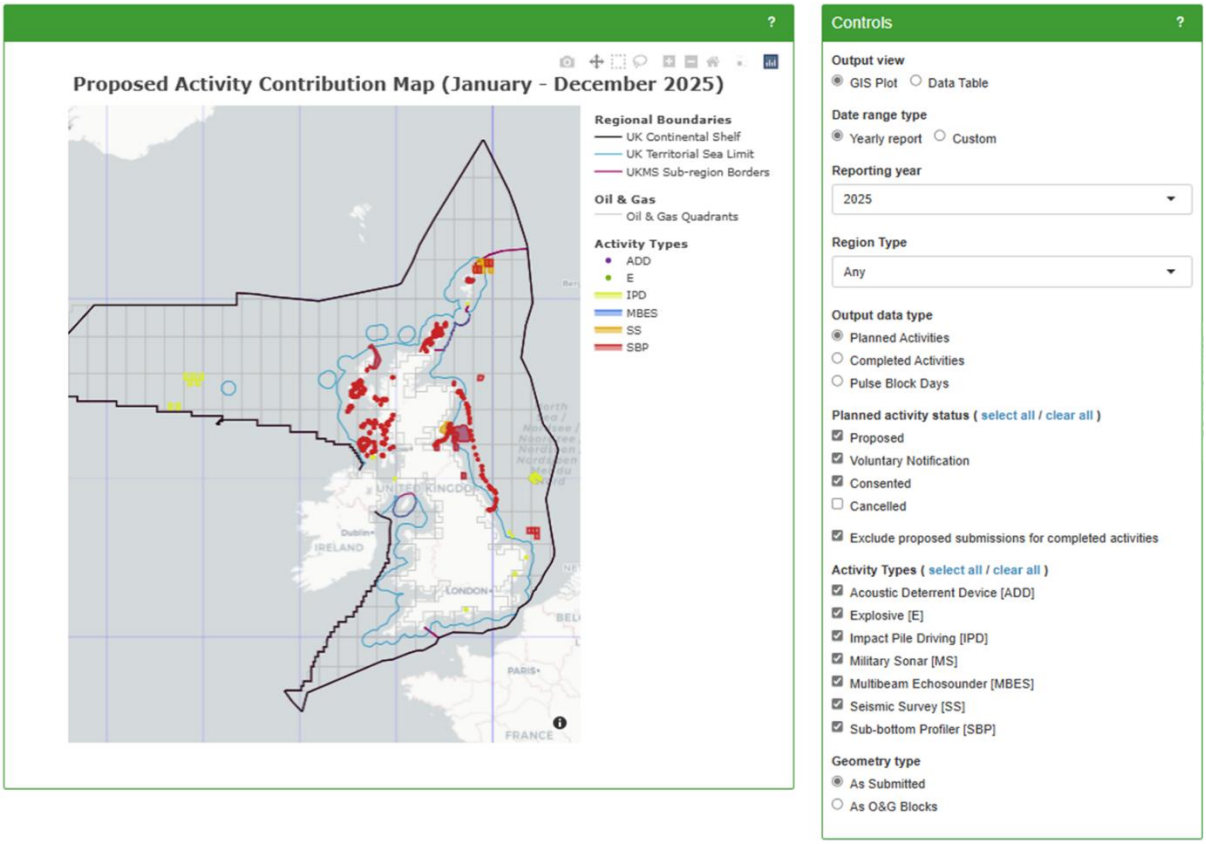

Figure 94. Default view of the 'MNR Outputs' page consisting of a GIS plot (left) and a 'Controls' panel (right) providing the option to switch between viewing data as a GIS plot or a data table.

6.1. Output Controls

The type of data that is displayed on the 'MNR Outputs' page can be selected and adjusted using the 'Controls' panel on the right-hand side of the page.

Users can view data as either a GIS plot (see Section 6.2) or as a datable table (see Section 6.3). To switch between views:

- Navigate to the 'Output view' section of the 'Controls' panel.
- Select either 'GIS Plot' or 'Data Table'

To set the time period and/or year of the activity outputs, navigate to the 'Date range type' section of the 'Controls' panel.

To view data for a specific year:

- Select the 'Yearly report' radio button.
- Select the year you wish to view from the 'Reporting year' drop-down list.

To view data for a custom timeframe

- Select the 'Custom' radio button.
- Navigate to the 'Period of interest' heading.
- Select a custom start and end date using the calendar pop-up.

To set the output data type you wish to see:

- Navigate to the ‘Output data type’ heading of the ‘Controls’ panel.
- Select ‘Planned Activities’ to view all planned activities.
- Select ‘Completed Activities’ to only view activities which were carried out.
- Select ‘Pulse Block Days’ to view the number of days in which impulsive noise has been generated for each O&G Block.

Please note that when selecting ‘Planned Activities’, all planned activities are shown, regardless of whether they were conducted or not. This allows users to compare which activities were intended to be carried out and which did actually happen. Users can however exclude proposed submissions for completed activities, by ticking the respective box.

To select what activity status options to include:

- Navigate to the ‘Planned activity status’ heading of the ‘Controls’ panel.
- Use the tick boxes to custom select one or multiple activity statuses.
- If you wish to select all statuses, click ‘select all’ next to the header.
- If you wish to unselect all statuses, click ‘clear all’ next to the header.

To select which type of activity you wish to view:

- Navigate to the ‘Activity Types’ heading of the ‘Controls’ panel.
- Use the tick boxes to custom select one or multiple activity types.
- If you wish to select all activity types, click ‘select all’ next to the header.
- If you wish to unselect all activity types, click ‘clear all’ next to the header.

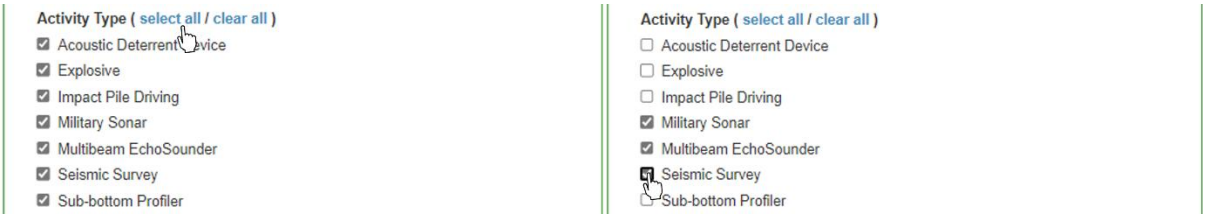

Figure 95. Example of selecting all types (left) and a custom selection (right) under ‘Activity Types’.

To adjust the geometry type of activity locations:

- Navigate to the ‘Geometry type’ heading of the ‘Controls’ panel.
- Select ‘As Submitted’ to view activity locations in their submitted format.
- Select ‘As O&G Blocks’ to see activities summarised by Oil and Gas Blocks. Locations submitted as coordinates or shapefiles will be shown as the block codes they fall within.

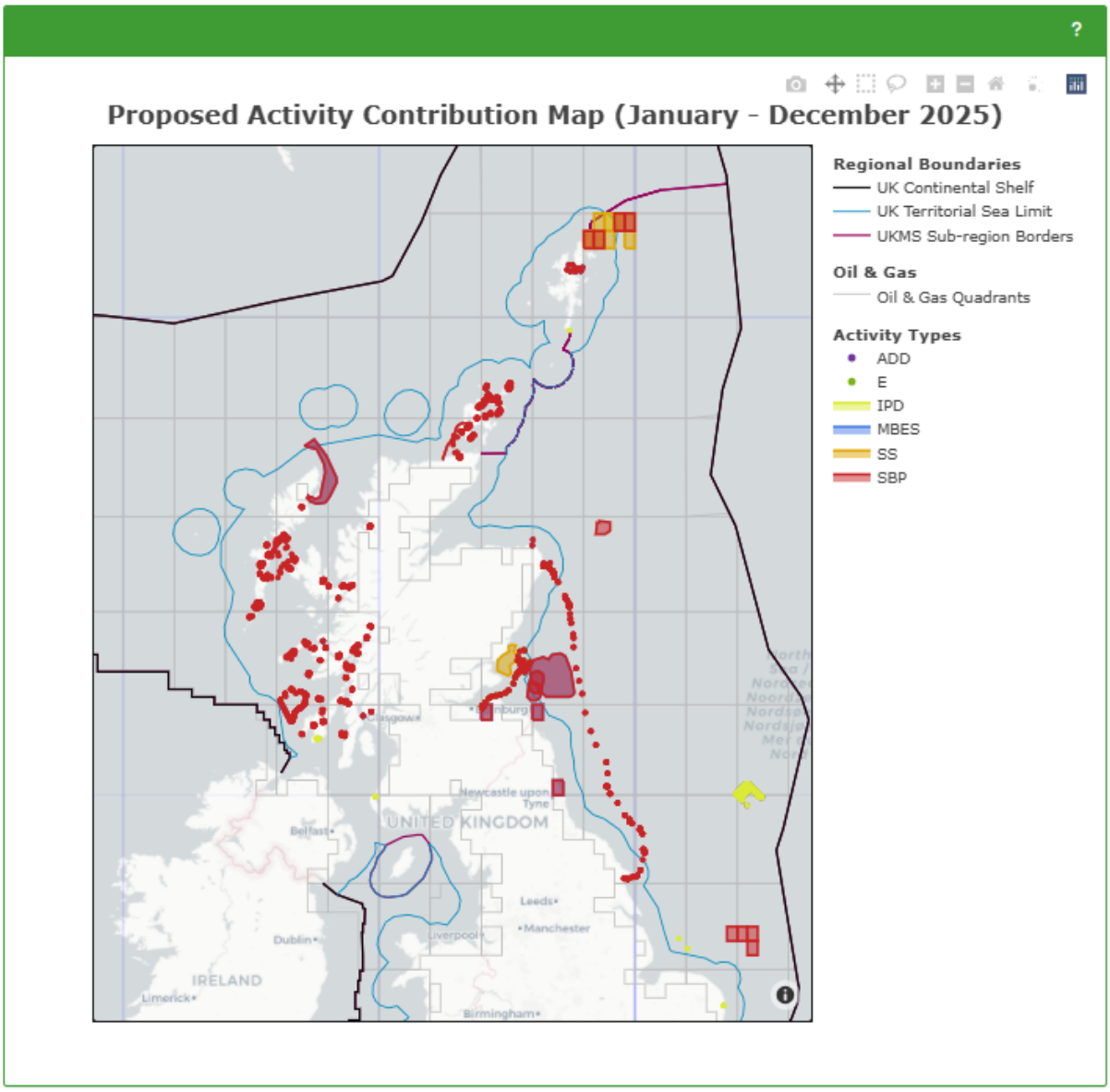

Figure 96. Example view of the 'GIS Plot' showing activity locations by submitted activity location.

6.2. GIS Plot

The GIS plot displays the regional boundaries of the UK continental shelf and territorial sea limits, UK Marine Strategy sub-region borders, and the Oil and Gas Quadrants contains within these bounds. The locations of activity types are displayed in different colours . In blocks with more than one activity the colours will overlap. Further, users can choose to display harbour porpoise Special Areas of Conservation (SACs).

To display SACs on the GIS Plot:

- Navigate to the 'GIS Plot' panel.
- Tick the box 'Show Conservation Areas'.
- Untick the box to hide SACs.

Please note that users can apply various plot controls to the GIS Plot which will display when hovering over the top-right corner of the plot (see Section 2.1.4).

The GIS Plot uses abbreviations for different activity types which are as follows:

Table 5. Different activity types and their associated acronyms used on the 'MNR Outputs' page.

Activity Type	Acronym
Acoustic Deterrent Device	ADD
Explosive	E
Impact Oile Driving	IPD
Military Sonar	MS
Multibeam Echosounder	MBES
Seismic Survey	SS
Sub-bottom Profiler	SBP

6.3. Data Table

The 'Data Table' displays detailed information about submitted applications, including the AAN, project name, application status, names of the lead and submitting organisation, name of the regulator, licencing information, project timeline, activity duration, activity types, activity noise parameters, activity sub-types, as well as activity locations.

Please refer to Common System Controls (see Section 2.1.3) for further guidance on table controls.

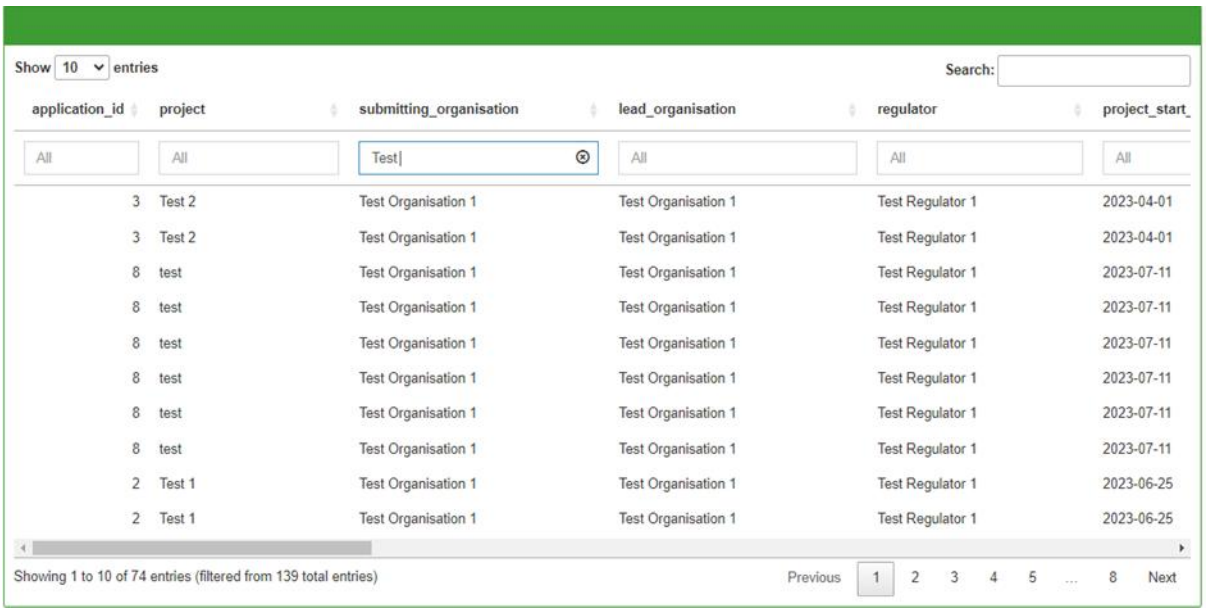

Figure 97. Example view of the 'Data Table' of the 'MNR Outputs' page.

6.4. Download Activity Outputs

Activity outputs are open access data and can be downloaded by anyone accessing the MNR Activity data can be downloaded either as a date-stamped GeoPackage for usage within a GIS application or as a data package containing the GeoPackage as well as a date-stamped XLSX file.

To download activity output data:

- Navigate to the ‘MNR Outputs’ page (see Section 6).
- Navigate to the ‘Controls’ panel and select the ‘Data Table’ radio button.
- Optional: Filter the data as required using the output controls (see Section 6.1).
- Navigate to the ‘Data Table’ panel.
- Select ‘Download Data’ to download a zipped folder containing a GeoPackage and XSLX file of the activity outputs.
- Select ‘Download GeoPackage’ to download only the GeoPackage.

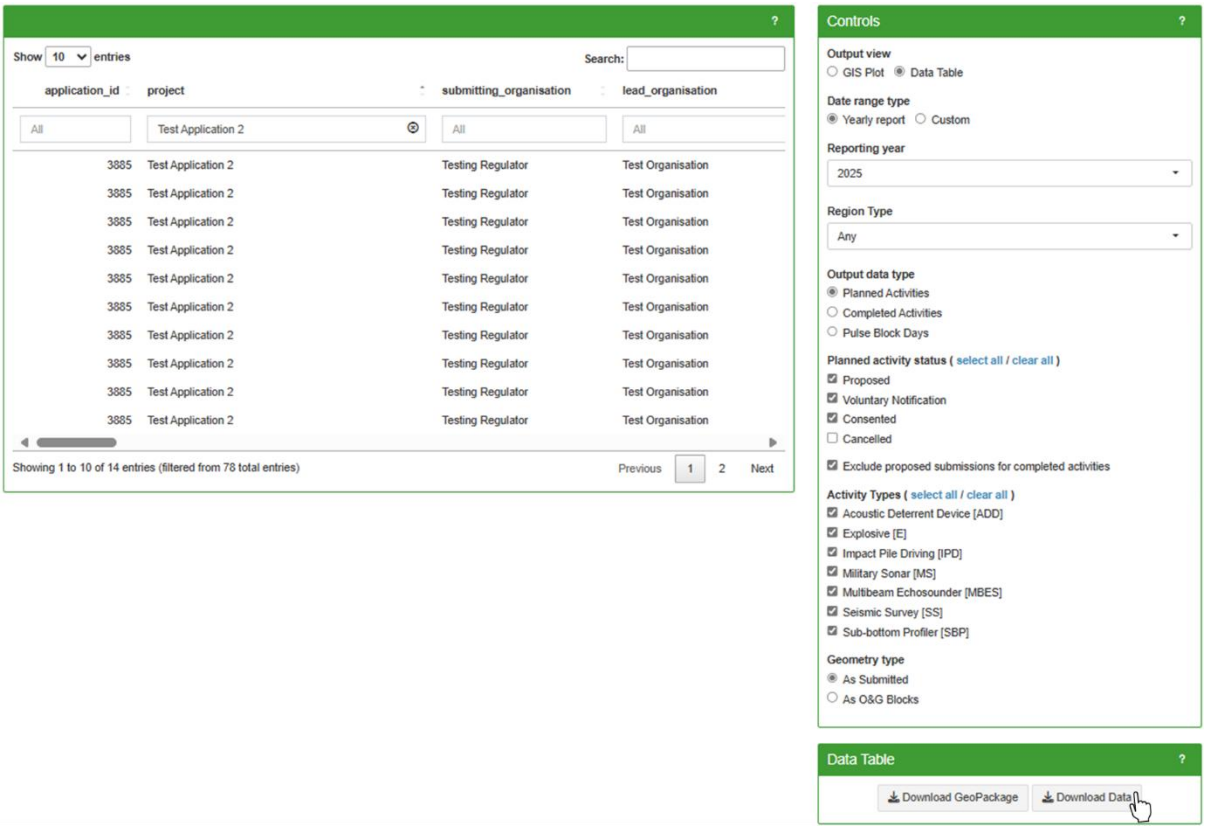

Figure 98. Location of the buttons to download MNR output data.

7. File Conversion Tool

The ‘File Conversion Tool’ allows users to convert P1/11 file into a format that is suitable for upload to the Marine Noise Registry. The information contained in the P1/11 file is processed after which it can be matched to a submitted MNR application. Once matched, a converted file can be downloaded and used to upload close-out data to a proposed or interim application. Please refer to Close-out Reporting for further guidance (see Section 5.2).

The File Conversion Tool will only work for P1/11 forms. Other formats will cause the system to display an error message.

7.1. File Converter

To convert a P1/11 file into an MNR suitable format:

- Navigate to the ‘File Conversion Tool’ page from the navigation panel.
- Navigate to the ‘Converter’ panel.
- Select the ‘Browse’ button.
- Locate the P1/11 file on your device and select ‘OK’ in your file explorer.
- Once your upload is complete, select the ‘Start processing’ button.

Please note that this tool only accepts uncompressed P1/11 files. Compressed files and/or folders must be unzipped prior uploading it to the tool.

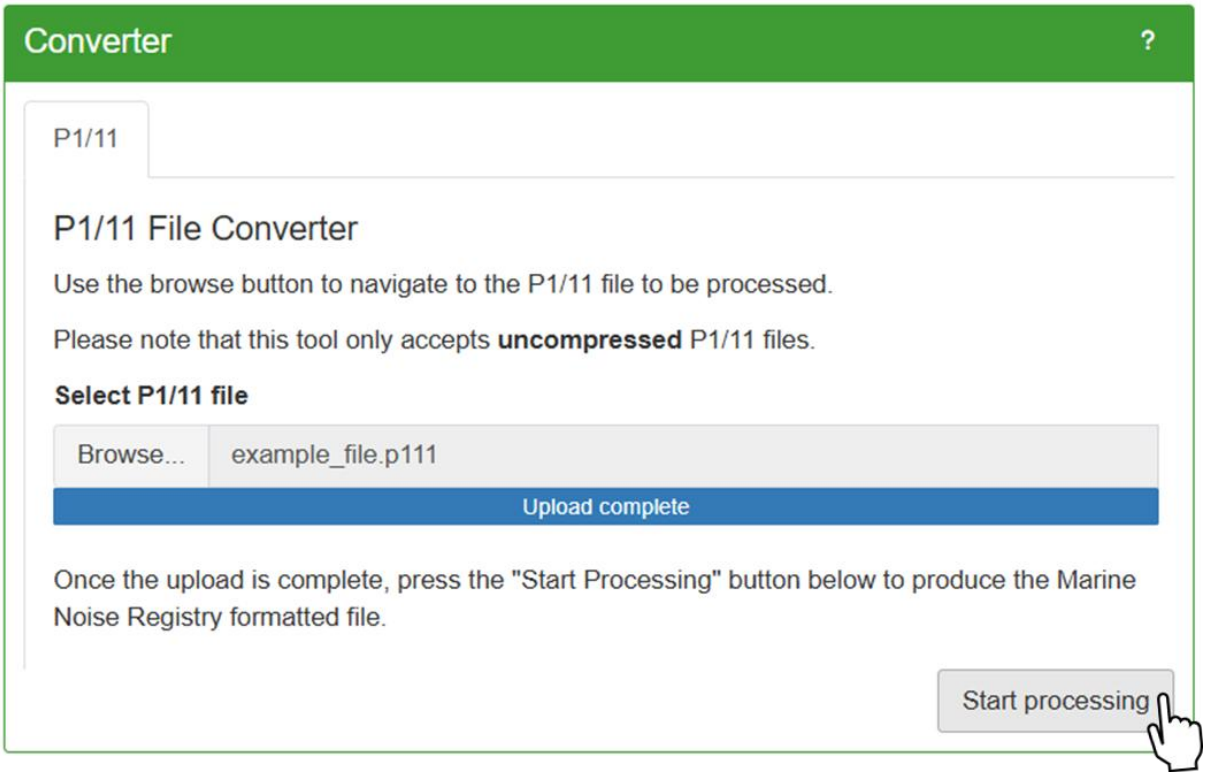

Figure 99. Example of initiating the processing of a P1/11 file in the ‘Converter’ panel.

7.2. Status Log

Navigate to the ‘Status Log’ panel below the ‘Output Preview’ panel to view information on whether the file upload processing was successful. If you receive an error message, ensure your file matches the required format.

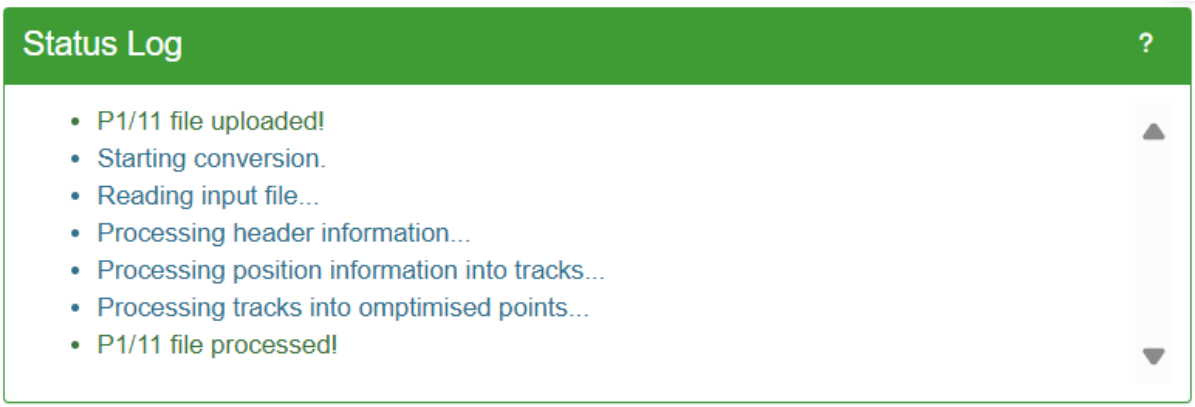

Figure 100. Example view of the ‘Status Log’ panel of the File Conversion Tool.

7.3. Output Preview

After processing is completed, the ‘Output Preview’ panel will show a preview of the P1/11 data on a geospatial plot.

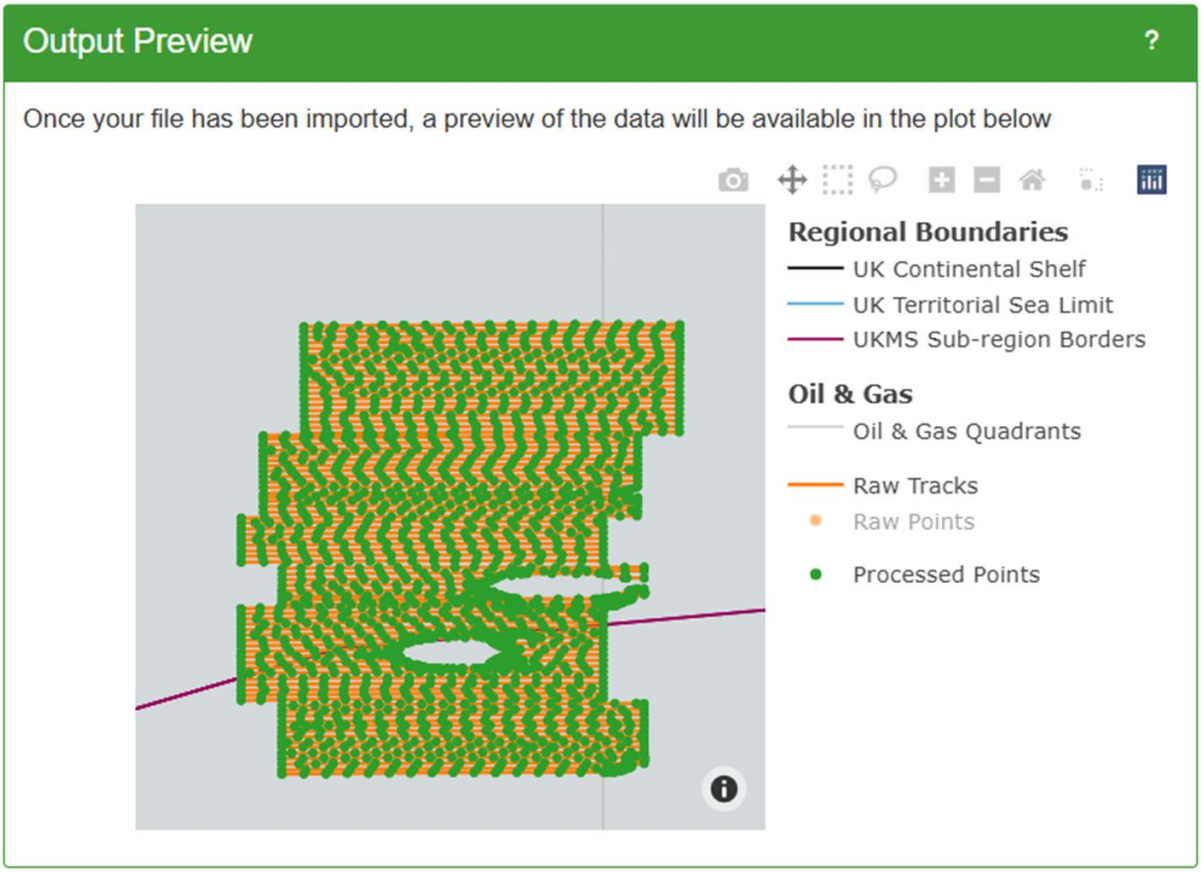

Figure 101. Example view of the ‘Status Log’ panel of the File Conversion Tool.

7.4. Select Activity Data

Navigate to the ‘Select Activity’ panel to match the P1/11 file to a particular activity:

- Select the activity that relates to the uploaded P1/11 file.

The ‘Select Activity’ panel will only display activities that are associated with the organisations that you are a member of or activities that were uploaded in the capacity of an agent for another organisation.

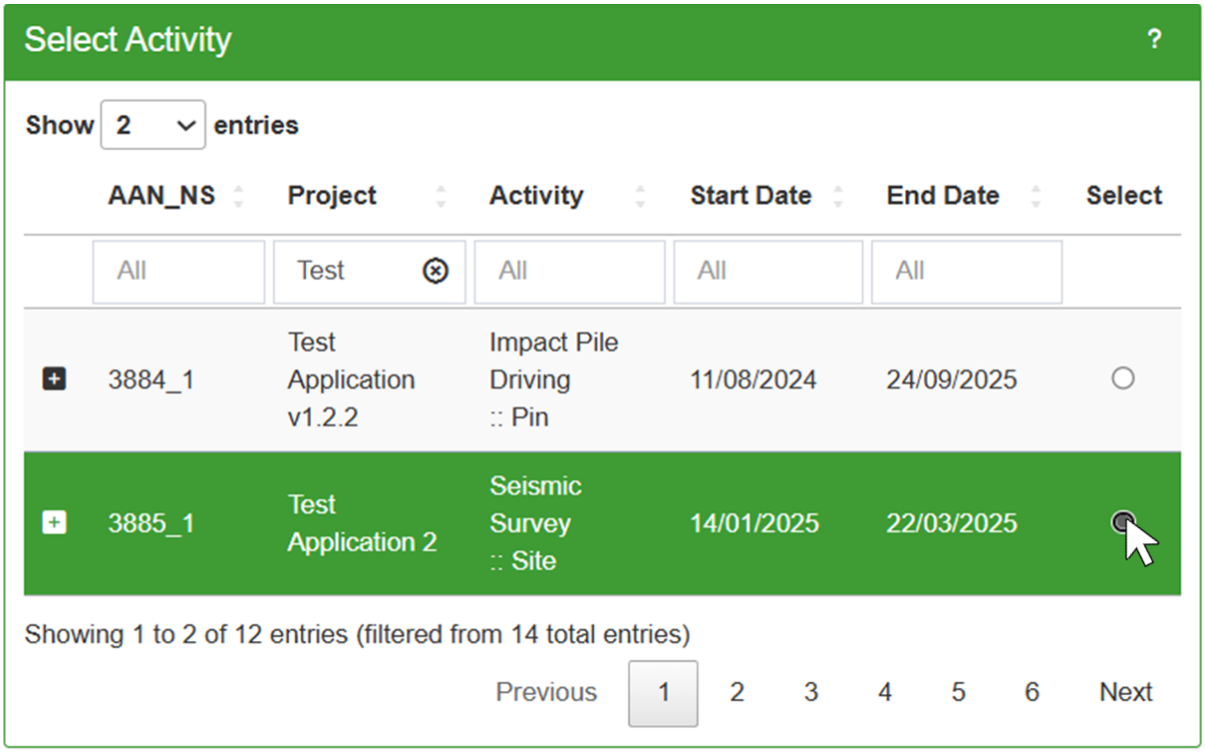

Figure 102. Example of selecting an activity match it to a converted P1/11 file.

7.5. Download File

Upon selecting an activity, the converted data can be downloaded. The downloaded file will be in the correct format to use during close-out reporting.

- Navigate to the ‘Download File’ panel.
- Select the ‘Download MNR Formatted File’ button. .

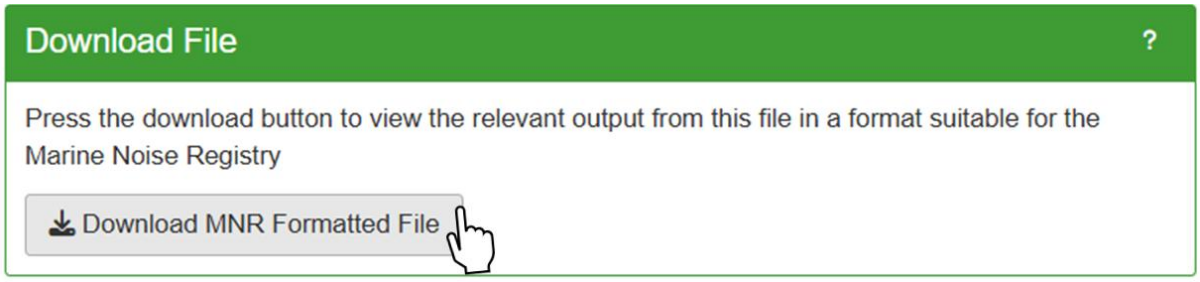

Figure 103. Example of downloading a MNR formatted file form the ‘File Conversion Tool’.

8. Disturbance Tool

8.1. Background

The ‘Disturbance Tool’ enables users to assess the potential noise disturbance footprint of activities within U harbour porpoise Special Areas of Conservation (SACs) in England, Wales, and Northern Ireland for specific years and seasons, as well as custom dates, in the context of the JNCC guidance on noise management in harbour porpoise SACs. In addition, users can display activities for UK Marine Strategy sub-regions, specifically the Greater North Sea, Celtic Seas, and Celtic Seas (seabed and subsoil only), for specific years or a custom time period.

The available seasons per SAC reflect the areas and time periods during which harbour porpoise densities have been found to be persistently higher than average (see Table 6).

Table 6. Special Areas of Conservation (SACs) for harbour porpoise and the associated seasons and periods of interest in relation to harbour porpoise abundance.

SAC	Season	Period
Bristol Channel Approaches	Winter	October to March
North Anglesey Marine	Summer	April to September
North Channel (NI)	Winter	October to March
Skerries Causeway	All year	January to December
Southern North Sea	Summer; Winter	April to September; October to March
West Wales	Summer; Winter	April to September; October to March

The tool aims to aid environmental assessments, in particular Habitats Regulations Assessments (HRAs), by using planned noise activity data that has been submitted to the MNR. It also uses data from closed applications if activities already took place in the season/year that is being assessed (and close-out data has been submitted). In addition, users can add hypothetical what-if applications (see Section 8.2) to their assessment to explore disturbance scenarios.

Please note that the outputs of the ‘Disturbance Tool’ should not be seen as a substitute to a more meaningful, case-specific, detailed assessment with more accurate scenarios of where and when the activities will take place (if this information is available). Please consult your respective regulator if you have any questions on how to use the tool’s outputs.

The tool’s outputs are based on a series of worst-case assumptions and relatively coarse data on location and timings. The main source of uncertainty arises from the fact that the data on planned activities submitted to the MNR often does not have the exact locations of the operations. Even when that information is available, it is not known in advance on which days and locations the operations will take place. Therefore, the estimates of the percentage area disturbed may be different to those in assessments by regulators which are likely to contain more detailed and accurate information.

Please note that if activities are shown to potentially exceed noise thresholds, it is upon the user to cooperate with other organisations in order to coordinate planned activities. Users could use the tool ‘Cooperation Discussions’ for this purpose.

8.2. New What-If Scenario

The ‘New What-If Scenario’ allows users to create a hypothetical application with one or more activities for exploring disturbance scenarios in UKMS sub-regions and harbour porpoise SACs using the ‘Disturbance Tool’.

To create a new what-if application:

- Navigate to the ‘New What-If Scenario’ page from the navigation panel.
- Complete the application with the required information (see Section 5.1).
- Select ‘Save What-If’ to save your what-if application.

Please note that nobody outside your organisation will be able to see your what-if applications, except for JNCC system administrators. Otherwise, hypothetical what-if applications can be viewed (see Section 5.4) and edited (see Section 5.5) like any other application. What-if applications can also be deleted (see Section 5.7).

Figure 104. Example of navigating to the ‘New What-If Scenario’ page from the MNR homepage.

8.3. Disturbance Assessment

To use the disturbance assessment tool, navigate to the ‘Disturbance Tool’ page from the navigation panel.

8.3.1. Configuration

To configure the Disturbance Tool:

- Navigate to the ‘Configuration’ panel.
- Select either ‘Special Area of Conservation’ or ‘UK Marine Strategy (UKMS) Sub-region’ from the ‘Area Type’ drop-down menu.

For UKMS subregions:

- Select an ‘Area of Interest’ from the respective drop-down menu.
- Select the year you wish to assess from the ‘Period’ drop-down menu.

For Special Areas of Conservation:

- Select a SAC from the ‘Area of Interest’ drop-down menu.
- Select a ‘Season ‘from the drop-down menu.
- Select a ‘Period’ from the drop-down menu.

To load activities that match your selection:

- Select the ‘Retrieve Data’ button

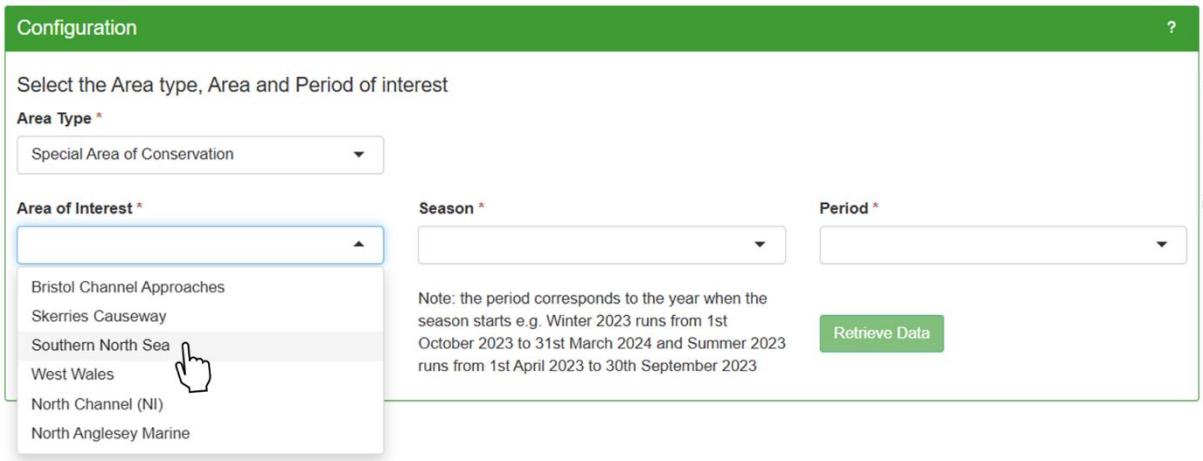

Figure 105. Example of selecting a SAC, Season and Period of interest in the ‘Disturbance Tool’.

8.3.2. Activity Filters

To apply additional filters to the activities that were fetched from the MNR database, navigate to the ‘Activity Filters’ panel.

- Application Status * – Use the tick boxes to custom select one or multiple statuses.

Please note that what-if applications and activities submitted as voluntary notifications (including exemptions) are not included in the assessment by default. If you wish for these activities to be considered within the disturbance assessment, please select the respective status in the ‘Activity Filters’ panel.

- Activity Types * – Use the tick boxes to custom select one or multiple activity types.
- Date Range – Apply a custom date range by entering dates in dd/mm/yyyy format or by using the calendar drop-down when selecting the fields. This filter is optional.
- Activities with disturbance footprints inside the Area of Interest – Use the tick box to only display activities with disturbance footprints inside the area of interest. This refers to the UKMS sub-region or SAC chosen in the ‘Configuration’ panel.

To apply your custom filters, select the ‘Apply Filters’ button at the bottom of the panel. To reset your filters to the default settings, select the ‘Reset Filters’ button.

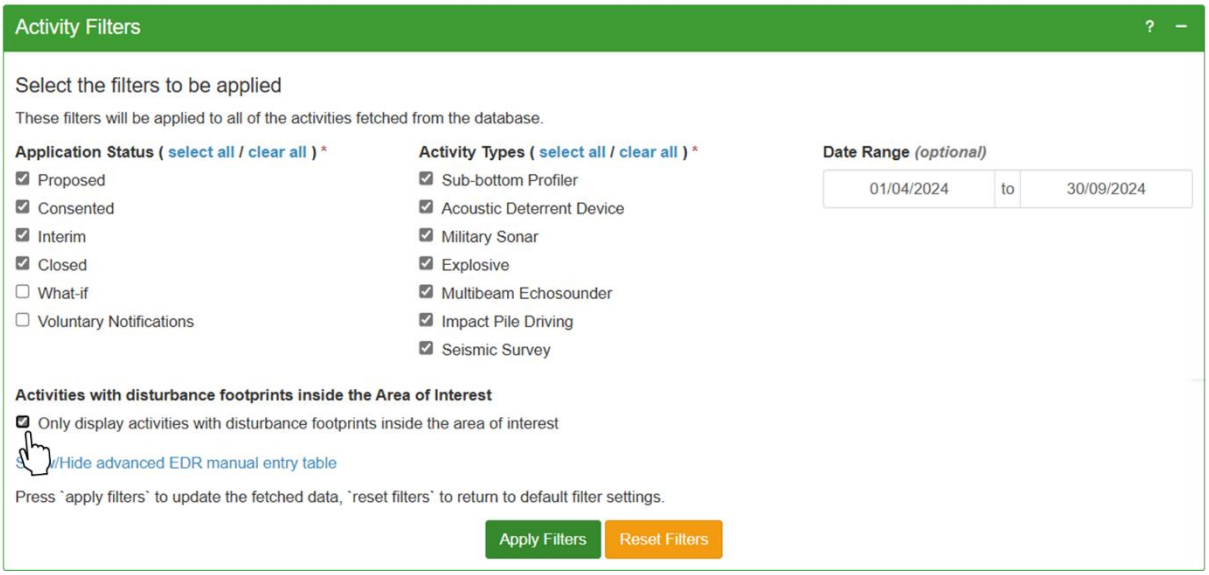

Figure 106. Example of using the tick box in the ‘Activity Filters’ panel of the Disturbance Tool to only display activities with a disturbance footprint inside the selected area of interest.

8.3.2.1. Override Default EDR/MDF

The tool applies default Effective Deterrence Range (EDR) and Maximum Daily Footprint (MDF) values to activities. Users have the option to apply custom values to activities where appropriate, however, changes to default EDRs only potentially change the disturbance footprint as EDRs are not always used to calculate daily footprints (see Annex 1, Section 3).

Overriding default values is appropriate where different values have been agreed with the respective regulator or for projects where Environmental Impact Assessments (EIAs) and Habitats Regulation Assessments (HRAs) have more accurately estimated MDFs. EIAs and HRAs should be available through the consenting portals of the different regulators (see Table 1).

To override default EDR and/or MDF values, navigate to the ‘Activity Filters’ panel.

- Select ‘ Show/Hide advanced Effective Deterrence Range manual entry table’.

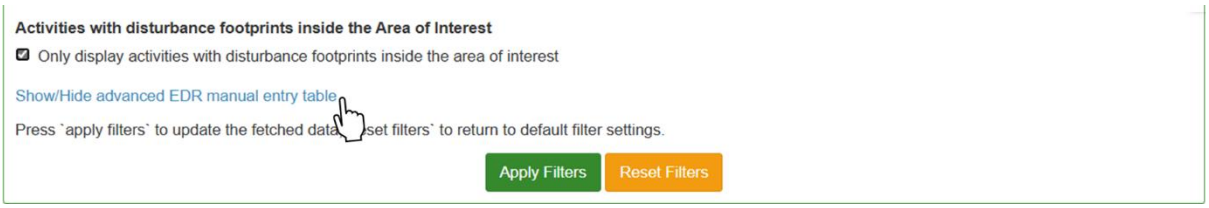

Figure 107. Example of expanding the EDR manual entry table in the ‘Activity Filters’ panel.

- Navigate to the ‘AAN_NS’ column.
- Enter the AAN_NS of the activity you wish to edit.
- Press ‘Enter’ on your keyboard.

If custom maximum daily footprint calculations are available for specific activities, users are encouraged to provide their calculations in the ‘Notes’ field (see Section 5.1.1) of the application.

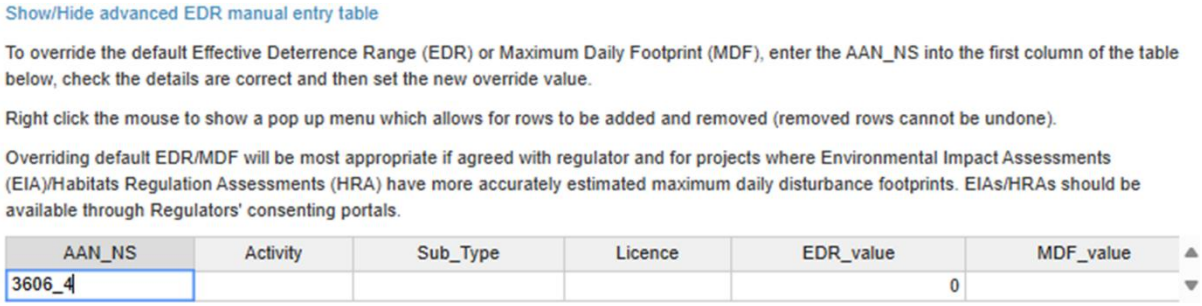

Figure 108. Example of entering the AAN_NS of an activity in the EDR manual entry table.

The remaining columns of the table will autofill with the associated activity data.

- Navigate to the ‘EDR_value’ and/or ‘MDF_value’ column(s) of the table.
- Enter your custom EDR and/or MDF value in the editable field.
- Press ‘Enter’ on your keyboard.

To apply your custom EDR and/or MDF value(s), select the ‘Apply Filters’ button at the bottom of the panel. To reset to default EDRs/MDFs, select the ‘Reset Filters’ button.

Please note that changing the EDR or MDF of an activity generates purely hypothetical outputs and does not affect the data submitted in the application.

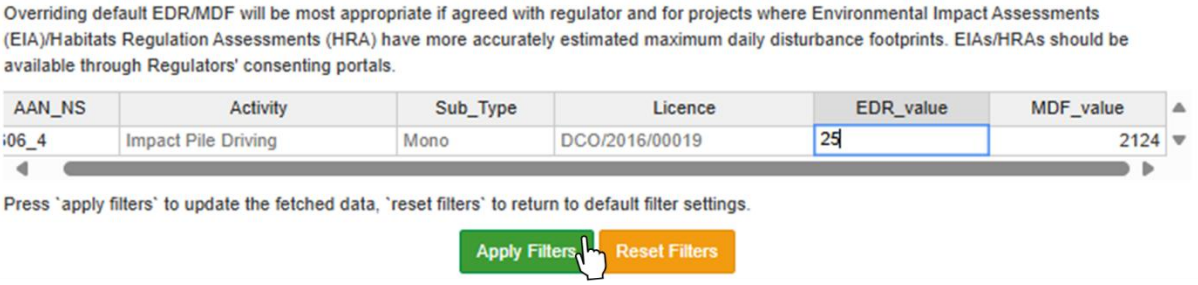

Figure 109. Example of entering the AAN_NS of an activity in the EDR manual entry table.

When the default EDR value is set to 0, no buffer gets added to the original location for assessment purposes. This applies to the following activity types only when the location was entered as a polygon or Oil and Gas Blocks:

- Low order UXO (under Explosives).
- Multibeam Echosounder.
- Mini Airgun (under Seismic Survey).
- Sub-bottom Profiler.

Please note that adding an EDR buffer around the submitted Oil and Gas Block or polygon would greatly overestimate the disturbed area which is relatively small for these activity types.

8.3.3. Activities Table

If your search found one or more activities, the ‘Activities’ panel will display a table listing all activities that match the configuration and applied activity filters. This includes what-if scenarios (only for your own organisation) and submitted activities from other organisations.

To view the additional details of an application such as mitigations or noise parameters:

- Select the plus icon to the left of the corresponding row to expand the entry.
- To hide the additional details, select the minus icon.

Please note that activities for which certain noise abatements have been specified will have a reduced EDR/daily footprint.

To view the details of the full application to which a particular activity belongs to:

- Select the button with the magnifying glass icon to the right of the table row.
- The application will open as a new tab in your browser.

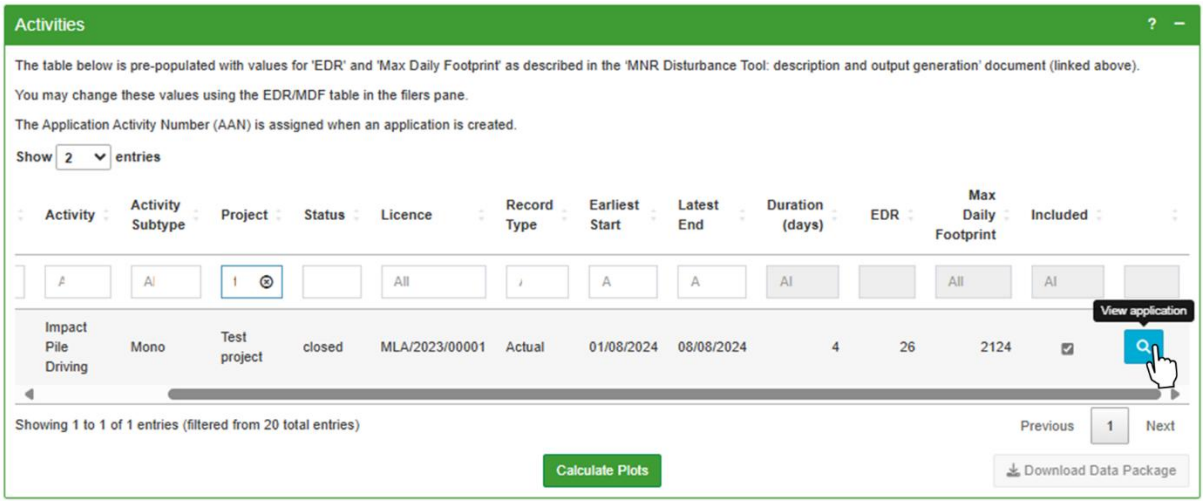

Figure 110. Example of opening an application from the ‘Activities’ panel in the Disturbance Tool.

To include or exclude a specific activity from the assessment:

- Tick the box in the ‘Included’ column to include the activity.
- Untick the box in the ‘Included’ column to exclude the activity.

Please note that certain geophysical surveys are exempt from licensing. Please check with your respective regulator as to whether these should be included in disturbance assessments.

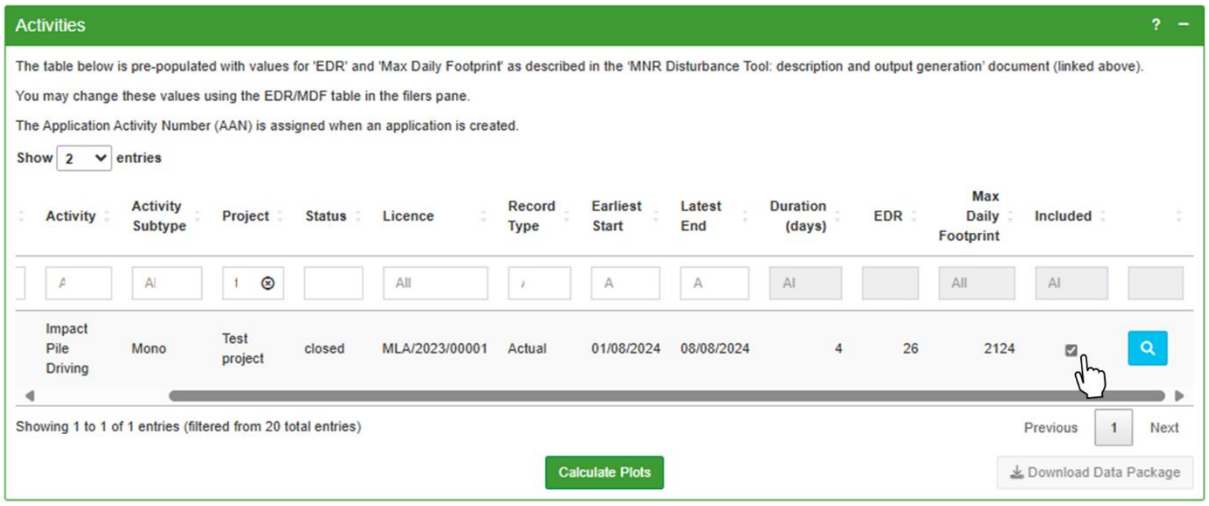

Figure 111. Example of excluding a specific activity from the assessment of the ‘Disturbance Tool’.

8.3.4. Assessment Outputs

In addition to the table listing activities that match your search, the ‘Disturbance Tool’ produces additional assessment outputs.

To calculate assessment outputs:

- Navigate to the ‘Activities’ panel.
- Select the ‘Calculate Plots’ button and the bottom of the panel.

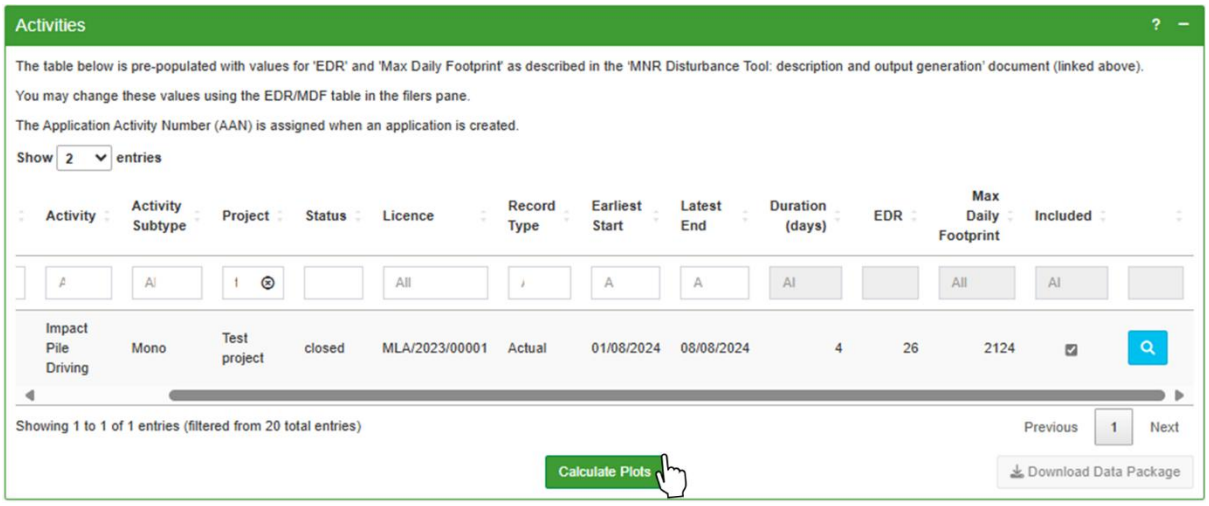

Figure 112. Example of initiating a disturbance assessment from the ‘Activities’ panel of the Disturbance Tool by pressing the ‘Calculate Plots’ button.

8.3.4.1. Impact Summary

The ‘Impact Summary’ panel shows colour-coded flags for daily and seasonal risks of exceeding defined noise disturbance thresholds with green, amber, and red denoting a low, medium, and high risk respectively.

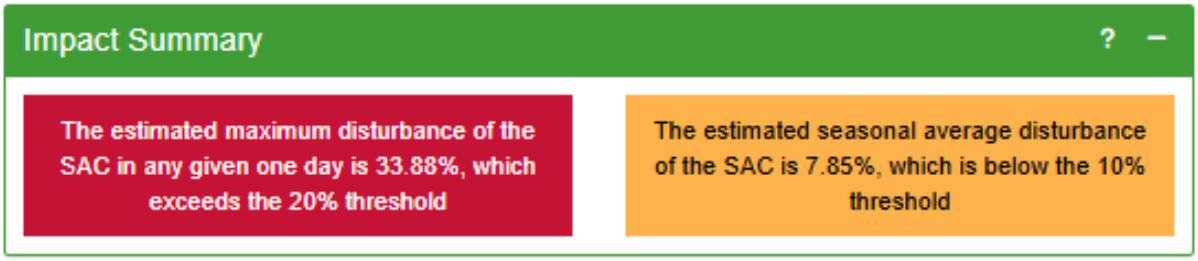

Figure 113. Example view of the 'Impact Summary' panel of the 'Disturbance Tool' showing colour-coded flags showing the daily and seasonal risk of exceeding noise disturbance thresholds.

8.3.4.2. Activity Schedules

The plot displayed in the 'Activity Schedules' panel visualises the timelines of the different activities that match the applied configuration and activity filters. If no additional filters are applied, the table will display activities located within 50 km of the selected SAC.

Please see Section 8.3.2 for information how to apply filters to adjust the data that is displayed on the plot.

Activities are displayed as filled horizontal bars which will have a transparent fill for the initially proposed licencing period (earliest start and latest end date) and a solid fill for the actual days the activity has occurred in (if close-out data has been submitted).

Please note that for interim activities, some close-out data has already been submitted, for example for specific years and or seasons. However, additional noise events may still occur within the proposed timeline (see Section 5.2.3 for more information on interim applications).

When placing the cursor at the start or end of an activity bar, a hover over box will display information such as the AAN_NS, project name, application status, activity type, regulator, and licence (or exemption number). For proposed operations, the box will also display the proposed duration, as well as the earliest start and latest end date. For completed activities, the reported duration and the actual date when the activity occurred are displayed.

Please refer to Annex 1 of this document or more information and technical guidance on how the 'Disturbance Tool' generates its outputs.

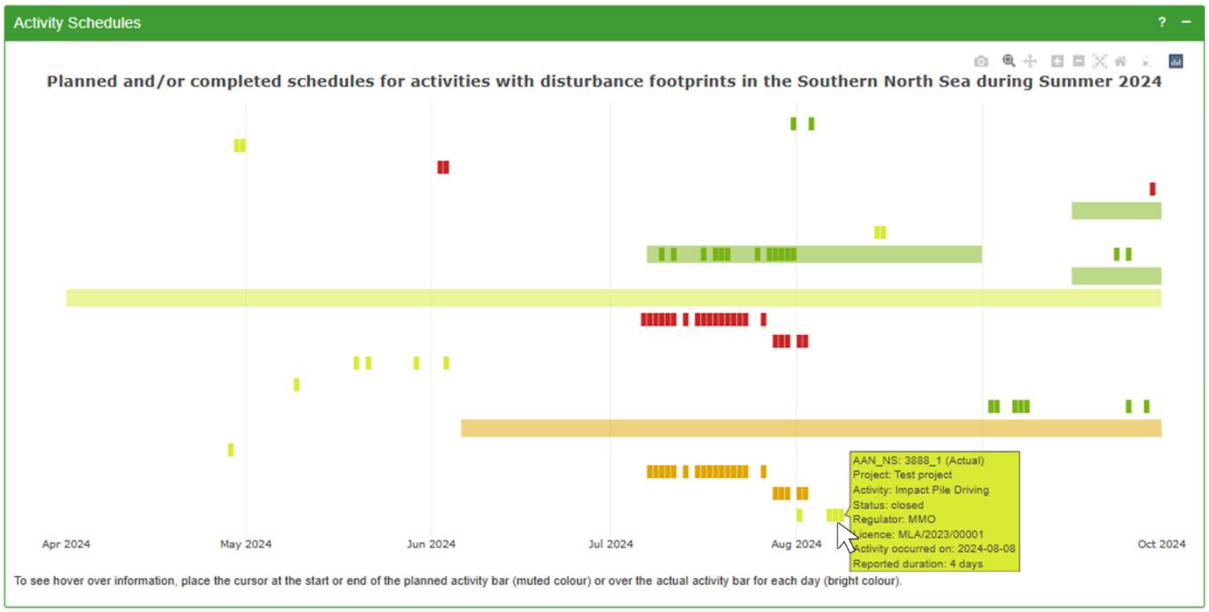

Figure 114. Example of the 'Activity Schedules' panel of the 'Disturbance Tool'.

8.3.4.3. Daily Total Disturbed Area

The plot within the 'Daily Total Disturbed Area' panel show provides a time-based visualisation of the potential maximum total percentage (%) area estimated to be disturbed in each day of the season (worst case) for planned data, and the actual estimated total % area disturbed for closed out data.

Please note that the plot assesses a worst-case scenario. For planned activities, it is not known on which day the activity will occur within the proposed licence period. Therefore, for planned activities, the estimated maximum daily percentage (%) area disturbed is applied to each day between the start and end date that was submitted for the activity. For this reason, it is likely that not all plotted activities will occur on a specific day.

Activities are displayed as vertical bars. If multiple activities could occur (or have occurred) on the same day, bars are stacked on top of each other. When placing the cursor at the top or bottom of a stacked bar, a hover over box will display information such as the day, AAN_NS, project name, application status, activity type, regulator, licence (or exemption number), as well as the information on the disturbed area:

- Area disturbed (%) * – The percentage the selected activity contributes to the total disturbed percentage area on a specific day.
- Total Area (%) – The total daily disturbed percentage area combining all activities on a specific day.

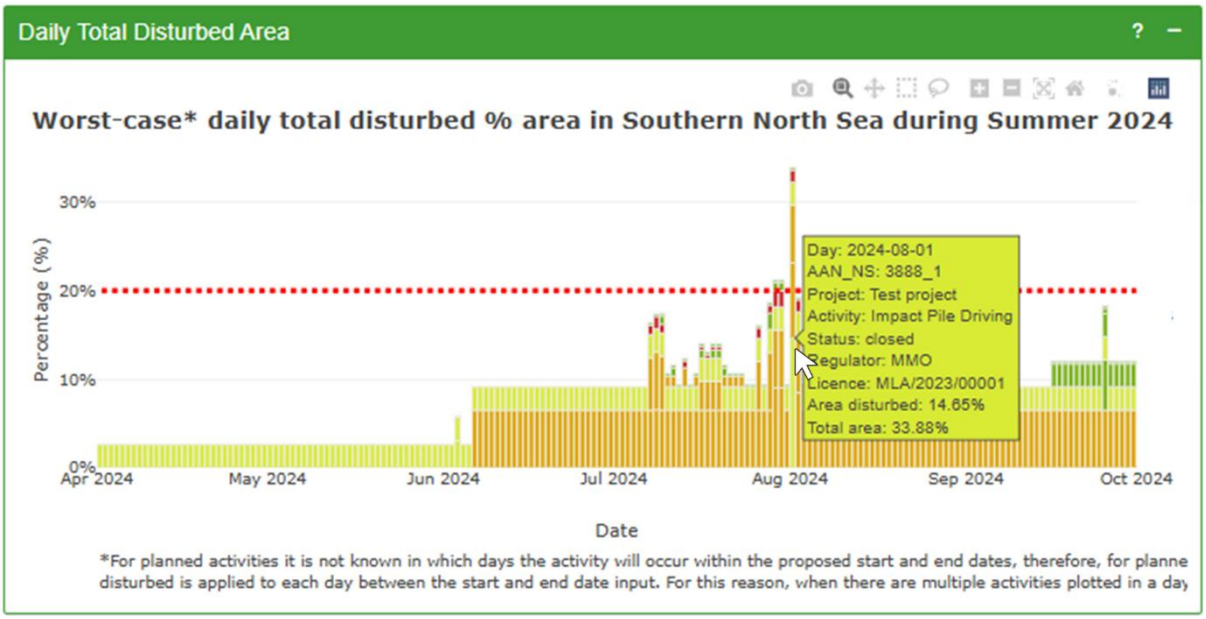

Figure 115. Example of the Daily Total Disturbed Area plot produced by the 'Disturbance Tool'.

Please see Section 8.3.2 for information how to apply filters to adjust the data that is displayed on the plot.

8.3.4.4. Activities' locations and respective EDR buffers

The 'Activities' locations and respective EDR buffers' panel displays a map that visualises the locations of individual activities footprints plus the respective EDR buffer for noisy activities occurring within 50 km of the selected SAC or that have disturbance areas overlapping the SAC (depending on the filters that are applied).

Activity locations are displayed as oil and gas blocks, points, polygons, or polylines depending on how locations were submitted for the associated application. Hovering over a specific activity will display information such as the AAN_NS, project name, activity type, status, regulator, earliest start and latest end date, and the proposed or reported activity duration.

Please see Section 8.3.2 for information on how to apply filters to adjust the data that is displayed on the plot.

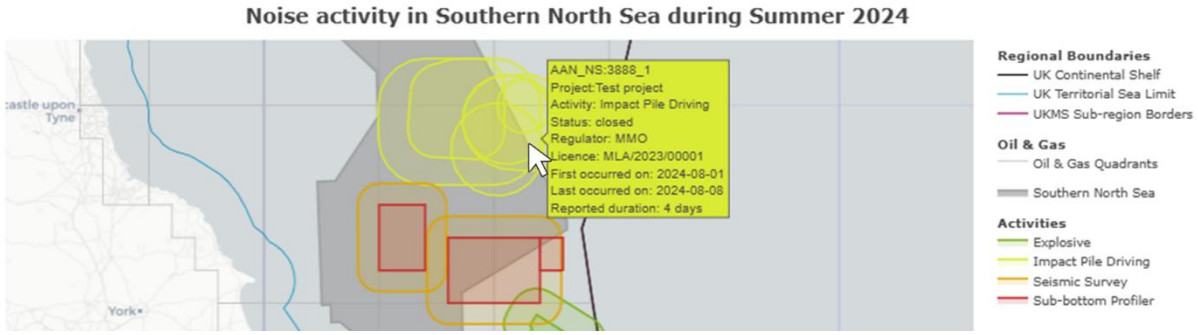

Figure 116. Example of a plot showing activity locations and associated EDR buffers in the Southern North Sea SAC. Activity specific information is displayed in a pop-up window.

Users can choose to apply a colour-coded legend by activity type or application status:

- Navigate to the ‘Activities’ locations and respective EDR buffers’ panel.
- Navigate to the ‘Activity or Status Selection’ heading.
- Select either ‘Activity’ or ‘Status’.

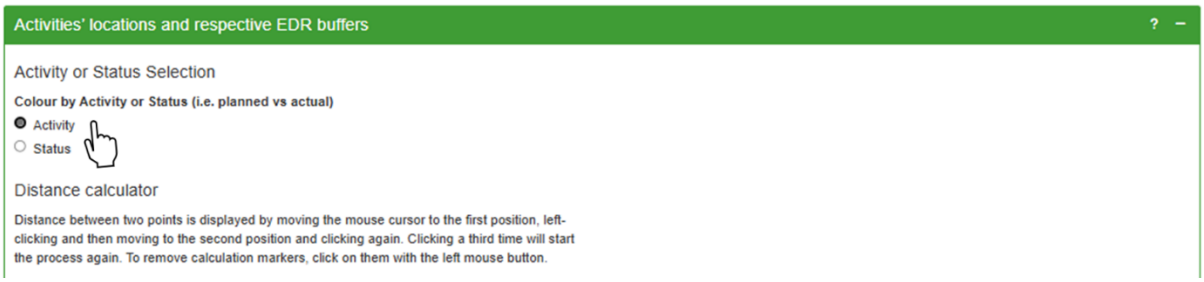

Figure 117. Example of selecting to view data by activity in the Disturbance Tool.

Users also have the ability to measure the distance between two points that are displayed on the plot. To use the distance calculator:

- Navigate to the ‘Activities’ locations and respective EDR buffers’ panel.
- Navigate to the ‘Distance calculator’ heading.
- Move your mouse cursor to the first position and click the left mouse button.
- Move your mouse cursor to the second position and click the left mouse button again.
- The distance in kilometres (km) will display in a textbox to the left of the plot.
- The restart the process, click your left mouse button for third time.
- To remove point markers on the plot, click on them with the left mouse button.

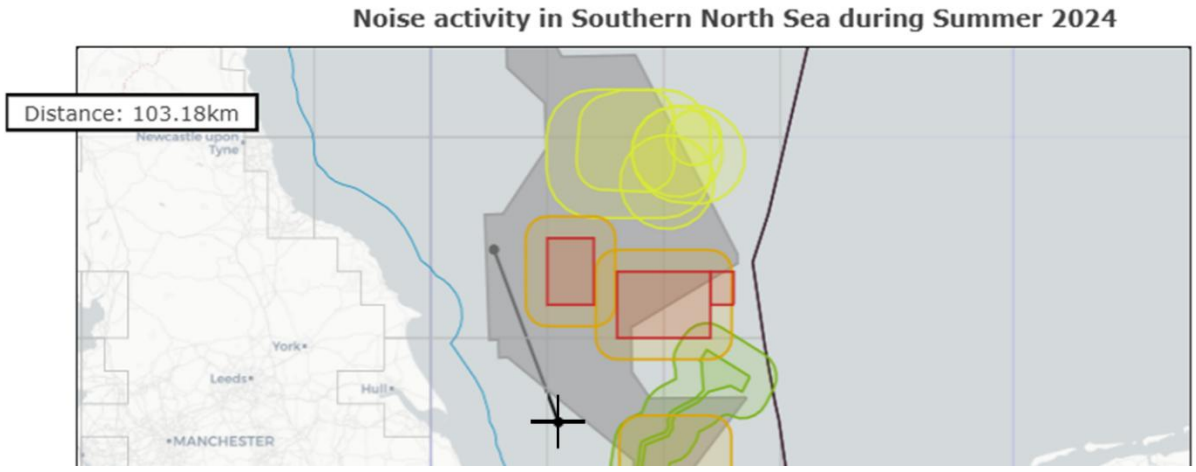

Figure 118. Example of using the distance calculator in the Disturbance Tool.

8.3.5. Download Assessment Data

To download a date and time-stamped XLSX file with details of all activities and disturbance assessment results relevant to the search criteria:

- Navigate to the ‘Activities’ panel.
- Select the ‘Download Data Package’ button in the bottom-right corner of the panel.
- Upon selection, the download will be initiated. This may take a couple of minutes.

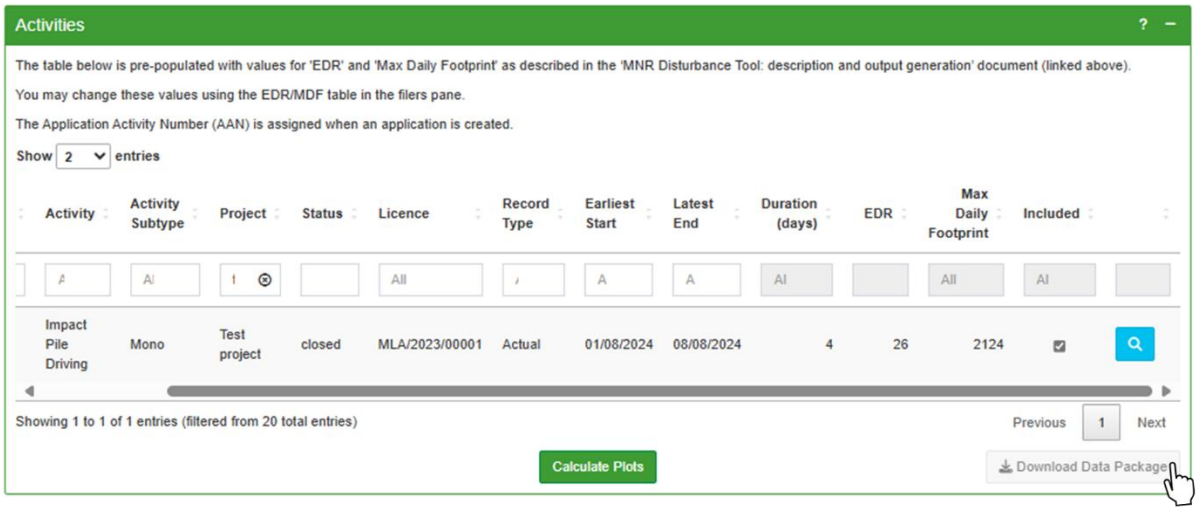

Figure 119. Navigation to the 'Download Data Package' button to download a XSLX file of the assessment outputs of the 'Disturbance Tool'.

The downloaded XLSX data package includes multiple tabs:

- ReadMe – This tab provides an explanation of the downloaded data package.
- Summary Statistics – This tab provides a summary statistic of the assessment such as the maximum daily disturbed area, seasonal average disturbance for the selected area of interest, season and year.
- Fetched Data – This tab includes all MNR activity data recorded for the selected season and year that are situated within 50km of the chosen area of interest.
- Filtered Data – This tab includes a sub-set of the fetched data which has been filtered according to any filters that were applied (i.e. activity types, custom time periods, application status).
- Daily Disturbed Percent Area – This tab provides information on specific activities alongside their respective percentage area disturbed for each day that the activity was proposed to occur or has occurred in. This tab is only included when assessing SACs.
- Close-out Disturbed Areas – This tab provides an assessment of the cumulative impact of closed activities that are occurring on the same day so that when disturbed areas overlap these are not counted twice. This tab is only included when assessing SACs.

To download a plot view as a PNG file:

- Hover over the top-right corner of the plot you wish to download.
- Upon hovering, a tool bar with different plot controls will display (see Section 2.1.4).
- Select the 'camera' icon to download the plot as a PNG file.
- Upon selection, the download will be initiated.

9. Cooperation Discussions

To reduce the risk that users are exposed to explicit content through the sharing of files via the Cooperation Tool, Google's Cloud Vision – Safe Search will be put in place which scans for explicit content (including adult, spoof, medical, violence, and racy). If the file is determined to "likely" contain inappropriate content, MNR Administrators will be notified and the file will automatically be blocked by the system. MNR Administrators will review the file and if inappropriate content has been shared, JNCC staff will de-register the user. If the file is deemed safe it will automatically be released to the MNR. If you believe your file is being blocked unfairly, please contact MNR@jncc.gov.uk. Files uploaded to the MNR may be reviewed periodically manually by JNCC staff to ensure continued user safety.

The 'Cooperation Discussions' is a functionality that allows members of different organisations to communicate with each other regarding their planned activities, for example with the aim to reduce cumulative noise disturbance footprints in harbour porpoise SACs.

A log can be downloaded for discussions which will help provide an audit trail of attempts to coordinate activities below the noise thresholds. The log can be one source of evidence for cooperation attempts between organisations in cases where this is a requirement within licence conditions. If organisations are unable to reach an agreement, they should forward the log to their respective regulator as a notification of a potential issue with adhering to the licence conditions.

Please note that JNCC has no role in this discussion and that other organisations have no obligation to participate in a discussion with you.

9.1. Initiate Discussion

To initiate a discussion:

- Navigate to the 'Organisations' page from the navigation panel.
- Search for the organisation you wish to contact in the 'Organisations' table.
- Select the 'Initiate discussion' button underneath the 'Cooperation' column header.

Figure 120. Example of initiating a discussion with another organisation using the 'Initiate discussion' button on the 'Organisations' page.

Please note that every member of an organisation can initiate a discussion with another organisation. This functionality is not restricted to administrators.

A pop-up window will open:

- Enter a custom name in the ‘Discussion Name’ field.
- Enter a custom description of the discussion’s aim in the ‘Discussion Purpose’ field.
- Optional: Select an option from the ‘Conservation Area & Season’ drop-down menu.
- Select the ‘Initiate discussion’ button to confirm the request.
- Alternatively, select ‘Cancel’ to cancel the discussion request.

Once created, the discussion will be displayed in the table of the ‘Cooperation Discussions’ page (see Section 9.2).

To avoid confusion, we recommend that the ‘Discussion Name’ refers to the project name of the application that is being discussed as well as the applicable season and year.

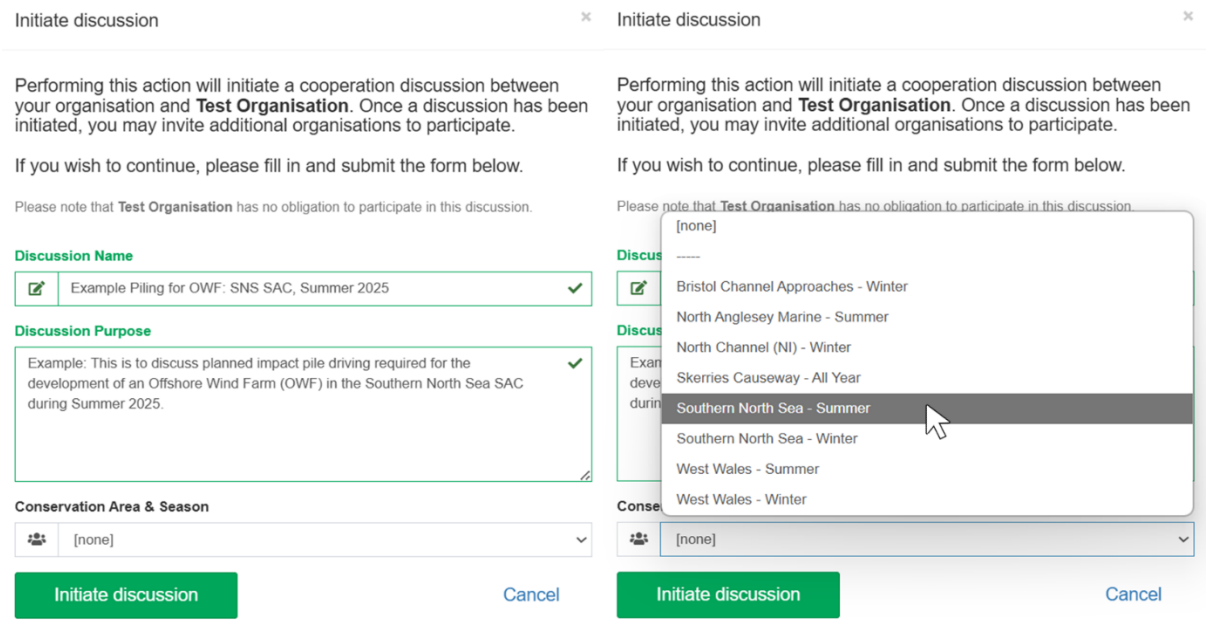

Figure 121. Pop-up window asking users to provide a name and the purpose of a new discussion. The cursor is selecting the SAC to which the discussion refers to.

9.2. View Discussion

To view all discussions your organisation has with other organisations:

- Select ‘Cooperation Discussions’ from the navigation menu panel.
- Find the discussion you wish to view in the ‘Cooperation Discussions’ table.

To view a specific discussion in the list:

- Select the discussion name underneath the ‘Cooperation Discussion’ header.

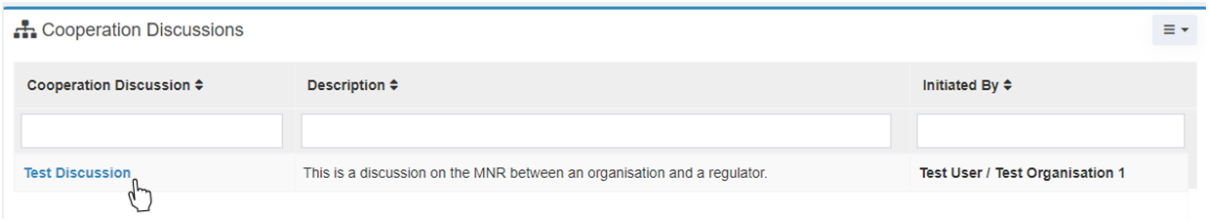

Figure 122. Example of the 'Cooperation Discussions' page listing all discussions of an organisation.

Each discussion consists of three panels:

- 'Discussion Summary' – This panel displays the discussion topic and description, the conservation area and season it refers to, the name and organisation of the user that initiated the discussion, as well as timestamped information (dd/mm/yyyy, hh:mm:ss) when the discussion was initiated.
- 'Participants' – This panel displays the name of the participating organisations as well as the names of the involved users by organisation.
- 'Messages' – This panel displays all messages sent by participants of the discussion. Messages are timestamped and are displayed alongside the name and organisation of the respective user.

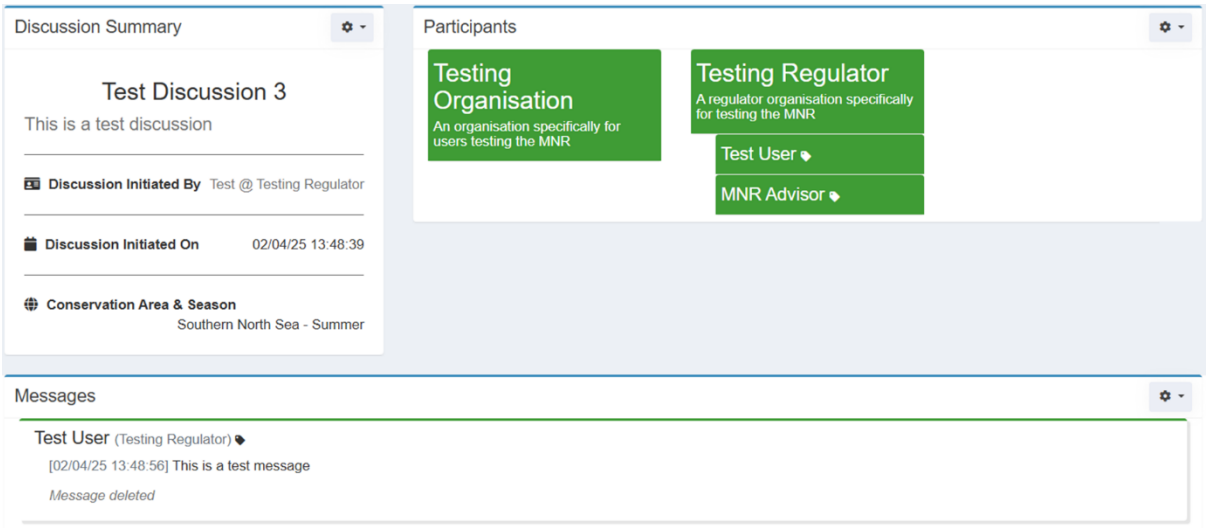

Figure 123. Example view of a new discussion page between an organisation and a regulator.

9.2.1. Display Controls

Users can customize how they wish to view the discussions listed on the 'Cooperation Discussions' page.

To change the default display type:

- Select the menu icon in the top-right corner of the 'Cooperation Discussions' table.
- Untick the 'Auto' check box from the drop-down menu.
- Select 'Cooperation Discussion' to show the column with the discussion name.
- Select 'Description' to show the column with the discussion description.
- Select 'Initiated By' to show the column with the name and organisation of the user who initiated the discussion.

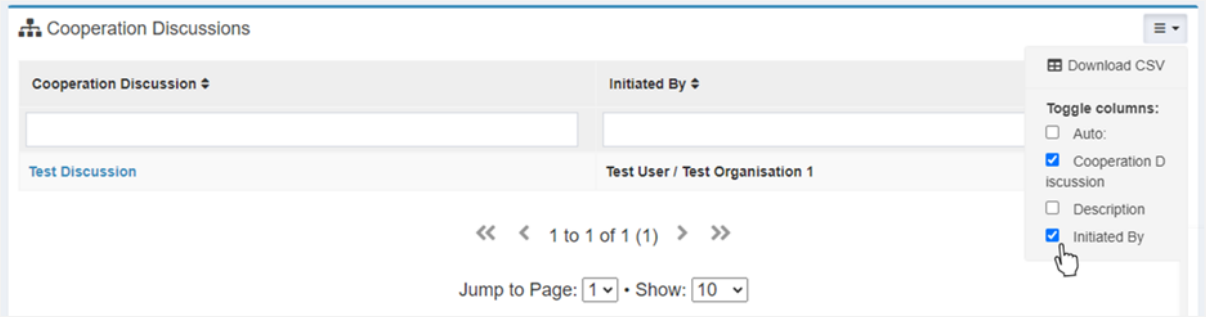

Figure 124. Navigation to the drop-down menu of the 'Cooperation Discussion' page set custom display options for the table.

9.3. Download Discussions

Users are able to download a CSV file listing all active discussions their organisation has with other organisations. The file includes information such as which user initiated the discussion, the name of the discussion, and the names of the participating organisations.

To download a CSV file listing all discussions of your organisation:

- Select 'Cooperation Discussions' from the navigation menu panel.
- Select the menu icon in the top-right corner of the 'Cooperation Discussions' table.
- Select 'Download CSV' from the drop-down menu to initiate the download.

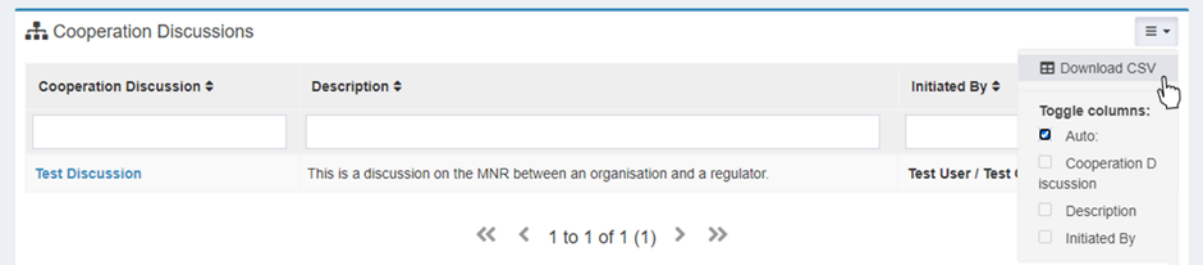

Figure 125. Navigation to the 'Download CSV' button on the 'Cooperation Discussions' page.

9.3.1.1. Export Messages

To download a CSV file containing exported messages of a discussion:

- Select 'Cooperation Discussions' from the navigation menu panel on the left.
- Select the discussion to open the discussion you wish to export.
- Navigate to the 'Messages' panel.
- Select the cog icon in the top-right corner of the panel.
- Select 'Export Messages' from the drop-down list to initiate the download.

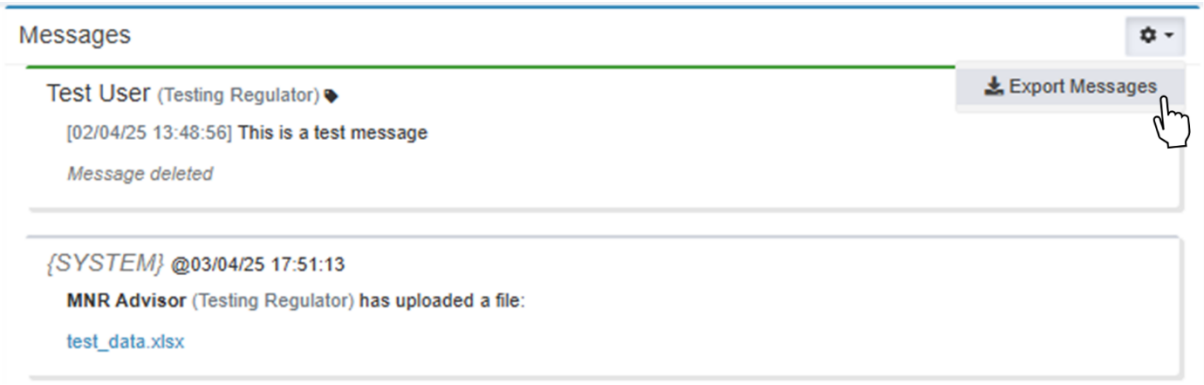

Figure 126. Example of exporting messages from a cooperation discussion via the 'Messages' panel.

9.4. Discussion Management

9.4.1. Send Message

To send a new message:

- Navigate to the 'Messages' panel at the bottom of the page.
- Type your custom message into the text box.
- Optional: Use the text formatting tools at the top of the box to format your message.
- Select the 'Send Message' button to send your message.

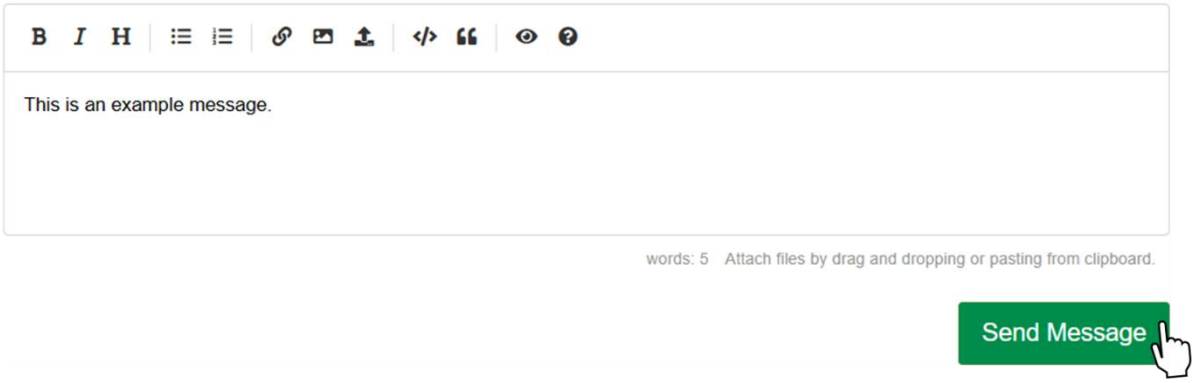

Figure 127. Example view of the dialog to send a new message within a discussion. Text formatting tools can be found at the top of the dialog box.

Please note that the message dialog box uses Markdown to format text. Please refer to the Markdown Guide for guidance on how to use Markdown basic syntax.

9.4.2. Upload File

Users have the option to send files as part of a discussion. For example, this may be useful to share outputs generated by the Disturbance Tool to discuss noise management in SACs.

To upload a file to a discussion:

- Navigate to the 'Messages' panel.

- Navigate to the tool bar at the top of the message field.
- Select the arrow icon to open your file explorer.
- Select the file you wish to upload from your device and select ‘Open’.
- Upon selection, the file is automatically sent as a message in the discussion.

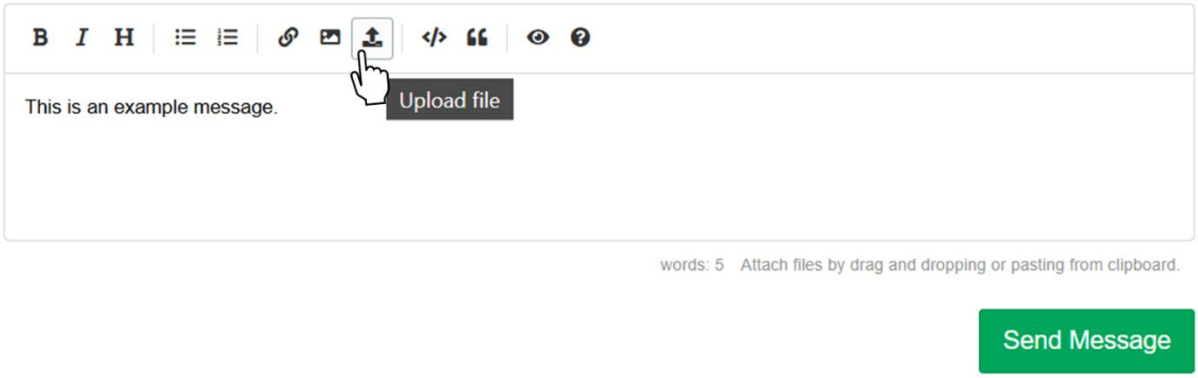

Figure 128. Example view of the dialog to upload a file to a new message within a discussion.

9.4.3. Delete Message/Upload

To delete a message or an uploaded file:

- Navigate to the ‘Messages’ panel.
- Hover over the right-hand side of the message to display a bin icon.
- Select the bin icon to delete the message or upload.

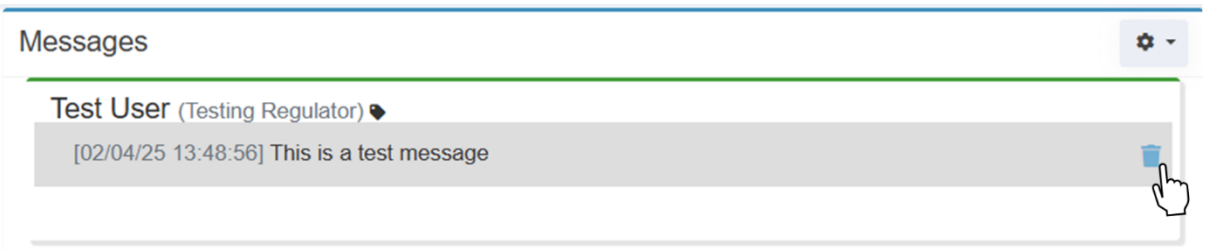

Figure 129. Example of deleting a message within an active discussion with another organisation.

A pop-up window will open asking you to confirm that you wish to delete the message.

- Select the ‘Delete Message’ or ‘’Delete Upload’ button, respectively.
- Alternatively, select ‘Cancel’ to cancel the action.

9.4.4. Edit Discussion

To edit the topic and/or description of a discussion:

- Navigate to the ‘Cooperation Discussions’ page from the navigation menu.
- Find and select the discussion you wish to edit from the table to view it.
- Navigate to the cog icon at the top-right of the ‘Discussion Summary’ panel.
- From the drop-down menu, select ‘Edit’.

Figure 130. Navigation to the cog icon in the 'Discussion Summary' panel to edit the topic and description of a discussion.

A pop-up window will open with editable text fields for the discussion name and description.

- Change the information as required.
- Select the 'Update' button to save your changes.
- Select the 'Cancel' button to cancel the action.

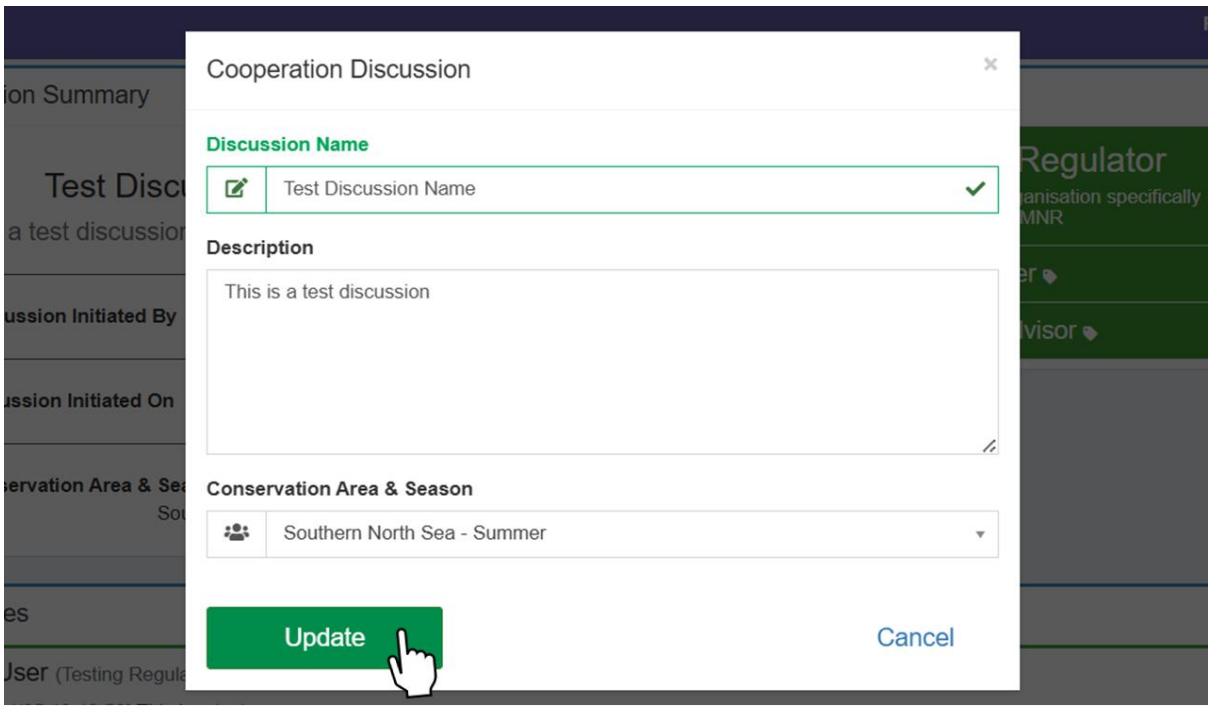

Figure 131. Pop-up window allowing users to change the name and description of a discussion.

9.4.5. Add Participants

To add an additional participant to a discussion:

- Navigate to the 'Cooperation Discussions' page.
- Find and select the discussion you wish to edit from the table to view it.
- Navigate to the cog icon in the right-hand corner of the 'Participants' panel.
- From the drop-down menu, select 'Invite organisation to participate'.

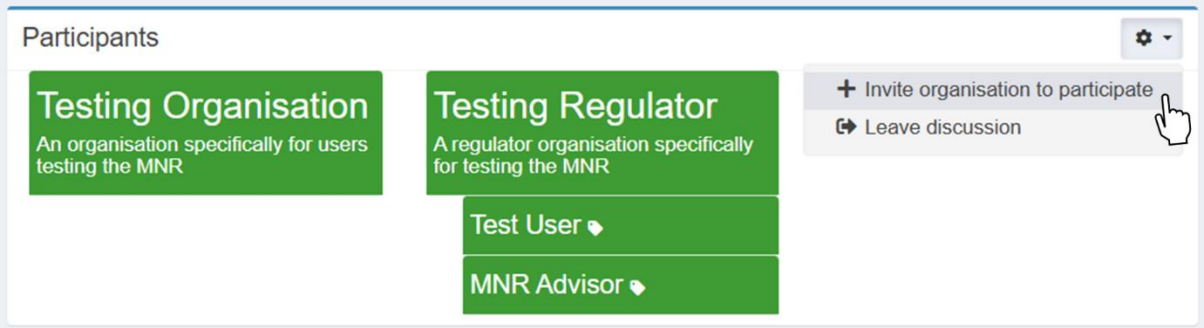

Figure 132. Example of adding a new participant to a discussion.

A pop-up window will open with a drop-down box listing all registered organisations.

- Select the organisation you wish to invite from the list.
- Select the 'Invite organisation' button to complete you invite.
- Alternatively, select the 'Cancel' button to cancel the action.

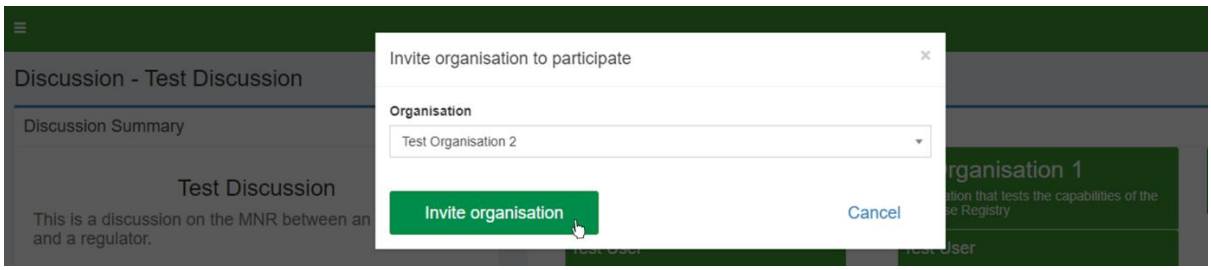

Figure 133. Pop-up window with an organisation selected from a drop-down menu to invite to an active organisation.

9.4.6. Leave Discussion

To leave a discussion and remove it from your organisation's 'Discussions' page:

- Select 'Cooperation Discussions' from the navigation menu panel.
- Select the discussion you wish to leave from the 'Discussions' table.
- Navigate to the cog icon in the right-hand corner of the 'Participants' panel.
- Select 'Leave discussion' from the drop-down menu.

Please note that by leaving a discussion, your entire organisation leaves it too. Once you have left, your organisation cannot participate in the discussion without being re-invited.

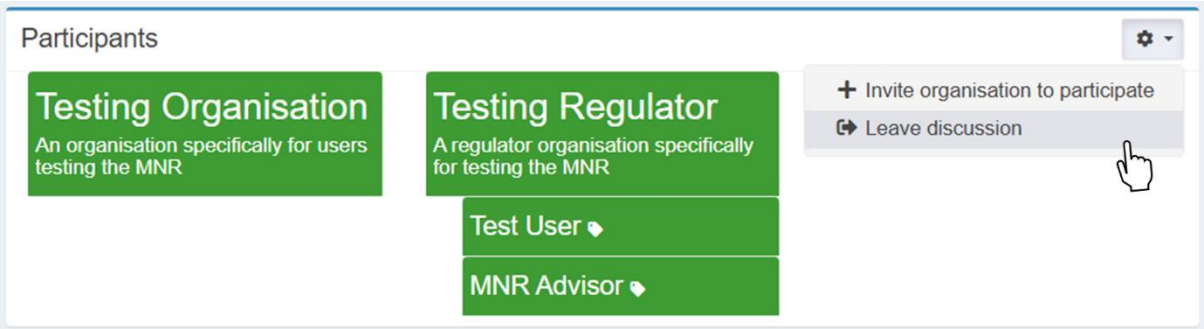

Figure 134. Example view of the ‘Participants’ panel of a discussion with the cursor hovering over the ‘Leave organisation’ button.

A pop-up window will open asking you to confirm your request to leave.

- Select the ‘Leave discussion’ button to leave the discussion.
- Select ‘Cancel’ to cancel the action.

Please note that discussion initiators cannot leave a discussion.

Glossary

Activity	Each individual noise source in an application is classified as an activity. There can be several activities specified within a single application.
Activity Location	The area (or exact location) in which an activity is proposed or confirmed to have occurred. This can be submitted as Oil and Gas Block codes, coordinates, or a polygon (at the proposed stage only) indicating the generalised area within which an activity may take place.
Administrator	A user that manages an organisation created within the MNR. Administrators can edit member details and accept or reject membership/agent requests for their own organisation.
Agent	An organisation that has the permission to upload application data on behalf of a Lead Organisation, for example as a consultant. Agents cannot be the organisation that is producing the noise.
Application	A submission to the MNR specifying one or multiple activities.
Application Activity Number (AAN)	A unique number that is allocated to each activity submitted to the MNR. The AAN is static which allows users to identify an activity across all application stages. Noise sources linked under the same application will share the same AAN and are distinguishable by a numeric suffix (e.g. ‘35_1’, ‘35_2’, where ‘35’ is the shared AAN).
Cancel	An action to indicate that an activity did not occur or falls outside the accepted MNR parameter ranges. Users can cancel an entire application or demonstrate a partial cancellation by cancelling individual activities within the application. It is only possible to cancel applications or activities at the consented or notified stage.
Cancelled	The status of an application and/or activity that did not occur or falls outside the accepted MNR parameter ranges.

Closed	The status of an application and/or activity for which close-out data has been submitted. Closed applications detail the actual dates and locations on which the noise-producing activities occurred. Close-out data on noise source parameters may also have been submitted.
Close-out Reporting	The reporting of detailed noise event data (e.g. date and location) after the activity has been completed to officially close-out the data submission for the activity.
Consented	The status of a planned application and/or activity that has an official licence number associated with it as supplied by the respective regulatory body.
Cooperation	A functionality of the ‘Organisations’ page which allows users to initiate a discussion with another organisation.
Cooperation Discussions	A page that lists all active discussions that an organisation has with other organisations.
Coordinates	Location information which can be provided in degrees:minutes:seconds or decimal degrees (WGS84). Coordinates can be used to identify the exact location in which an activity may occur or has occurred. If the exact location is unknown at the proposed stage, coordinates can be used to create a polygon indicating the general area within which an activity may take place.
CSV	A Comma Separated Values (CSV) file is a text file that has a specific format which allows large amounts of data to be saved in a table-structured format. CSVs can be used to upload location data or download activity outputs.
Delete	An action enabling users to delete a draft or what-if application entirely or delete one or more activities within an application.
Discussion	A conversation between members of two or more organisations.
Disturbance	The effect that can potentially occur as result of noise events. This can include the displacement of animals from an area, changes to marine mammal diving or

	movement patterns, and other behavioural responses.
Disturbance Tool	A tool to aid assessments of the noise disturbance in harbour porpoise Special Areas of Conservation (SACs) for specific years and seasons. The tool also allows users to visualise potentially disturbed areas outside SACs.
Draft	An application that has been saved to the system but not yet submitted as proposed.
Duration	The number of days on which an activity is expected to take place, entered at the proposed stage. If the duration is unknown, the maximum number of days between the earliest start and end date should be provided.
Edit Mode	A functionality of the MNR allowing users to edit an existing application.
Edit Permissions	A functionality through which members of a lead organisation can allow one or more of their agents to edit an application.
Effective Deterrence Range (EDR)	The potential range of temporary disturbance as defined in JNCC Guidance. This value (between 0 and 50 km) can be set manually by the user for each noise source in the Disturbance Tool. Default EDRs are listed in Annex I.
Environmental Impact Assessment (EIA)	An assessment of the potential environmental impacts of a plan or project.
File Conversion Tool	A page where users can convert certain file formats (e.g. P1/11) to a format that is suitable for data ingestion onto the MNR.
GeoPackage	A GeoPackage is an SQLite Database file with a .gpkg extension. It includes geospatial data in a point and/or polygon format.
Geo Plot	A section of an application visualising proposed and closed-out location information that has been submitted.
Habitats Regulation Assessment (HRA)	An assessment carried out by competent authorities to ascertain whether a plan or project, alone or in-combination could result in an adverse effect on a European protected site’s integrity, including Special Areas of Conservation (SACs).

Interim	The status of an application for which close-out data has only been partially submitted. For example, this will apply to multi-year applications when close-out data has been submitted at the end of each respective year.
Lead Organisation	The company or operator that is responsible for undertaking an activity. Consultants can be associated with, and upload data on behalf of, a lead organisation via the agent mechanism.
Licence	A unique identifier for licensed activities that require consent from their respective regulator.
Marine Plan Areas	Marine Plan Areas are 11 sub-areas of the English inshore and offshore waters marine planning regions. See Marine plan areas in England - GOV.UK for more information.
Maximum Daily Footprint (MDF)	The worst-case disturbed area in a single day of a noisy activity that is overlapping with a Special Area of Conservation. Within the 'Disturbance Tool', this value will apply to planned data only and will be the same in all the days in which the selected activity could occur.
Member	A user that is associated with a specific organisation. Users can only be members of one organisation.
MNR Outputs	A page where submitted application data can be viewed and downloaded as a PNG, GeoPackage, or a XLSX file. Outputs can also be spatially and temporally refined and viewed as either a GIS plot map or in a tabular format.
Multi-year Application	Description of an application that spans multiple consecutive years. A separate interim close-out must be submitted for each year of the application before submitting a final close-out for the last year.
My Organisation	A summary page of the organisation which users are a registered member of. The page displays overall organisation details and lists all members of your organisation, agents for your organisation, and all organisations for which your organisation is an agent for.
New Application	A page where users can create a new application.

New What-If Scenario	A page where users can create a hypothetical application with one or more activities for exploring disturbance scenarios in harbour porpoise Special Areas of Conservation.
Noise Event	Impulsive noise from a single noise source such as impact pile driving or a seismic survey, occurring in a single day.
Noise Source	A type of noise producing activity such as explosives, seismic surveys, or impact pile driving.
Notified	The status of a planned application and/or activity that has no official licence number associated with it. This includes voluntary submissions, for example, on military sonar activity, and activities which are exempt from licensing such as certain high resolution geophysical surveys. The supply of an exemption number is optional.
Oil & Gas Block/Quadrant	The UK oil and gas grid licensing system which separates UK offshore waters into different blocks and quadrants. A block measures 10 minutes' latitude by 12 minutes' longitude.
Organisation	A company registered within the MNR which users can join and submit applications for. A list of all organisations registered with the MNR can be found on the Organisations page.
Participant	A user that is member of an organisation that is part of an active discussion.
PNG	A 'Portable Network Graphics' (PNG) file is a raster graphics format. This format is used within the MNR to download plots as image files.
Project	The name of the project an application is part of. This can be a survey or windfarm name, or a custom name to differentiate between applications.
Proposed	The status of an application and/or activity that has been submitted specifying planned noise-producing activities.

Pulse Block Days	Number of days within a set period of time that impulsive noise has been generated within each UK Oil and Gas licensing block.
P1/11	Geophysical position data exchange format designed for the exchange of position data typically resulting from in-field survey operations such as geophysical (including seismic), hydrographic etc. It is a common format used for seismic surveys.
Regional Boundaries	The borders of the sub-regions as defined under the UK Marine Strategy (UK MS) that are contained within the boundaries of the UK continental shelf.
Regulator	The regulatory body that determines and upholds licence conditions that permit organisations to undertake work within specific parameters.
Shapefile	File format for geospatial vector data to use within a geographic information system (GIS).
Special Area of Conservation	A type of protected area in the UK established to contribute to the conservation of habitats and species identified in Annexes I and II of the European Council Directive 92/43/EEC (known as the Habitats Directive).
Status	The stage an application has progressed to, the approval stage of an organisation, or the approval stage of a user request as a member or agent of an organisation, also see Draft, Proposed, Consented, Notified, Cancelled, Interim and Closed for specific details.
Submitter	The name of the user who has submitted a specific application. The organisation that the user is a member of is displayed alongside their name, for example ‘Name Surname @ Organisation’.
Sub-type	Further specifications of a noise source such as the survey or equipment type (e.g. Pinger for Sub-Bottom Profilers).
System Administrator	An administrator with unrestricted access to the MNR including the ability to manage all

	applications and user requests. This role is held by employees of JNCC.
UKMS Subregion	Under the UK Marine Strategy, UK waters are divided into two sub-regions: the Greater North Sea and the Celtic Seas
User	A person that has registered with the MNR with the intention to submit, view, or download activity data.
View Applications	A page where existing applications are listed and can be opened for viewing or editing. Users who are members of an organisation are able to view all applications submitted to the MNR except draft and what-if applications submitted by other organisations.
View Mode	A functionality of the MNR allowing users to view an existing application.
Voluntary Notification	Data entry to the MNR for a particular application that is not subject to licence or consent conditions.
What-if	An application that can be used to assess the potential disturbance of a planned/and or hypothetical activity using the Disturbance Tool.
XLSX	A XLSX file is a file format for Microsoft Excel documents which is used for storing spreadsheet data.

Annex 1

MNR Disturbance Tool: Description and Output Generation

1. Introduction

The MNR Disturbance Tool provides means to explore future scenarios of noisy activities and assess the likelihood that planned projects (alone and in combination with other activities) could exceed the Statutory Nature Conservation Bodies' noise guidance thresholds for harbour porpoise Special Areas of Conservation (SACs) in England, Wales, and Northern Ireland. It also allows for retrospective assessments to check whether noise levels stayed within the advised limits.

The guidance states that no more than 20% of the site (or seasonal area) is to be disturbed in each day and no more than 10% to be disturbed on average over a season. Seasons are 'Summer' (April to September) and 'Winter' (October to March). The Disturbance Tool also identifies which projects are contributing to the noise in the sites in particular seasons.

Please note that decisions on how activities are coordinated to keep within these limits are beyond the scope of this tool.

Table 7. Harbour porpoise Special Areas of Conservation (SAC) and associated seasonal areas. Winter: 1 October – 31 March; Summer: 1 April – 30 September.

Special Area of Conservation	Season	Area (km^2)
Bristol Channel Approaches	Winter	5850
North Anglesey Marine	Summer	3249
North Channel	Winter	1604
Skerries Causeway	All year	108
Southern North Sea	Summer	27028
	Winter	12696
West Wales Marine	Summer	7376
	Winter	1460

The tool will aid environmental assessments, in particular Habitats Regulations Assessments, by using data that has been submitted to the MNR on planned activities. However, it also uses data from closed applications if activities already took place in the season/year that is being assessed (and close-out data has already been submitted). In addition, users can add hypothetical what-if applications (see Section 8.2 of the MNR Help and Guidance) to their assessment.

The tool's outputs are based on a series of worst-case assumptions and relatively coarse data on location and timings. The main source of uncertainty arises from the fact that the data on planned activities submitted to the MNR often does not have the exact locations of the operations. Even when that information is available, it is not known in advance in which days and locations the operations will take place. This means that when the Disturbance Tool plots multiple activities in each day, it is likely that not all planned activities (i.e. planned and/or consented activities) will occur on that day. It is also likely that the total estimated daily % area disturbed is a worst-case scenario with low likelihood of occurring, particularly if

activities have estimated short durations (small number of days) but large licensing periods. In addition, for planned activities where disturbance footprints overlap if activities occur on the same day, the Disturbance Tool adds up individual footprints which means that overlapping areas are added twice to the totals in the assessment outputs. Therefore, the estimates of the percentage (%) area disturbed may be different to those in regulator assessments, which are likely to contain more detailed and accurate information.

With close-out data, more precise location data is available for each day and, therefore, overlapping disturbance buffers from multiple activities occurring on the same day are not added twice to the total footprint.

Please note that the outputs of the 'Disturbance Tool' should not be seen as a substitute to a more meaningful, case-specific, detailed assessment with more accurate scenarios of where and when the activities will take place (if this information is available). Please consult your respective regulator if you have any questions on how to use the tool's outputs.

2. Usage

Users will be able to choose the SAC of interest and season as well as change the default Effective Deterrence Range (EDR; up to 50 km) and the maximum daily footprint (MDF) for each of the noise sources before outputs are produced.

The tool uses the MNR data on planned activities and a series of pre-defined daily disturbed area footprints for each noisy activity (Table 8) and produces the following outputs:

- A table listing all activities that match the tool's configuration. The table shows the activity types and subtypes, duration of activities, licence references (if applicable), start/end dates, the EDR (default or custom) and the maximum worst-case daily disturbance footprint in km^2 (default or custom, for each activity).

- A downloadable Data Package file providing information on the tool's assessment outputs including summary statistics of the maximum daily disturbed area and seasonal average disturbance in the selected area, season and year of interest as well as information on the daily percentage disturbed area for each activity and revised footprints for activities with overlapping disturbed areas on the same day.

- Coloured flags visualising daily and seasonal percentage (%) areas disturbed:

    - Daily threshold:
        a. Green: total disturbed area is on any one day < 10%.
        b. Amber: total disturbed area is ≥10% but < 20% on any one day.
        c. Red: total disturbed area is ≥ 20% on any one day

    - Seasonal threshold:
        a. Green: average disturbed area over the period is < 5%
        b. Amber: average disturbed area over the period is ≥ 5% but < 10%
        c. Red: average disturbed area over the period is ≥ 10%

- A plot visualising the seasonal timelines of overlapping activities' licensing periods (the earliest start and latest finish date). Depending on what filters are applied during the tool configuration, planned as well as completed activities can be shown.

- A plot visualising the total area disturbed on a given day by one or more activities o, for planned activities only, the worst-case total area disturbed on a given day by one or more activities.

- A map visualising the total activity footprint (oil and gas blocks, points, lines, or polygons) in addition to the respective disturbance range buffer (EDR as in SNCB guidance) for activities with disturbed areas within 50 km of the boundary or that overlap the SAC. Users can also choose to have applications in proposed, consented, notified, interim, closed and what-if (of own organisation only) statuses shown on the map.

3. Disturbed Area Calculation

3.1. Close-out data

For close out data, the disturbed area calculation is fairly straightforward since the activity locations on any given day will have been submitted as either points or oil and gas blocks, commonly used for pile-driving and explosives and seismic surveys, respectively. The daily area disturbed is then calculated based on the EDR distance and the area of overlap with the site. It is assumed that the disturbed area has the same disturbance range/radius (EDR) all around. In addition, for activities with overlapping disturbed areas on the same day, any overlaps are accounted for only once, when calculating the total combined footprint, to avoid overestimation of the total disturbed area.

3.2. Planned data

The data on planned activities input to the MNR on the other hand has a great level of uncertainty regarding location and timings. Locations can be input in oil and gas blocks (commonly used for seismic surveys), , points (commonly used for pile-driving and explosives), lines or polygons, with points being the most accurate locations.

Even when the exact activity locations are known, it is not possible to know with certainty what the activity locations will be on any given day, hence, this information is not included in the MNR. Regarding activity timings, the MNR records data is submitted on the estimated duration of an activity as well as the start and end date of licences which can often be large temporal windows. For example, an activity record may have a license extending over a period from 6 months to one year but will only have the activity listed with 1-2 days of duration.

This uncertainty over the timings can cause rather conservative cumulative assessments since it is assumed that those days of activity could fall in any of the licence period days. In addition, where disturbed areas of planned activities would overlap if these occurred on the same day, the tool adds up individual footprints which means that overlapping areas are added more than once to the total, resulting in a further conservative estimate.

Due to the inherent uncertainty in the planned data, a series of worst-case assumptions are made in the tool in order to generate a daily disturbance footprint. Users can change the default values and enter their own, better informed, values.

3.3. General assumptions applicable to all activity types

The disturbance tool makes following general assumptions regarding disturbed areas:

- Since the exact location of the planned activity in any given day is unknown, the assumed worst-case daily porpoise disturbance footprint (km^2) will be the smallest of the following two areas:
    - The worst-case maximum daily disturbance footprint (MDF) for each noise source as in Table 8 (rationale described below). This assumes that the disturbance occurs entirely inside the SAC. This approach is conservative as locations closer to the boundaries of the SACs and outside the SACs will have less of an overlap with the SACs.
    - The overlapping area between the SAC and the disturbed area resulting from all the project's locations. The disturbed area is estimated by buffering the locations (point, polygon, or line) using the EDRs (see Table 8) as the buffer radius. The disturbed area has the same disturbance range/radius (EDR) all around. In reality, due to varying environmental conditions depending on direction from source and therefore affecting sound propagation, the range of disturbance will likely vary with direction, but this is not taken into account in this tool. For certain activities with a small disturbance footprint (low order UXOs, multibeam echosounders, mini-airguns and sub-bottom profilers) no further buffer is added if the locations were entered as oil and gas blocks or polygons so to not overestimate the area.
- For multiple activities occurring on the same day, it is assumed that the disturbance footprints do not overlap and, therefore, the areas are summed without considering any overlap (which would reduce the daily disturbance footprint). Without knowing the exact locations of the activities on each day it is not possible to know if there will be overlapping disturbance footprints in any given day. Hence, a worst-case scenario is used.
- The activity could happen in any of the days between start and end dates.
- When the start/end date of an application crosses the summer and winter seasons, the number of days estimated duration is split proportionally between the two seasons (i.e. if the licence period had 100 days in summer and 50 days in winter and the estimated duration was 30 days, 20 days would be allocated to summer and 10 days to winter).

Table 8. Default Effective Deterrence Ranges (EDRs, km) in harbour porpoise SACs and assumed worst-case maximum daily disturbance footprints (MDF, km^2) for each noise source and associated sub-types. These will be reviewed regularly to ensure these are based on the best available evidence. Users can manually input new values if the default EDRs or maximum daily footprints are not suitable.

Noise Source	EDR (km)	MDF (km^2)
Seismic Survey		
Ocean Bottom	12	1759
Regional	12	1759
Reservoir	12	1759
Route	12	1759
Site	12	1759
Vertical Profile	12	452
Mini-Airgun	5	256
Other	12	1759
Sub-bottom Profiler Survey		
Boomer	5	256
Chirp	5	256
Parametric	5	256
Pinger	5	256
Sparker	5	256
Imager	5	256
Multibeam Echosounder		
All types	5	256
Piling (without abatement)		
Mono-piling	26	2124
Pin-piling	15	707
Conductor piling	15	707
Sheet piling	15	707
Piling (with noise abatement)		
All types	15	707
Explosives		
Open water < 2kg	5	79
Open water > 2kg	26	2124
Open water > 2kg (with noise abatement)	15	707
Within 100m of mudline < 2kg	5	79
Within 100m of mudline > 2kg	15	707
Within 100m of mudline > 2kg (with noise abatement)	5	79
UXO High order	26	2124
UXO High order (with noise abatement)	15	707
UXO Low order	5	79

3.3.1. Seismic Surveys

The area of potential daily disturbance of harbour porpoise will always vary depending on the location of the survey in relation to the SAC, how many line turns, vessel speed, etc. However, without knowing the exact location of survey lines and timings it is not possible to accurately calculate daily disturbance footprints.

When undertaking a typical seismic survey, the vessel will be travelling at a speed of 4 knots (7.4 km/h). Consequently, the maximum length of line that could, in theory, be surveyed over the course of a single day is 177.8 km. Assuming a 12 km EDR, the total area impacted over the course of 24 hrs would be 4719 km^2. This is an unrealistically large area since there will be breaks of approximately 3.5 hrs in airgun operations at the end of each line as the vessel turns before commencing the next line. It is also unlikely that a survey would be undertaken along a single transect line in a single day. In addition, some surveys will not be entirely within the SAC boundaries and therefore may have less of a daily disturbance footprint than surveys entirely within the SAC. Weather related delays or technical reasons may further reduce the amount of time airguns are operated each day. Whether the survey lines are sequential in space (less than 500m spacing) or adopt a racetrack design (many km spacing) could also impact the daily disturbed area.

Given these uncertainties, the tool uses a daily area disturbed of 1759 km^2 taken from the Habitats Regulations Assessment (HRAs) for the ION Southern North Sea Seismic Survey 2021. This was the largest estimate used in published HRAs carried out for seismic surveys (in a sequential line survey design) in the Southern North Sea SAC. This footprint assumes that the seismic lines are undertaken sequentially from one line to the adjacent line (<500m away). If the survey is to be carried out in a racetrack design the daily disturbance footprint could be increased, depending on whether more than one line is surveyed in each day.

This will apply to all seismic surveys except vertical profiling (VSP) and mini-airguns. For VSPs, the daily footprint will be the area of a circle of 12 km radius since the survey is stationary. For mini-airguns, given the low power source and consequential lower noise output, the daily footprint will be the same as for sub-bottom profilers – 256 km^2.

3.3.2. Sub-bottom Profiler Surveys

As for seismic surveys, the area of potential disturbance of harbour porpoise will always vary depending on the location of the survey in relation to the SAC, how many line turns, etc. However, without knowing the exact location of survey lines and timings it is not possible to accurately estimate the daily disturbance footprint. In the unlikely event that a sub-bottom profiler was used continuously over a period of 24 hrs with a vessel speed of 4 knots (7.4 km/h) a total area of 1778 km^2 per day could be affected (using the 5 km EDR). This is a highly precautionary scenario as it is very unlikely that a sub-bottom profiler would be undertaken along a single transect line of 178 km in a single day.

This tool uses 256 km^2 taken from estimated maximum daily area disturbed for the proposed geophysical surveys at Dogger and Sofia offshore wind farms within the Southern North Sea SAC in the Habitats Regulations Assessment (HRAs) in the ION Southern North Sea Seismic Survey 2021. This was the largest estimated daily disturbed footprint attributed to sub bottom profilers in published HRAs. There is no empirical evidence for porpoise disturbance ranges associated with sub-bottom profilers. There are several different types of sub-bottom profilers, and the available evidence so far comes from noise measurements and modelling and not field observations of porpoise response.

3.3.3. Piling

It is assumed that one pile driving event occurs a day. The worst-case daily footprint for mono-piling (without noise abatement) is the area of a circle of 26 km EDR (2124 km^2). For all other types of piling, including with noise abatement, the worst-case daily footprint is the area of a circle of 15 km radius (707 km^2).

3.3.4. Explosives

It is assumed that one explosive event occurs a day. The worst-case daily footprint for high order UXO clearance (without noise abatement) is the area of a circle of 26 km radius (2124 km^2). For high order with noise abatement and cutting for well abandonment with >2kg explosives but using noise abatement, the worst-case daily footprint is the area of a circle of 15 km radius (707 km^2). For low order UXO clearance, the worst-case daily footprint is the area of a circle of 5 km radius (79 km^2).

For explosive use in connection with well abandonment, the worst-case daily footprint is the area of a 26 km (2124 km^2) radius circle for cutting/perforating in open water or 100 m below mudline using 2 kg or more total explosive. For cutting/perforating in open water or within 100m below mudline using 2 kg or less total explosive the worst-case daily footprint is the area of a 5 km circle (79 km^2).

There is no empirical evidence for porpoise disturbance ranges associated with explosive use. The EDR for high order explosives matches that of mono-piling, the largest range observed. The other types of explosive use will mostly have lower sound source levels; hence, it is assumed the area affected by disturbance will be smaller, with the smallest assumed for low-order UXO clearance and well cutting in open water or within 100m below mudline using less than 2 kg of explosives.

3.4. Total Daily Percentage (%) of site disturbed

The worst-case maximum daily footprint of each activity is divided by the area of the (seasonal) site and then summed to provide a total % of site disturbed. For close-out data only, overlapping disturbed areas from multiple activities are only accounted for once.

3.5. Seasonal Average Percentage (%) of site disturbed

The seasonal average is calculated by multiplying the worst-case daily percentage of the (seasonal) site disturbed by each activity individually in each day by the number of days the impact could occur in (estimated duration) and then averaging across the total number of days within that season (i.e. dividing the totals by 183 days in the summer period and 182 days in the winter period). This provides a seasonal average spatial effect.