NavView User Guide – 17 Beacons

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17. BEACONS

NavView supports ultrashort baseline (USBL) acoustic systems to varying extents. In order to do this, it requires information regarding the acoustic beacons in use. This is provided via the Beacons section in the Setup ribbon or Project Explorer Data section.

FIGURE 17-1 BEACONS - SETUP RIBBON

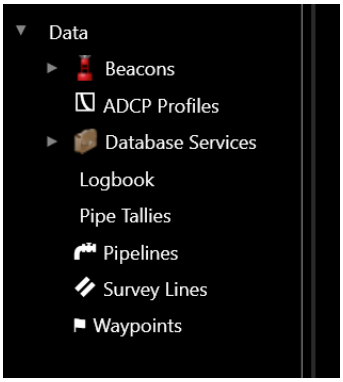

FIGURE 17-2 BEACONS – PROJECT EXPLORER

If Rolls and Privileges are enabled, the following are what is allowed for each role:

Roles	Privileges
Not Logged In/User	Cannot add, edit or remove beacons
Online/Supervisor	Cannot add or remove beacons, can edit selected beacons
Administrator	Can add, edit and remove beacons

17.1 BEACON CONFIGURATION

1. From the Setup ribbon or Project Explorer click the Beacons icon (see Figure 17-1 and Figure 17-2) to open the Configure Beacons dialog (see Figure 17-3).

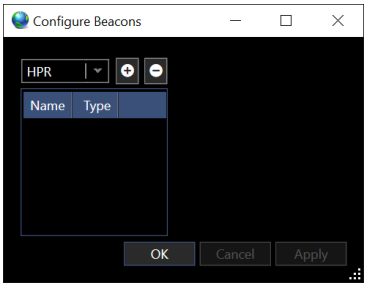

FIGURE 17-3 CONFIGURE BEACONS DIALOG

NavView supports the following Beacon types:

- Sonardyne Compatt 6
- Sonardyne DPTi 6
- Sonardyne Marker 6
- Sonardyne Compatt 5
- Kongsberg HPR
- Sonardyne SST
- Sonardyne WSM
- Generic USBL
- Sonardyne SST 6

This section covers only HPR and Generic USBL.

17.1.1 ADD A BEACON

1. Open the Configure Beacons dialog.
2. From the drop-down list, select the beacon type to add.

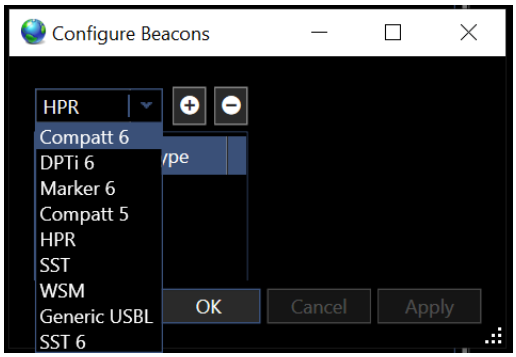

FIGURE 17-4 BEACON TYPES

Note: When the Configure Beacons dialog is opened from a task specific wizard or view, only the appropriate beacon types are available. For example, if opened from the USBL device settings wizard, only USBL beacons are listed.

3. Click the add button

17.1.1.1 HPR BEACON

HPR beacon supports the Kongsberg FSK and Cymbal protocols.

1. Select HPR from the drop-down list (see Figure 17-5)

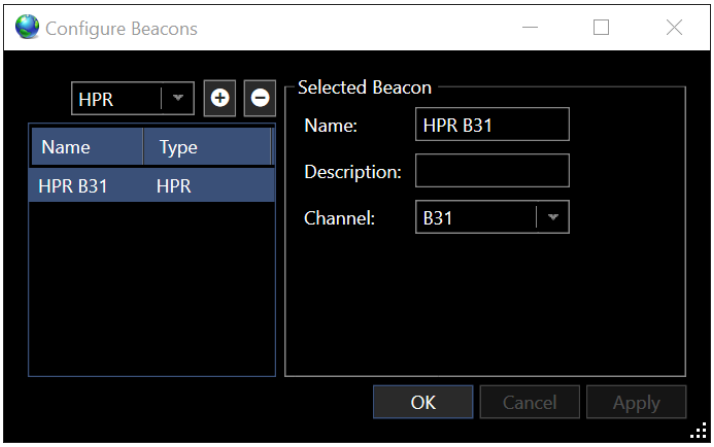

FIGURE 17-5 HPR BEACON DIALOG

2. Click the add button to add to the list.
3. In the **Name** box, give the beacon a name that identifies it such as the beacon channel or what the beacon will be used for, e.g. ROV Primary. Defaults to Type and Channel.
4. **Description** is optional.
5. From the **Channel** drop-down, select the beacon channel. Channel options are FSK (B) or Cymbal (M)

17.1.1.2 GENERIC USBL BEACON

Generic USBL beacon is used for USBL systems, such as HAINS, where an id is assigned in the output string.

1. Select Generic USBL from the drop-down list (see Figure 17-6)

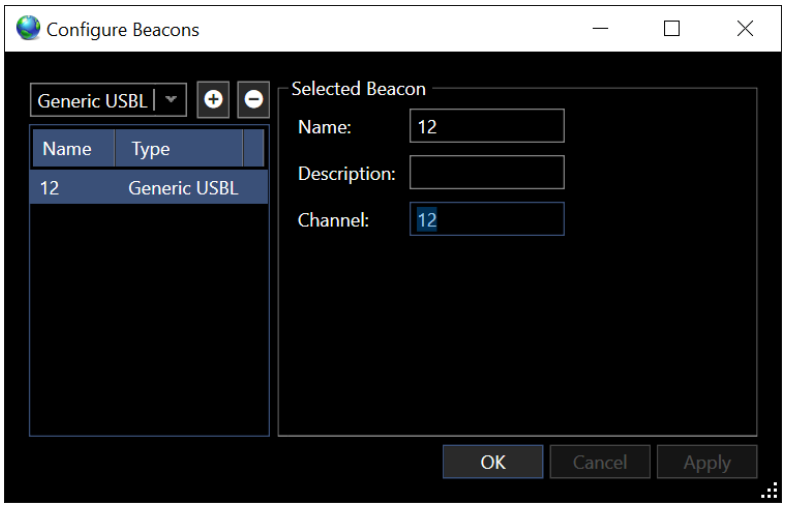

FIGURE 17-6 GENERIC USBL DIALOG

2. Click the add button to add to the list.
3. In the **Name** box, give the beacon a name that identifies it such as the beacon channel or what it will be used for.
4. **Description** is optional.

5. Enter the **Channel** for the generic beacon to match the id in the data string being output from the USBL system.

Note: The added beacons can also be seen and edited in Explorer/Data/Beacons.

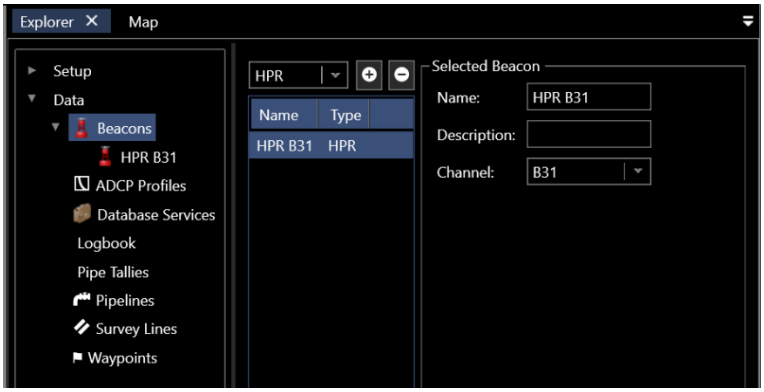

FIGURE 17-7 BEACONS – EXPLORER/DATA/BEACONS

17.2 USING BEACONS

NavView uses the beacons for tracking subsea objects using USBL systems. It is important to be aware that when a beacon is added it creates a unique object. It is this object that is associated with those features in NavView that can utilize the beacon data, e.g. Calculations, Text views, etc. Changes made to the configuration of existing beacons do not cause a break in this association.

As an example, in the case of using beacons as primary and secondary position sources for an ROV, the beacon names should reflect the application, e.g. **ROV Primary** and **ROV Secondary**. Should one of these fail and be replaced by a beacon set to a different code than the original, the only change required in NavView is to access the respective beacon's configuration and update it to the new code. All existing associations such as the assignment of that beacon in a Calculation or configured to be logged to the database remain in place and these operations continue seamlessly.