1. Cable Fish Device

Revision History			
Revision	Date	Author	Comments
01A	Mar 27, 2025	B Wright	Initial release

1.1 Overview

The CableFish device supports input from and output to the North Sea Systems' Cable Fish. Input and output messages are comma delimited.

1.2 Add Device

1. From the Explorer view or Setup ribbon, select Devices to display the IO Devices
2. From the dropdown list, select Cable Fish and click the **+** button

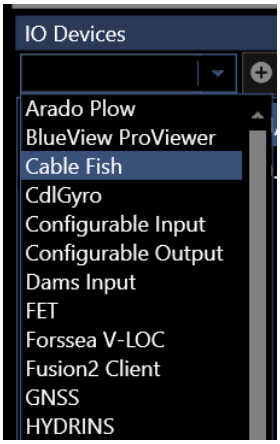

Figure 1 IO Devices - Cable Fish Device Selection

3. Configure the Device IO parameters and apply them accordingly (refer to the Devices section of the User Guide)

1.3 Configure Device

1. Access the Configure Cable Fish view by either right mouse clicking on the Cable Fish device in the list and selecting Device Settings or selecting it in the list and clicking the Configure device icon ( ) in the Device view tool bar to open the Configure Cable Fish dialog (see Figure 2)

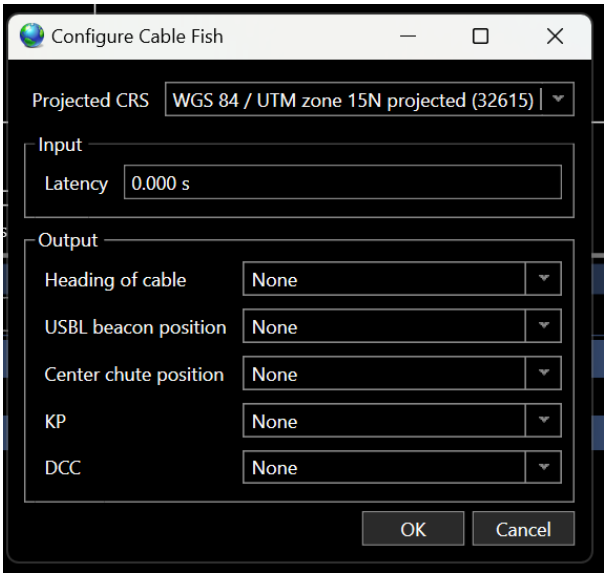

Figure 2 Cable Fish Configuration

2. Projected CRS
    a. Select the Horizontal CRS from those added to NavView that the position data, both received from the Cable Fish and transmitted to ,it are referenced to
3. Input
    a. Input latency:
        i. If the latency of the input message is known, enter it here, otherwise leave this at 0
4. Output
    a. NavView supports the selection of the data source for each output items to provide the greatest flexibility
        i. For each output type, the respective dropdown list presents all available data sources of that type
        ii. From the respective dropdown lists, select the desired data source
        iii. If the option None is selected for a data source, the respective field in the output message is empty
    b. Figure 3 is an example of appropriate data source selections

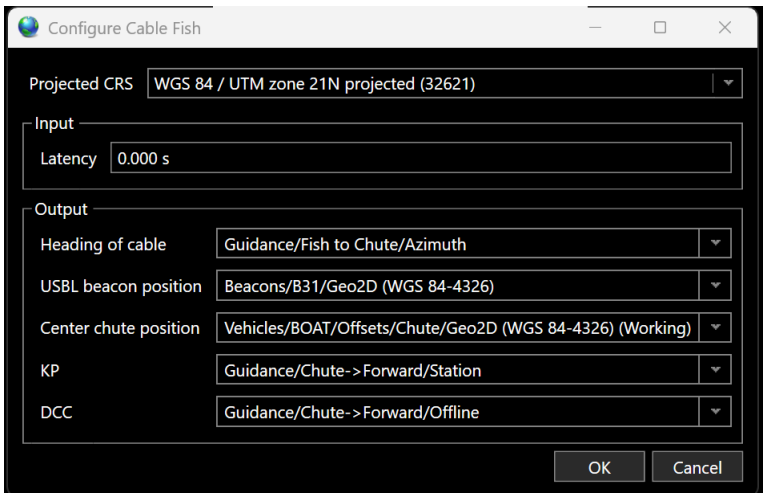

Figure 3 Cable Fish Output Configuration

c. The output message is terminated with <CR><LF>

5. Once configuration is complete click OK

1.4 Monitoring

1. Open a Device Status view (see the Devices section in the User Guide)
2. ASCII Decode Tab

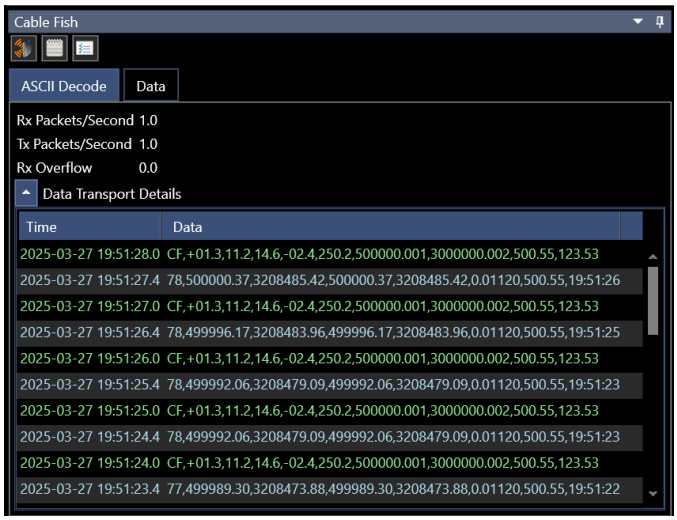

Figure 4 Cable Fish Device Status View - ASCII Decode Tab

a. Rx Packets/Second: Displays the input rate of the received messages
b. Tx Packets/Second: Displays the output rate of transmitted messages
c. Rx Overflow: Displays the number of bytes in the case of an input buffer flow
d. Scrolling list of received (green) and transmitted (blue) messages

3. Data Tab
   a. Displays the decoded and published data

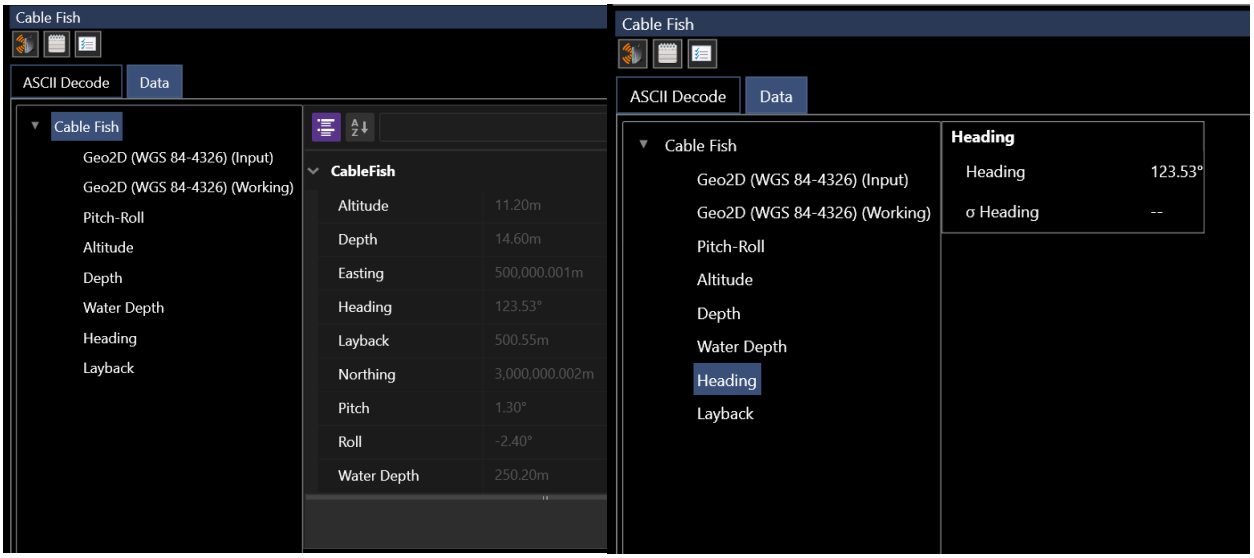

Figure 5 Cable Fish Device Status View – Decoded and Published Data

b. Selecting the top of the tree (e.g. Cable Fish) displays the decoded data in the right panel in the units and number of decimal places expected based on the documentation provided
c. Expanding the branches in the tree (e.g., Altitude, Heading, etc.) lists the respective observation that are published and available for use elsewhere in NavView such as Text views and Data Recording

1.5 Input Telegram

Cable Fish CableFish Message to NavView		
Field	**Format**	**Description**
1	CF	Message header
2	+/-##.##	Pitch angle in degrees of survey head with positive being nose down (same as pitch angle of cable)
3	##.##	Altitude in meters of survey head
4	##.##	Depth in meters
5	+/-##.##	Roll in degrees with starboard side down, looking in direction of touchdown
6	##.##	Water depth in meters
7	#######.##	Easting of the cable touchdown point in the respective WGS84 UTM zone
8	#######.##	Northing of the cable touchdown point in the respective WGS84 UTM zone
9	###.##	Layback in meters
10	<CR><LF>	Carriage return Line feed

1.6 Output Telegram

NavView to CableFish Message		
Field	**Format**	**Description**
1	###	True heading in degrees of the cable
2	#######	Easting of the cable touchdown point in the respective WGS84 UTM zone
3	#######	Easting of the cable touchdown point in the respective WGS84 UTM zone
4	#######.#	Easting of the centre of the port chute,
5	#######.#	Northing of the centre of the port chute
	##.#	KP
	##.#	DCC
	hh:mm:ss	Time in UTC
6	<CR><LF>	Carriage Return Line Feed