



To: DPS 4D Users
Date: 2012-03-30
Subject: DPS 4D version 1.02.01

HMI Version 6.08.04

NAV Engine Version 2.00.01

Linux 2011-37

HPLib 6.07

Release Note

This version handles UTC leap seconds. An UTC leap second is to be inserted on 2012-06-30 23:59:59 UTC.

Operator SW (HMI)

Standard configuration - antenna location

In the previous version, antenna heights above 99.99 m were not accepted if entered directly in the GNSS Geometry configuration view. This has now been corrected.

NAV Engine

UTC leap second

An UTC leap second is to be inserted 2012-06-30 at 23.59.59. Previous versions do not handle this and could produce an erroneous position and time. This is now handled. On systems using Glonass, Glonass will automatically be disabled one minute before an upcoming leap second, and automatically enabled again one hour after leap second.

General

Upgrade of both HMI and NavEngine is supported from an USB memory stick. The software upgrade procedure is described below.

Disclaimer

This update should not be performed during, or prior to, critical operations. The system will be offline for the duration of the upgrade, thus no outputs will be available for external equipment. After the update has been completed the system should be allowed in monitoring mode, and not utilised for navigation or DP operations, for at least four hours to ensure proper operation.

The system should be monitored closely after the update. If any doubt about the performance of the system please do not hesitate to contact the service department at Kongsberg Seatex AS.

The update must be done in accordance with Kongsberg Seatex AS procedures (Installation manual, release notes etc.) and is done at the customers own risk.

Software Upgrade

- 1 Perform a system configuration backup by selecting **Copy configuration** from the **Tools** menu. It is recommended to run this program twice; once with a memory stick as the target and once with a folder on the DPS hard disk as the target.
- 2 If you have received a DPS system upgrade memory stick from Kongsberg Seatex, please continue from step 4.
- 3 Extract the contents of the zip file received from Kongsberg Seatex to the root folder of a USB memory stick. Verify that the memory stick contains a folder named DPS in the root directory after extraction.
- 4 Insert the upgrade USB memory stick to a USB port.
- 5 The following message will appear in the upper left corner of the screen:

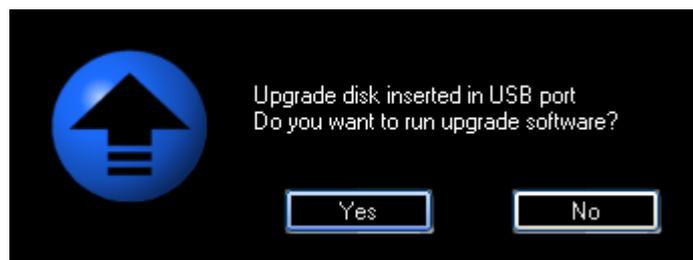


Figure 1 Software upgrade dialog

- 6 Click **Yes** to run the software upgrade.
- 7 The following message is displayed:



Figure 2 Information message

Caution *If the memory stick is removed before prompted by the system, the upgrade will fail and leave the DPS system in an indeterminate state!*

8 The upgrade system will now inform about the versions involved, as indicated in the following figure:



Figure 3 Version information

9 Click **Install** to start the upgrade.

10 The Operator SW and NAV Engine will be stopped when clicking **Install**. This will also stop all output to external systems, such as the DP.

11 DPS software installation will now start, and progress information will be updated in the dialog throughout the process. The Operator SW is upgraded first. Upon successful upgrade of the Operator SW, the NAV Engine upgrade starts.

12 The NAV Engine software and configuration on the Processing Unit will now be upgraded. NAV Engine upgrade status is indicated as shown below:

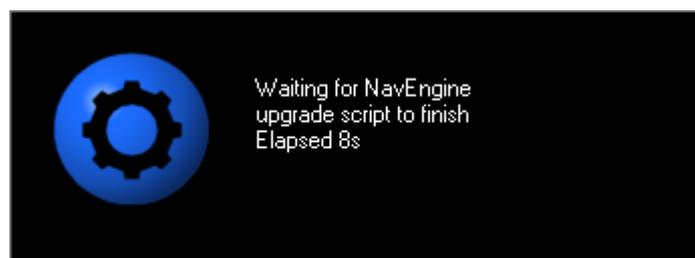


Figure 4 NAV Engine upgrade status

The four LEDs on the Processing Unit's front panel will start flashing yellow during NAV Engine upgrade.

Note *If the GNSS receiver FW is to be upgraded, the NAV Engine upgrade may take up to 10 minutes (500 seconds). Do not under any circumstances interrupt the upgrade. This may damage the GNSS receiver.*

Note *All relevant configurations from the old system are maintained. There should be no need to re-enter configuration parameters after upgrade.*

- 13 When the software upgrade has been successfully installed, the message below is presented. Click **OK** to close the dialog.

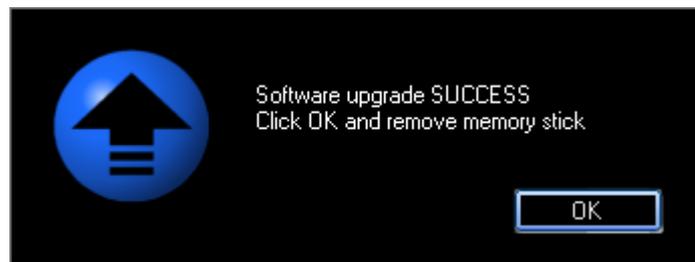


Figure 5 Successful installation

- 14 Remove the memory stick.
- 15 The Processing Unit will automatically reboot if required.
- 16 The system software is automatically started and output to external systems will resume.

Troubleshooting

Serial port types

If the setup file of the NAV Engine being upgraded contains settings indicating the serial line type (RS-232/ RS-422), this setting will have priority over the settings imported from registry. In some cases, the existing information in the setup file might deviate from the information in registry. This might cause missing signal from e.g. gyros. In case an upgrade causes the system to lose the gyro signal, serial line type mismatch is a likely cause, and is easily corrected in Standard configuration.

Configuration changes not accepted

IP ports 30999 to 31010 are reserved by NAV Engine. In previous versions of the system, no restrictions existed on selecting IP port numbers for input/output. As no previous configuration is overwritten when upgrading the software, this may lead to conflicts after a software upgrade. Any telegram output with a port number within the reserved range will cause a conflict, and an error message is displayed when trying to apply configuration changes. Conflicts are marked with a red lamp in the Input/output section. The configuration is accepted simply by selecting a port outside the reserved range.

SeaSTAR HP/XP/G2 correction services

An upgrade from an older version requires a re-subscription from Fugro if the system is using the SeaSTAR HP/XP/G2 services.

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