NAVISUITE

A complete software toolbox
for subsea survey and engineering

EIVA
MARINE SURVEY SOLUTIONS
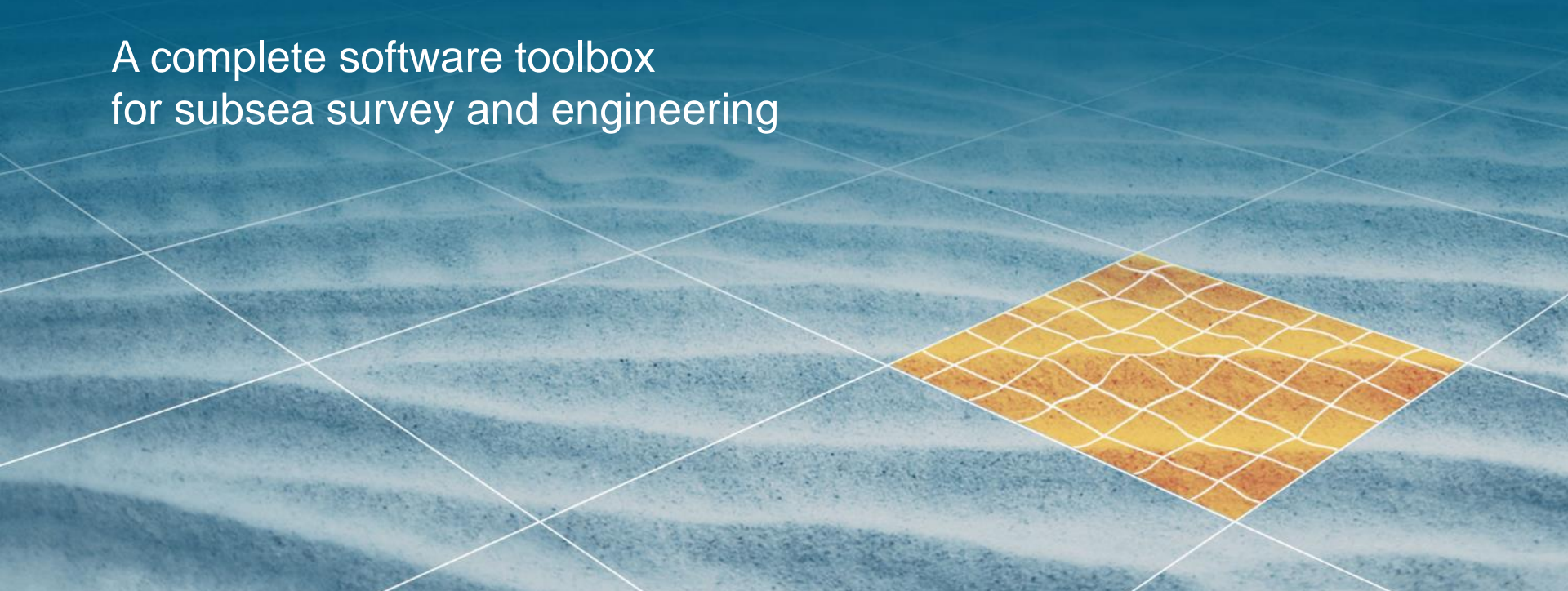
Making data headway

A complete software solution for virtually any subsea survey or engineering operation

A perfect match for small- and large-scale setups

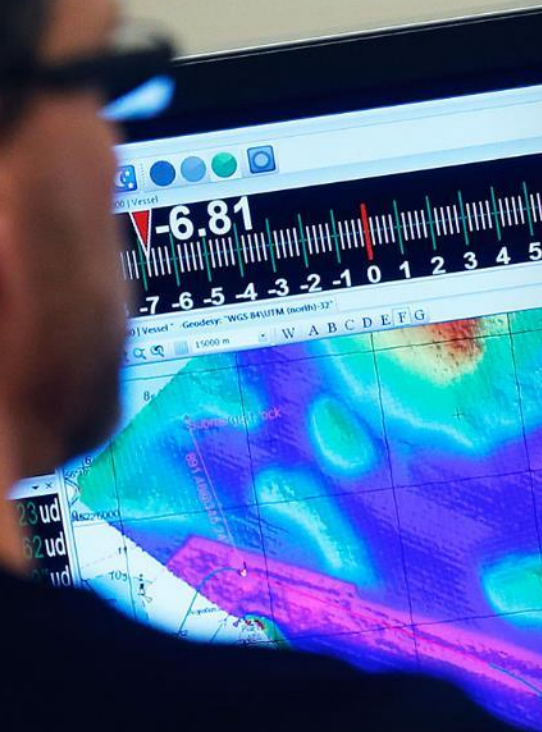More flexible workflow and complete traceability

More efficient data processing
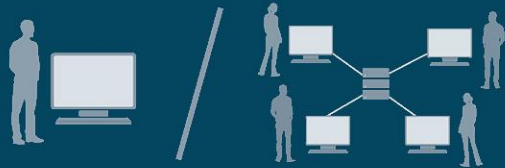
High-quality end results

Easy integration with other software solutions

Support of even the widest equipment spread

Future-proof investment

Applications
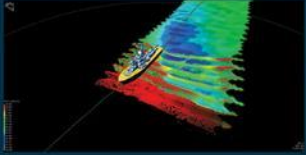
Multibeam surveys and seabed mapping

Hydrographic surveys

Structure and seabed inspection

NaviSuite Edulis

Permanent monitoring

Rig move and anchor handling

Template and foundation placement

Side-scan surveys

NaviSuite Nardoa
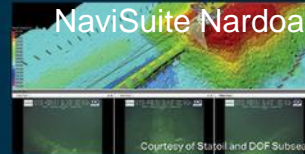
Pipeline and cable route inspections
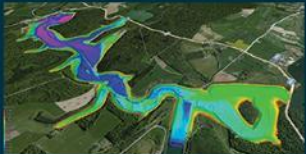
Data management and GIS
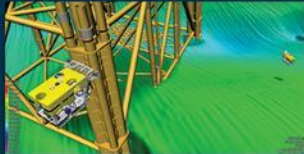
Subsea positioning
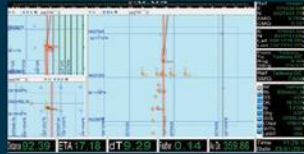
2D seismic surveys
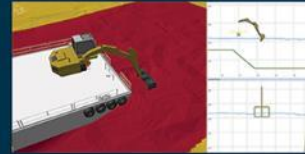
Dredging

'By means of the S-CAN feature, we have reduced the time spent on cleaning by more than 25 percent, and we obtain a far better overall result.'
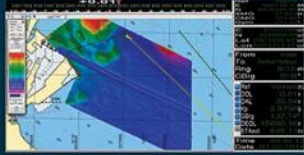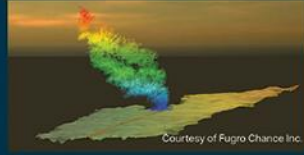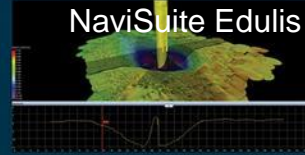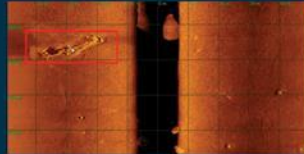
Per Norvald Boge
Lead Data Processor, DOF Subsea

'Since EIVA software was introduced in NPCC during 2005, it has played a vital role in all our survey activities viz barge positioning, navigation, geophysical data acquisition, ROV and post-processing.'

Shibu Vasudevan
Senior Geomatics Staff, NPCC Survey

'EIVA software is one of the best hydrographic survey software solutions I have worked with due to its flexibility and user-friendliness.'

Obadaye Daniel
Project Surveyor, Tilone Subsea Limited

'Standardisation on a single solution is of strategic importance to us, and after thorough evaluation, we have selected EIVA's suite of online products as the best fit for us.'

Hugh Ferguson,
Projects and Operations Director – Life of Field
Subsea 7

EIVA
MARINE SURVEY SOLUTIONS

NaviSuite products

NaviPac
Navigation and positioning

NaviScan
Sonar data acquisition

➤ Online solutions

NaviEdit
Survey data editing

NaviModel
4D modelling and visualisation

➤ Offline solutions
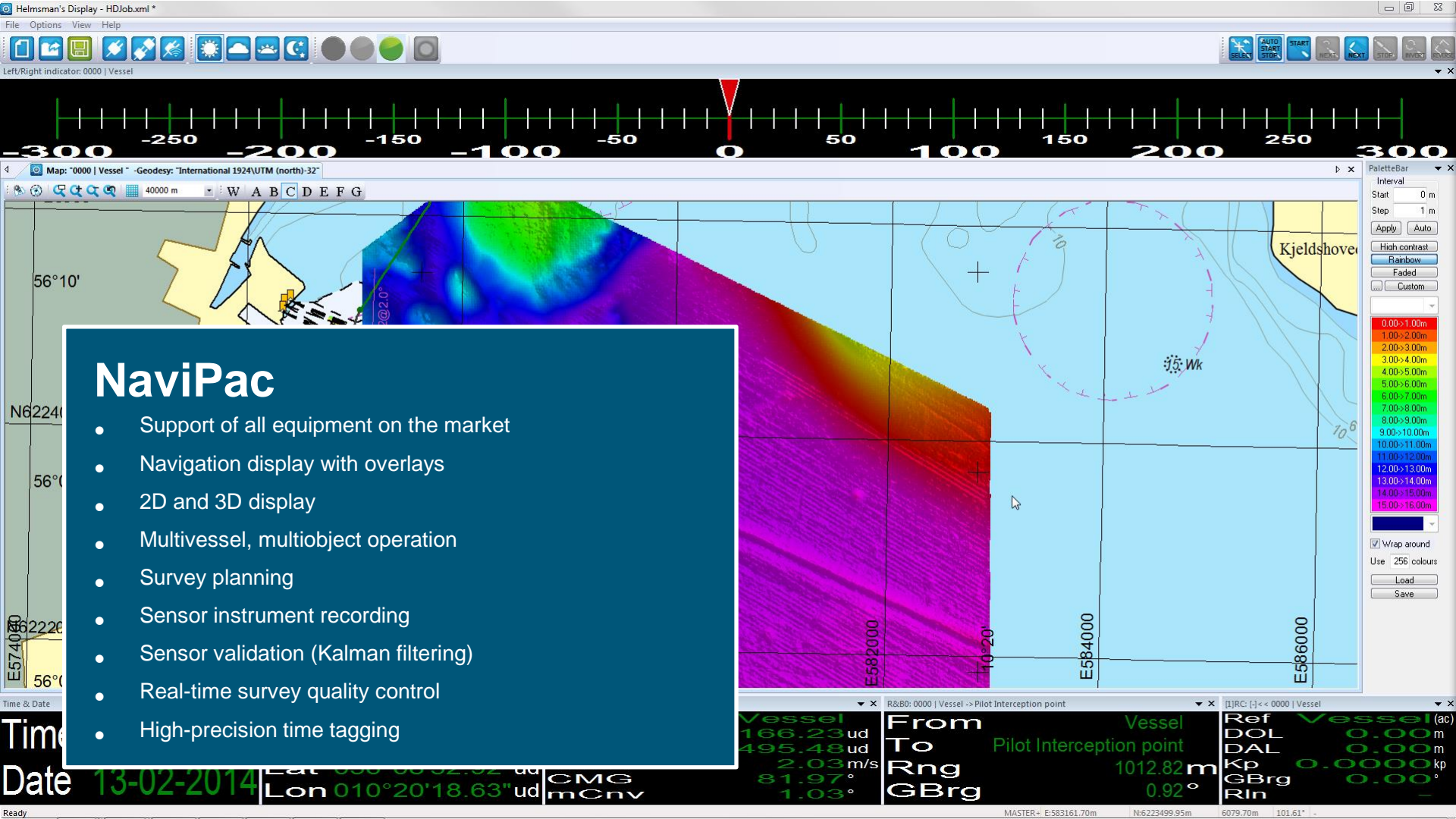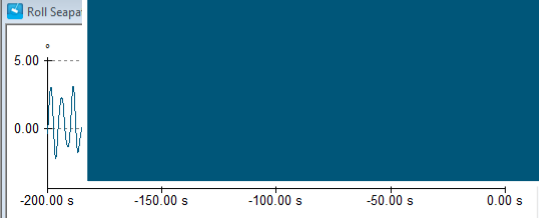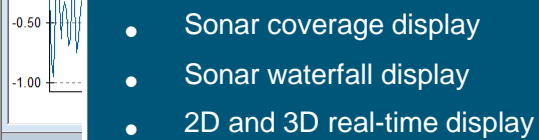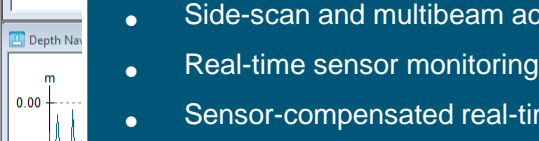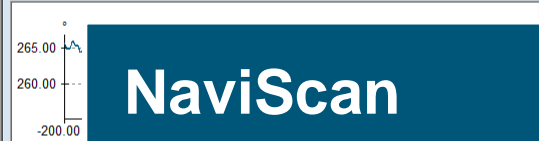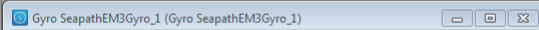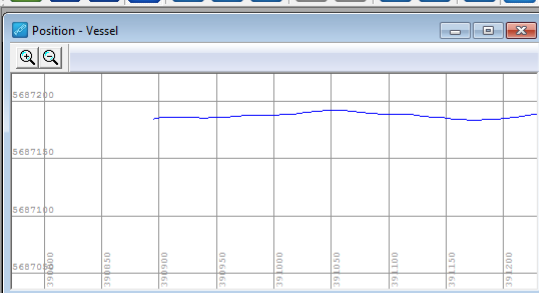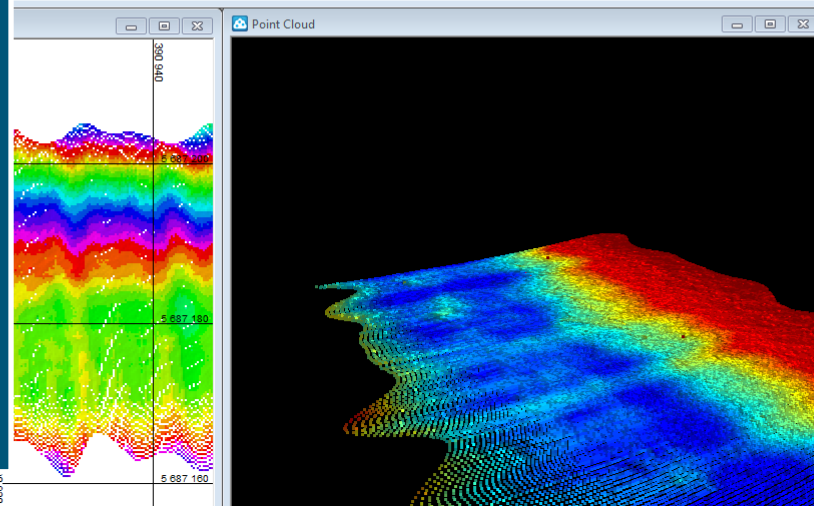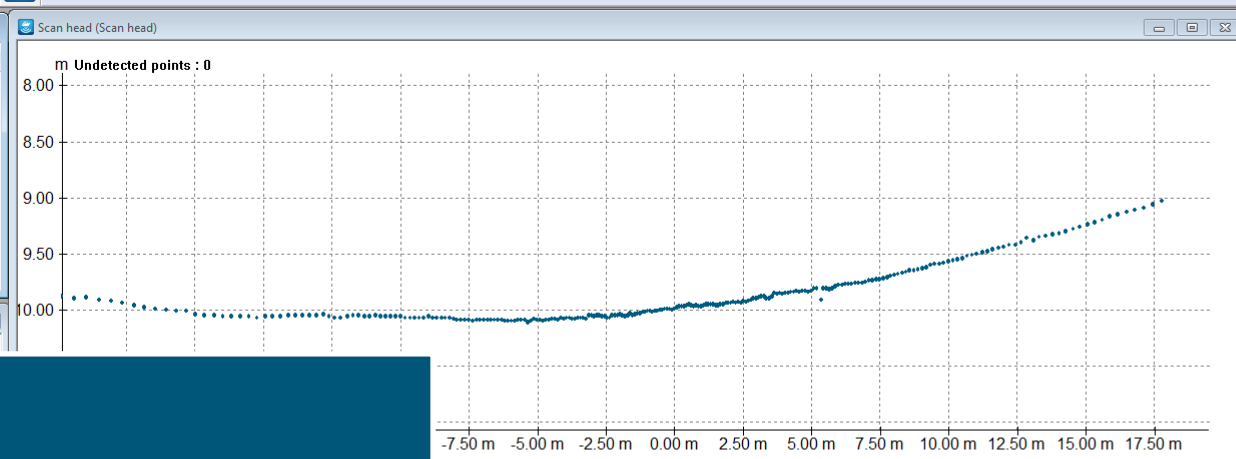
NaviPlot
Chart production

NaviPac

- Support of all equipment on the market
- Navigation display with overlays
- 2D and 3D display
- Multivessel, multiobject operation
- Survey planning
- Sensor instrument recording
- Sensor validation (Kalman filtering)
- Real-time survey quality control
- High-precision time tagging

NaviScan

- Side-scan and multibeam acquisition
- Real-time sensor monitoring
- Sensor-compensated real-time DTM
- Sonar coverage display
- Sonar waterfall display
- 2D and 3D real-time display

NaviEdit

- Project file management
- Editing of overall survey parameters
- Graphical tools for sensor data editing
- Automatic despiking, advanced spline, Kalman filters, etc
- Manual, semi-automatic and fully automatic editing
- Batch processing
- Processing of third-party data

NaviModel

- 3D object integration
- Unlimited model sizes
- Inspection and eventing
- Automatic cleaning (S-CAN)
- Analysis and calculation tools (volume/area, cross/length profile, etc)
- Video and GIS integration
- Point cloud stitching

File   Edit   View   Help

Project
  Top Frame
    Bathy Plot
    Long Profile Frame
      Long Profile [TOP.LPA]
      Long Profile [BOP.LPA]
      Long Profile [SeabedInner.lpa]
    Cross Profile Frame
    Text
    Text
    Text
    Event Profile Frame
      Event Profile [Eventing9.log]
      EventLayout
        Event Profile
        Free Span
        Freespan Touchdown
        Field Joint
        Anode

Bathymetry

Longitudinal Profiles

KP64.30   KP64.25

NaviPlot

- KP alignment sheets
- Survey report layout
- Multipage report generation
- Legends and annotations
- AutoCAD integration

Legend

Sensor Details:

Positioning System:
  Primary System: Ashtech Proflex 800 RTK GPS
  Secondary System: C-Nav 3050 w. RTG
Gyro:
  Teledyne Orion Gyro/MRU, Teledyne TSS Meridian Surveyor Gyro
Motion Sensor:
  Teledyne Orion MRU
Dynamic Positioning:
  Sonardyne Fusion USBL
Tidal Compensation:
  RTK GPS-height observations
Echo-sounder:
  R2Sonic 2040 (400 kHz, 120 degrees opening angle)

Geodesy:

Datum: WGS-84	Ellipsoid: WGS-84
(WGS-84→WGS-84):	Semi-major axis: 6 378,137.000 m
dX: 0.000 m	Inverse Flattening: 1/298.257223563
dY: 0.000 m	Map-projection:
dZ: 0.000 m	UTM, Zone 31 North
rX: 0.000″	Projection type: Transverse Mercator
rY: 0.000″	Central Meridian: 9° West
rZ: 0.000″	Central Latitude: 0.000° North
Scale: 0.000 ppm	Scale at central meridian: 0.9996
	False Easting: 500,000.00 m
	False Northing: 0.000 m

Bathymetry   Data exported from edited, cleaned raw data
              Average DTM model with 0.05 m cell size
              Contour interval: 0.5 m

Profiles Plots: Longitudinal profile: TOP, BOP, Seabed (Average DTM)
                 Cross-profile: Median, KP-based

Events Profile: Offline Events, generated with the Eventing tool in NaviModel

Scale 1:250

Keyplan:

Current Chart: ???
KP from 64.21 to 64.35

Pipeline Inspection Survey
NNN and YYY

Client: Client
Company

Revision History

0	03-12-2012	Previous		LBG	JGN	CIN
Rev. no.	Rev. date	Description		Drawn by	Checked	Accepted

Survey Date(s):   Surveyed by: Survey Vessel:
18-08-2011   Company   MS EIVA

Ready

Single Event Str
Label
Event name
Tick Height
Event text
Text column
Text font
Text height
Text angle
H Anchor
V Anchor
Anchor X Offs
Anchor Y Offs
Extra column te

Debris

CAP   NUM   SCRL

Features

	Surface multibeam surveys	ROV multibeam surveys	Hydrographic surveys	Side-scan surveys	Pipeline and cable route inspection - NaviSuite Nardoa	Structure and seabed inspection	Permanent monitoring - NaviSuite Edulis	Subsea positioning	Rig move and anchor handling	Template and foundation placement	2D seismic surveys	Dredging - Based on NaviSuite Uca
NaviPac Lite			(x)									
NaviPac Plus	(x)		(x)		(x)	(x)						
NaviPac Pro	(x)	x	(x)	x	x	x		x	x	x	x	(x^1)
NaviPac Science												
NaviScan	x	x		x	x	(x^2)		x		(x^2)		(x^1)
NaviEdit Lite			x			(x^3)			(x^3)			
NaviEdit Pro	x	x	x	x	x	x		x		x	x	(x^1)
NaviModel	x	x	x	x	x	x	x					(x^1)
NaviPlot	x	x	x	x	x	x						

[1] NaviSuite Uca consists of a NaviPac and NaviModel bundle. You can upgrade NaviSuite Uca with the complete NaviSuite package for on-shore monitoring and modelling

[2] NaviScan needed for multibeam echo sounder and side-scan sonar operations

[3] NaviEdit is suitable for final position reporting etc

Optional extras

	Surface multibeam surveys	ROV multibeam surveys	Hydrographic surveys	Side-scan surveys	Pipeline and cable route inspection - NaviSuite Nardoa	Structure and seabed inspection	Permanent monitoring - NaviSuite Edulis	Subsea positioning	Rig move and anchor handling	Template and foundation placement	2D seismic surveys	Dredging - Based on NaviSuite Uca
Catenary module									X			
Lay module												
Chase boat/Fast route craft (FRC) module												
Barge module									X			
Tug module									X			
3D pipeline and cable route inspection module					X							
S-CAN cleaning module	X	X			X	(x[4])						
Scour sonar acquisition module							X					
Template and foundation positioning module										X		
ATTU time-tagging unit	X	(x)			(x)			(x)				
NaviSuite Seismic Trigger topside unit											X	

[4] S-CAN recommended for large multibeam echo sounder seabed surveys
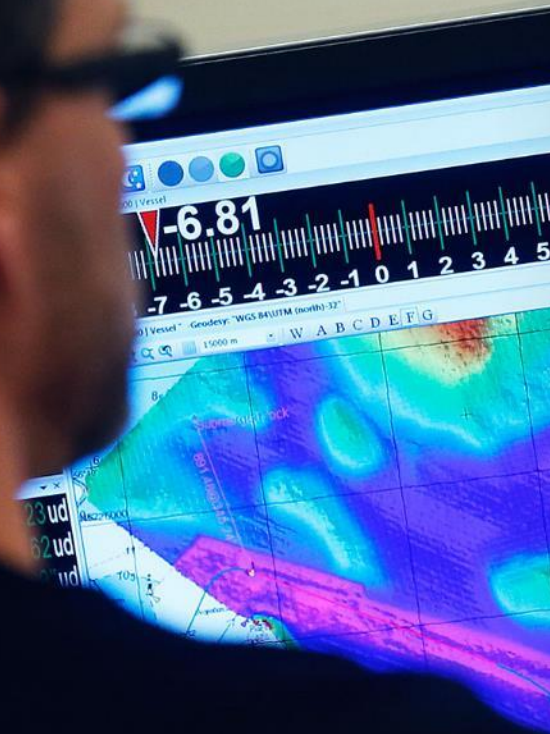
Services available

Software Maintenance and Support (SMS) programme

Training courses

Mobilisation/installation

Remote license activation by EIVA via phone or email

Dongle replacement programme for lost or broken dongles

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