



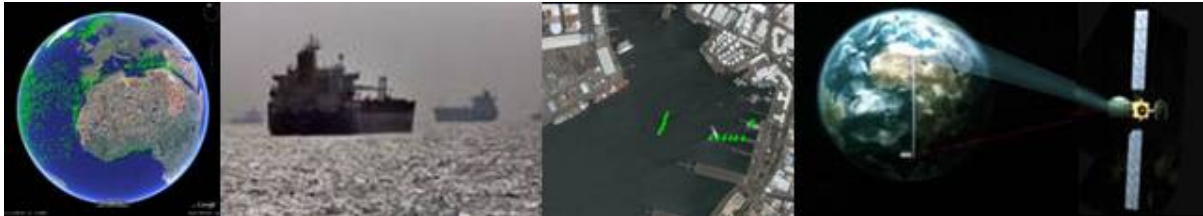
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Technical Note TN-10-2 Receiver Test Results

Preparatory Action for Assessment of the Capacity of Spaceborne Automatic Identification System Receivers
to Support EU Maritime Policy

Receiver Test Results	<i>Doc. N°:</i> TN-10-2 <i>Issue:</i> 1 <i>Date:</i> 07.04.2010 <i>Page:</i> 2 of 4
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<i>Doc. N°:</i> TN-10-2	<i>Issue:</i> 1	<i>Date:</i> 23.03.10	<i>Page</i> 2 of 16		
<i>Title:</i> AIS Receiver Test Result					

	<i>Name & Function</i>	<i>Signature</i>	<i>Date</i>	<i>DISTRIBUTION LIST</i>	<i>N</i>	<i>A</i>	<i>I</i>
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DOCUMENT CHANGE RECORD			
<i>ISSUE</i>	<i>DATE</i>	<i>CHANGE AUTHORITY</i>	<i>REASON FOR CHANGE AND AFFECTED SECTIONS</i>
1			
2			

Applicable and Reference Documents

RD 1	Preparatory Action for Assessment of the Capacity of Spaceborne Automatic Identification System Receivers to Support EU Maritime Policy – Pasta Mare Technical Proposal Call for Tenders No MARE/2008/06
RD2	FWS/HIP/0491/001 HIP Firmware specification

1. SCOPE

The following figures show the measurement results of the AIS receiver, conducted by ComDev.

2. RESULTS

- a. minimum sensitivity of the receiver:** -118 dBm
- b. sampling frequency:** 1.8MHz
- c. minimum memory capability** 300GByte Hard drive
- d. continuous sampling without interruption** - yes
- e. Data format** Data format for each AIS-Channel is a 16 bit unsigned integer word for the I-Channel and a 16 bit unsigned integer word for the Q-Channel. The ADC have a precision of 14 bits
- f. time synchronisation** The time is synchronised with the GPS time
- g. recorded data** includes a relative power estimation, a GPS time stamp and the GPS position every 10 seconds.
- h. The frequency stability** 1 ppm
- i. LNA noise figure** 3.5 dB
- g. Input Bandwidth** 2.4 MHz