

# Assessment of EGNOS potential in the maritime and inland waterways transport sector

*A Project for the European Commission by Valdani Vicari & Associati S.r.l. and DKE Aerospace Germany GmbH*



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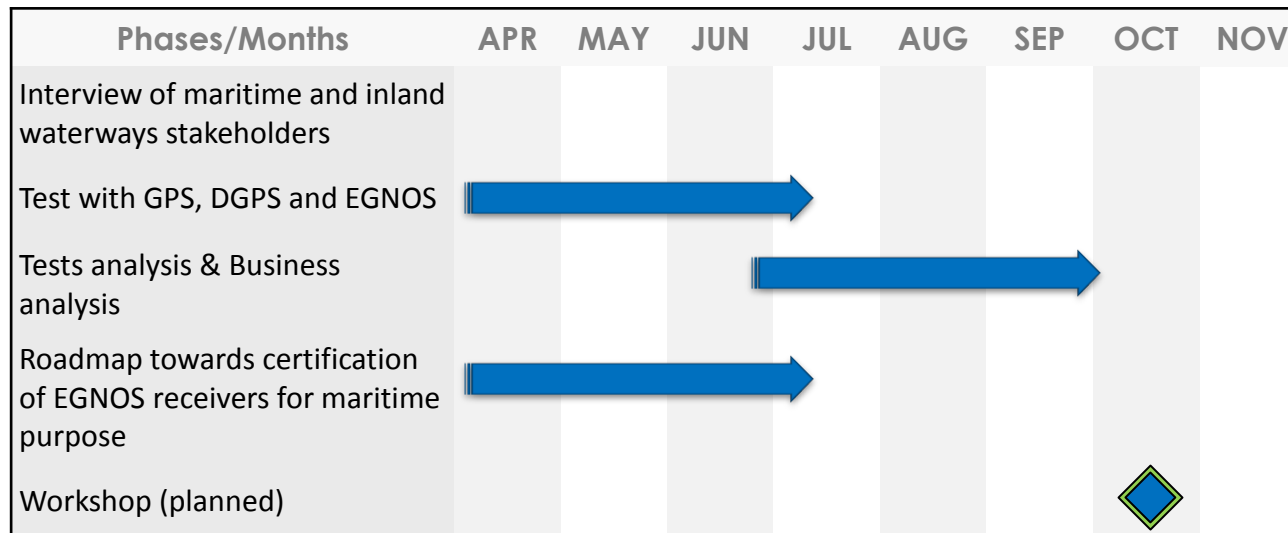
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- Project aims at
  - **getting views** from maritime and inland waterways national authorities on EGNOS and DGPS usage
  - **performing tests** to compare EGNOS and DGPS in different European maritime and inland waterway areas
  - Create a **roadmap** towards the **certification of EGNOS receivers for maritime use**
  - Presenting methodologies and results in a **workshop** later this year, organized by the project team (planned for October 2012)



**Interested in the Workshop?** Contact Ms Aliya Zhunussova (VVA) eMail: [a.zhunussova@vva.it](mailto:a.zhunussova@vva.it)

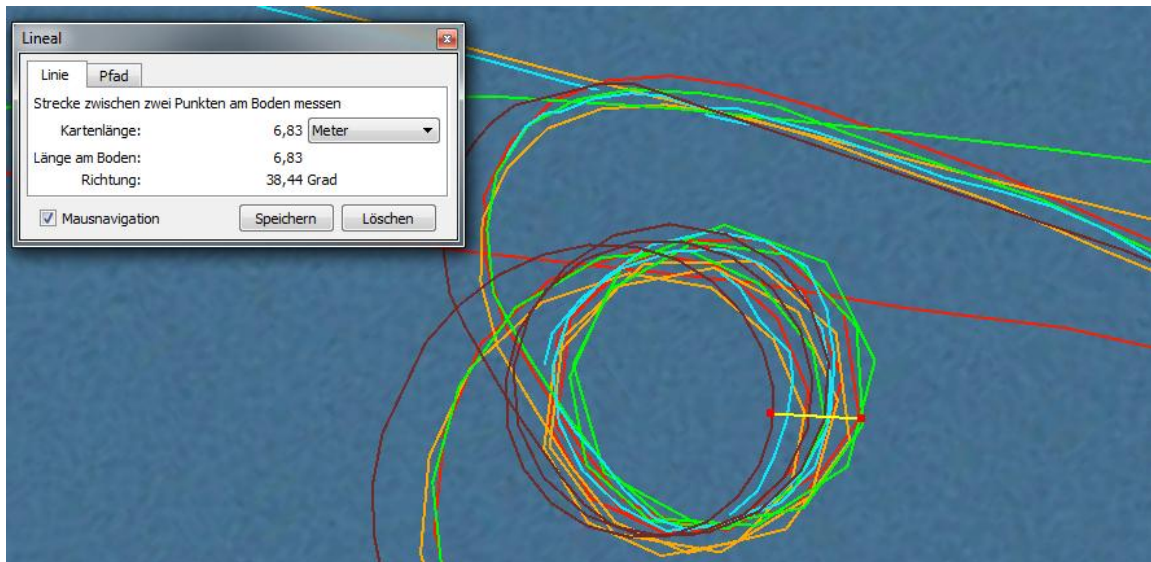
- ▶ The objective is to collect information and data directly **from the key stakeholders** on **EGNOS and DGPS** usage and potential **in maritime and inland waterways** and the related investments and costs



- Reflect the requirements set by the task specification
- Cover the possibility for the introduction of new equipment in the maritime market
- Include equipment certified by IMO for maritime usage
- Equipment covers a wide price range.
  - to reflect the scenarios from the private ship owner to the “expensive” receiver required to use the DGPS L-band frequency services used as reference position.
  - Absolute high-end equipment in the price range of > 10T EUR is not covered by this test
    - Not required by the task specification
    - This price range is not consider relevant for the intended audience

<b>Receiver usage</b>	<b>Receiver name</b>	<b>Receiver ID</b>
<b>GPS receiver</b>	uBlox EVK-6T	RX1
<b>EGNOS low-end receiver</b>	uBlox EVK-6T	RX2
<b>EGNOS mid-end receiver</b>	Furuno GP-150	RX3
<b>EGNOS high-end receiver</b>	Septentrio AsteRx2eL	RX4
<b>IALA (MSK) beacon receiver</b>	Trimble SPS 351	RX5
<b>Reference receiver (Veripos service)</b>	Septentrio AsteRx2eL	RX6

- Comparison of the different positions
- Visualization on a map for quick assessment of the performance
- In-depth analysis of the data in order to provide a justified yes/no answer of EGNOS for maritime and inland waterways



**Fig. Preliminary tests conducted at the Lake of Constance, Germany**

- Results are presented at the Workshop

## Create a roadmap ...

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- The objective is to provide a **roadmap for the certification of EGNOS receivers** for the **maritime** usage
- From what is understood already a certification would be appreciated by the maritime community.
- Main players in the standardization process of EGNOS receivers for maritime will be contacted, such as IMO and IEC. Also contacts to other parties such as the IALA committee have been established.

# THANK YOU FOR YOUR ATTENTION

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