ACCSEAS PROJECT ENDS ON A HIGH

The ACCSEAS project ends on a high, delivering an excellent demonstration of e-Navigation to the North Sea Region

ACCSEAS, an EU-funded project to support improved maritime access to the North Sea Region, has officially ended after implementing and demonstrating groundbreaking solutions to minimising future navigational risk.

Mrs Brigit Gijsbers, who opened the final ACCSEAS conference in February in her capacity as Rijkwaterstaat’s Director of Maritime Affairs in the Netherlands, summarised the concerns facing maritime traffic in the North Sea Region:

‘Our country is situated on the shores of one of the busiest sea areas of the world, with currently over 243,000 ship movements along our coast and to/from our seaports. However, we should realize that shipping is no longer the only user community of the navigable space at sea.

‘The findings as reflected in the ACCSEAS’ Baseline and Priorities Report for the North Sea Region show, from a shipping and traffic management perspective provide a somewhat worrying picture for the North Sea Region after 2020. The conclusions of this report; based on predictions for the future mean that we cannot be sure they will be 100% correct but should still be considered as a serious wakeup call for all regional administrations and competent authorities who have responsibility.’

In tackling these challenges, ACCSEAS has developed innovative solutions based on the IMO e-Navigation concept to improve situational awareness and information integrity. Improving the spatial awareness of the mariner and shore-based authorities will allow those users to get a better understanding of the current situation around them.

The Baseline and Priorities Report highlighted the potential issue of increased traffic in tighter shipping lanes created by windfarms, particularly in the southern North Sea. There will be an increased reliance on ship systems to navigating through these areas to ensure that the risk of collision and grounding remain low.

Through demonstrating e-Navigation services such as the Tactical Route Exchange, No-go Areas and the Augmented Reality Head-up Display, ACCSEAS has shown that solutions can be developed that will allow users either to receive information they cannot yet get or is more difficult to obtain.
This information will enable the mariner, and shore-based authorities, to understand their immediate and near future environment in a more clear and intuitive way. The demonstrations have shown that users are enthusiastic about the improved view of the environment that the ACCSEAS solutions provide.

By improving the spatial awareness, the users of the Region will gain a better understanding of how to traverse it with more confidence, efficiency and safety. This can only serve to gradually increase accessibility in the North Sea Region. Information integrity is crucial in informing all users of the situation in the maritime space. It underpins the acceptance and ultimate success of e-Navigation as an emerging driver for improved safety and efficiency. A number of the solutions demonstrated in ACCSEAS have the aim of ensuring that the information presented to both the mariner and shore-based authorities is accurate and delivered in a timely manner.

Good examples of such services are Resilient PNT (improved integrity of positioning and navigation information), MSI/NM (improved and more reliable maritime safety information delivery), Vessel Operations Co-ordination Tool (faster and more reliable delivery of search and rescue information) and Inter-VTS Exchange Format (improved shore-based visualization of the sea-space).

More information on these services, and others, can be found in the Final Report and the related Service Description documents available on the ACCSEAS website at www.accseas.eu The services themselves are underpinned by a coherent architecture, as described in the ACCSEAS e-Navigation Architecture Report.

The ACCSEAS project has demonstrated solutions that will have an impact on accessibility to the North Sea Region and its ports. The solutions would be of limited value if the users were not suitably trained on the using the services to maximum benefit. The Training Needs Analysis and the Use of Simulators in e-Navigation Training and Demonstrations Reports highlight the need for robust training of users in the new technology and its application in navigating the seas.

ACCSEAS has gone a long way to investigate the human factor of e-Navigation technology, and has proposed further work to ensure that as the concept evolves, the training evolves alongside it. This will give e-Navigation the best opportunity to provide the maritime users of the North Sea Region, and beyond, much needed tools to tackle the challenges of the future.

The project has also developed the ACCSEAS Legacy Report, which details the work plan for a sustainable development of e-Navigation in the North Sea.
Region, building on the results of ACCSEAS. The project calls for stakeholders in the region to get involved in the forums and coordinating groups to ensure a prosperous future for maritime accessibility. Interested parties should look out for invitations to events on the ACCSEAS website shortly.

Dr Alwyn Williams, ACCSEAS Project Manager concluded: ‘The ACCSEAS project has given stakeholders in the North Sea Region and beyond an opportunity to experience the solutions the project has developed and also looked at ways of moving these forward. We have had excellent feedback from test users throughout the project, they have said they will miss the solutions, which is a telling sign of their potential impact. The ACCSEAS partners have driven forward with a clear goal of providing a demonstration of e-Navigation and the overall experience has been a positive one. ACCSEAS is just the beginning, the solutions we have developed will help the navigator to do their job and the ACCSEAS solutions offer real benefits to the North Sea Region.’

Pic caption
ACCSEAS 1
An example of an ACCSEAS demonstration installation.

ACCSEAS 2
HRH The Princess Royal addresses assembled ACCSEAS Conference delegates at the inaugural gathering.