## UKHO Unveils New Innovation Programme to Support Blue Economy Development





The UK Hydrographic Office has launched a new ADMIRALTY Marine Innovation Programme. Spearheaded by the UKHO's Research, Design and Innovation team and RE\_SET, the programme will give innovators and start-ups a chance to develop new solutions that solve some of the world's most pressing challenges when it comes to our oceans.

The launch of this programme follows

extensive research commissioned by the UKHO into the blue economy, which is estimated to be worth £3.2 trillion by the year 2030. Marine geospatial data will play an essential role in supporting this growth by enabling the identification of new areas for tidal and wind energy generation, supporting safe navigation for larger autonomous ships, playing a vital role in mitigating the effects of climate change, and more.

Successful innovation programme participants will develop their own solutions for these areas, using ADMIRALTY datasets that range from seabed composition samples and bathymetric profiles of the seafloor, to tidal and navigational information. Entrants to some challenges will also work alongside leading experts in research, design and development at the UKHO, with winners receiving an opportunity to launch their products into some of the world's fastest-growing marine sectors.

## **Coastal Inundation**

Following on from the successful completion of the Offshore Renewable Energy challenge, the UKHO is inviting innovators to develop new solutions to reduce the impact of coastal inundation using ADMIRALTY data.

As part of the ADMIRALTY Marine Innovation Programme, the <u>latest challenge</u> invites participants to develop solutions that provide disaster relief agencies with a clear view of coastal inundation situations and that support other groups to identify vulnerable areas and put in place mitigation measures before an inundation event occurs.

Caused by storm and tidal surges, coastal inundation poses a significant risk for seaside communities around the world. These events can completely submerge surrounding areas in seawater, causing substantial damage to infrastructure. With sea levels continuing to rise, what is already an existing problem for many low-lying coastal states has the potential to present serious risks to many more regions and communities in the coming years, with expected annual losses of 0.3–9.3% of global GDP.

Participants will have access to world-leading geospatial and scientific ADMIRALTY data throughout the challenge, including Anguilla datasets, and will also get the chance to work with leading experts and receive support from UKHO staff as they develop a prototype product.



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The winning team will receive hands-on support and marine geospatial information, in addition to a cash prize of SGD10,000 to develop an alpha product that could help to protect the lives and livelihoods of millions of people around the world.

Mark Casey, head of research, design and innovation at the UKHO, said: "Coastal inundation is a tangible and imminent threat that affects coastal states and communities around the globe. It poses a massive challenge to their economic activity and blue economic development. The creation of solutions that enable these risks to be mapped and mitigated are therefore crucial, particularly given the context of sealevel rise."

"This ADMIRALTY Marine Innovation Programme challenge is dedicated to harnessing the power of marine geospatial data and identifying how it can work as a key source of information to help develop a better understanding of the marine environment. Alongside our other successful challenges, coastal inundation is a worthy effort to pursue new leading solutions for, and we look forward to working with all prospective teams and partners on their innovations."

