

## NOOS annual report 2016

### Member report – IMI

<b>Country</b>	Ireland
<b>Institution</b>	Marine Institute
<b>Observations</b>	<p><b>Status:</b></p> <ul style="list-style-type: none"> <li>• Weather buoy network consisting of 5 platforms (4 on shelf around Irish coast and 1 deep sea west of Porcupine Bank). Real time measurements of air pressure, air temperature, wind, sea temperature, wave height and period (the 4 coastal platforms measure wave spectra)</li> <li>• 4 spectral wave buoys located on west coast of Ireland. Real time wave spectral and statistics data</li> <li>• 12 operational tide gauges around Irish coast providing water level data in real time.</li> <li>• Several monitoring cruises to collect physical, chemical and biological (esp. fisheries) data</li> <li>• Subsea observatory in Galway Bay with real time current profile and bottom temperature and salinity data</li> </ul> <p><b>New initiatives:</b></p> <ul style="list-style-type: none"> <li>• New stations being added to tide gauge network</li> <li>• Acoustic buoy to be deployed in Galway Bay</li> </ul>
<b>Modelling</b>	<p><b>Operational</b></p> <ul style="list-style-type: none"> <li>• Baroclinic (ROMS 3.6) model of northeast Atlantic (1-2 km resolution) with 2 nested models (~200 metres resolution) for west and southwest Ireland. Daily 3-day forecasts</li> <li>• Wave model (SWAN) of IBI region waters (0.025 degree resolution). Daily 6-day forecasts</li> </ul> <p><b>New initiatives:</b> under development:</p> <ul style="list-style-type: none"> <li>• Flexible mesh model of Clew Bay (west coast of Ireland)</li> <li>• Flexible mesh model of Killary Harbour (west coast of Ireland) planned for 2017</li> </ul>
<b>Dissemination</b>	<p><b>Status:</b></p> <ul style="list-style-type: none"> <li>• Data available via data.gov.ie (central government portal)</li> <li>• Data available on our ERDDAP data server (erddap.marine.ie)</li> </ul> <p><b>New initiatives:</b></p> <ul style="list-style-type: none"> <li>• Web-based Lagrangian modelling application</li> <li>• Web viewer for model forecasts</li> </ul>
<b>Relevant National Projects</b>	<ul style="list-style-type: none"> <li>• National Flood Forecasting Service is being launched, led by Met Eireann (national weather forecasting centre)</li> <li>• Collaboration with other agencies in development of renewable energy sector</li> <li>• Oceanographic service report for Fisheries and Marine Environment</li> <li>• Climate change support for national impact and adaptation planning</li> </ul>
<b>Relevant international</b>	<ul style="list-style-type: none"> <li>• CMEMS (Copernicus Marine Environment Monitoring Service). We are co-responsible for IBI MFC biogeochemical modelling service</li> </ul>

<b>Projects</b>	<ul style="list-style-type: none"><li>• Partner in Atlantos with involvement in Work Packages 1, 4 and 8</li><li>• Partner in H2020 Tapas project – development of tools for sustainable aquaculture</li><li>• Full member of EuroArgo and EMSO ERICs</li><li>• Partner in Jerico-NEXT</li><li>• We are partners in a number of Interreg Atlantic Area proposals which have yet to go through final evaluation</li></ul>
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