

MARINET

Marine Renewables Infrastructure Network

www.fp7-marinet.eu



What is MARINET?

An EC-funded marine renewables infrastructure network offering periods of free access to world-class test facilities

28 partners

12 countries

42 marine testing facilities accessible for technology development by users from outside the network

48 month duration: April 2011—March 2015

Why the need for MARINET?

Marine renewable energy offers significant potential for Europe and beyond. This technology development requires research and testing at progressive scales in **specialised facilities** along the path to commercialisation.

Europe hosts a full suite of these unique test facilities—but to accelerate development a coordinated approach is needed to streamline access and avoid duplication. For technology developers, the issues are facility access costs and cross-boarder access, which can be significant barriers to progress.

The **MARINET initiative** addresses these challenges by bringing together unique facilities, world-class experts and EC funding to provide periods of free test facility access and to **coordinate focussed R&D**.

What does MARINET offer?



ACCESS one of the 42 MARINET facilities— at no cost!

Facility costs are paid by the EC. Access to the 42 partner facilities covering all scales is open to companies of any size, research groups etc. and is organised through regular calls for access—beginning December 2011.

APPLY at www.fp7-marinet.eu to access test facilities in:

- Wave Energy
- Offshore-Wind Energy
- Common Aspects e.g. Electrical, PTO, Materials etc.
- Tidal Energy
- Environmental Data



What are the MARINET conditions?

- Open to any group of one or more where the group leader and majority of group members are based in the EC or an FP7-associated country, i.e. companies, research groups etc.
- Facility must be outside the country where the group is based
- Interesting results may be published - these can be tailored to fully protect IP if desired

MARINET Partners



Contact



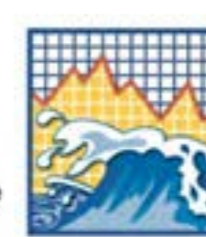
Web: www.fp7-marinet.eu

Email: info@fp7-marinet.eu

Coordinator: Hydraulics & Maritime Research Centre, UCC, Ireland



UCC
Coláiste na hOllscoile Corcaigh, Éire
University College Cork, Ireland













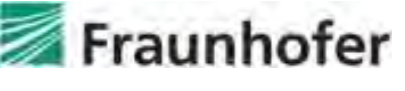

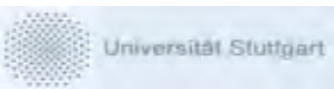













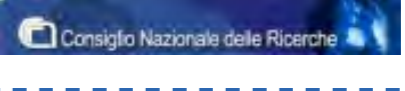
HMRC
HYDRAULICS & MARITIME RESEARCH CENTRE



Facilities Available

Area	Wave Energy	Tidal Energy	Offshore Wind Energy & Environmental Data	Common Aspects e.g. Electrical /PTO/Materials etc
 Small Lab	<ul style="list-style-type: none"> • AAU – Wave Basin • AAU—Nissum Bredning Test Site • UCC_HMRC – Wave Basin • UEDIN – Curved Wave Tank • UNI_STRATH—Kelvin Hydrodynamics Lab 	<ul style="list-style-type: none"> • UNI_STRATH – Kelvin Hydrodynamics Lab • DTU – Current flume (with carriage) • USTUTT – Laminar Wind Tunnel 	<ul style="list-style-type: none"> • UNIFI-CRIACIV—Small Boundary Layer Wind Tunnel • UNI_STRATH—Kelvin Hydrodynamics Lab • USTUTT—Laminar Wind Tunnel • DTU—Current Flume with a Carriage 	<ul style="list-style-type: none"> • UCC HMRC—Rotary Test Rig • TECNALIA—Electrical PTO Lab • SINTEF—Renewable Energy Lab - SmartGrid • USTUTT—Turbine Test Rig
 Large Lab	<ul style="list-style-type: none"> • IFREMER – Wave Basin of Brest • IFREMER—Current Circulation Tank • NAREC – Wave Flume (marine test site) • LUH – Large wave flume in Hydralab • CNR-INSEAN - Wave Tank • ECN—Hydrodynamic and Ocean Engineering 	<ul style="list-style-type: none"> • IFREMER – Recirculation Channel with waves • CNR-INSEAN – Circulating Water Channel 	<ul style="list-style-type: none"> • ECN—Hydrodynamic and Ocean Engineering • CNR-INSEAN—Wave Tank 	<ul style="list-style-type: none"> • NAREC—Grid Integration • NAREC—Nautilus Rotary Rig • IFREMER—Materials and Structures Group • DTU—PowerLabDK • NAREC—CPTC Energy Link Lab • DTU—Mechanical Test Facilities
 Medium-Scale Site	<ul style="list-style-type: none"> • AAU – Nissum Bredning • SEAI_OEDU – Galway Bay • SEAI_OEDU—Belmullet • EMEC – Nursery site wave • QUB—Shallow Water Wave Tank 	<ul style="list-style-type: none"> • QUB - Portaferry Tidal site • TTC - Den Oever tidal site • EMEC - Nursery site tidal 	<ul style="list-style-type: none"> • SEAI_OEDU—Wave Site Data Galway • SEAI_OEDU—Wave Site Data Belmullet • AAU—Nissum Bredning • QUB—Portaferry Tidal Test Centre 	<ul style="list-style-type: none"> • UNEXE—Mooring
 Large-Scale Site	<ul style="list-style-type: none"> • EVE – Biscay Marine Platform • SEAI_OEDU - Belmullet Test Site 	<ul style="list-style-type: none"> • N/A 	<ul style="list-style-type: none"> • DTU—National Wind Test Site • QUB—Portaferry Data • DTU—Mobile Offshore Wind Measuring • ECNETH—Database of Measurements on OWEZ • USTUTT—Offshore Nacelle LiDAR • PU—HF Radar Environmental Monitoring Facility • NTNU—Full-scale Wind Measurement Station • DTU—Database of Wind Characteristics 	<ul style="list-style-type: none"> • FH_IWES—Offshore Field Test Site • WAVEC—OWZ Pico • EVE—Mutriku

Partner Countries

 	<p>Ireland University College Cork, HMRC (UCC_HMRC) <i>Coordinator</i></p>	
	<p>Sustainable Energy Authority of Ireland (SEAI_OEDU)</p>	
 	<p>Denmark Aalborg Universitet (AAU) Danmarks Tekniske Universitet (RISOE)</p>	
 	<p>France Ecole Centrale de Nantes (ECN) Institut Français de Recherche Pour l'Exploitation de la Mer (IFREMER)</p>	  
      	<p>United Kingdom National Renewable Energy Centre Ltd. (NAREC) The University of Exeter (UNEXE) European Marine Energy Centre Ltd. (EMEC) University of Strathclyde (UNI_STRATH) The University of Edinburgh (UEDIN) Queen's University Belfast (QUB) Plymouth University (PU)</p>	
 	<p>Spain Ente Vasco de la Energía (EVE) Tecnalia Research & Innovation Foundation (TECNALIA)</p>	
	<p>Belgium 1-Tech (1_TECH)</p>	
	<p>Netherlands Stichting Tidal Testing Centre (TTC) Stichting Energieonderzoek Centrum Nederland (ECNeth)</p>	
	<p>Germany Fraunhofer-Gesellschaft Zur Foerderung Der Angewandten Forschung E.V (Fh_IWES) Gottfried Wilhelm Leibniz Universität Hannover (LUH) Universitaet Stuttgart (USTUTT)</p>	
	<p>Portugal Wave Energy Centre – Centro de Energia das Ondas (WavEC)</p>	
	<p>Italy Universita Degli Studi Di Firenze (UNIFI-CRIACIV) Università degli Studi della Tuscia (UNI_TUS) Consiglio Nazionale delle Ricerche (CNR-INSEAN)</p>	  
	<p>Brazil Instituto de Pesquisas Tecnológicas do Estado de São Paulo S.A. (IPT)</p>	
	<p>Norway Sintef Energi AS (SINTEF) Norges Teknisk-Naturvitenskapelige Universitet (NTNU)</p>	