

ANNUAL REPORT 2021

NSAI TECHNICAL COMMITTEES
NSAI ETC TC18 - MARINE
ENERGY - WAVE, TIDAL AND
OTHER WATER CURRENT
CONVERTERS

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1 Introduction

NSAI ETC TC18 is Ireland's National Mirror Committee monitoring the work of the international committee IEC/TC 114 - Marine energy - Wave, tidal and other water current converters.

2 Scope of TC

The scope is as follows: 'To support the preparation of international Technical Specifications for marine energy conversion systems. The primary focus is on the conversion of wave, tidal and other water current energy into electrical energy, although other conversion methods, systems and products are included. Tidal barrage, dam installations and Off-shore wind energy, as covered by IEC TC 4 and TC 88, respectively are excluded.'

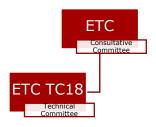
The committee mirrors the following international committees:

Committee Name	Committee Title
IEC/TC 114	Marine energy - Wave, tidal and other water current converters

3 Structure and Membership

3.1 Structure

The Figure below illustrates the structure of the Committee:



3.2 Members

The table below identifies the organisations represented on the committee:

Organisation	Role
Exceedence	Chairperson
NSAI	National Secretary
DP Energy	Committee Member
BlueWise Marine	Committee Member
ARR Ltd	Committee Member
Pure Marine	Committee Member
SEAI	Committee Member
Wave Venture	Committee Member
Ocean Energy	Committee Member
Techworks	Committee Member
Rockall Solutions	Committee Member
UCC	Committee Member
	(6 experts)

ORPC	Committee Member
Tidal Flyer	Committee Member
CEI	Committee Member
G-Kinetic	Committee Member
NUI Galway	Committee Member
SSE	Committee Member
PO Maritime	Committee Member
TUD	Observer

Note: Independent experts participate in ETC TC 18 are not listed above. For more information contact NSAI.

4 Summary of 2021 Activities

4.1 National

4.1.1 Meetings

Committee members attended the following national meetings in NSAI as follows:

Meeting No.	Date	Minutes Reference
1	10 March 2021	N0531
2	19 October 2021	N0533

4.1.2 National Work

NSAI ETC TC18 were not involved in any National deliverables in 2021. ETC TC18 supports all National parties who have an interest in Marine Energy in benefitting from Standards being developed at IEC level.

4.2 International/Regional

4.2.1 Meetings

The IEC TC114 Plenary meeting for 2021 took place remotely between the 22nd and 25th March 2021. There were four delegates in attendance representing the Irish interest.

Members of the national committee continued to partake in technical body meetings throughout the year in a virtual capacity.

4.2.2 International/Regional Work

There was one international technical specification published in 2021 within IEC/TC 114; IEC TS 62600-10:2021 Marine energy – Wave, tidal and other water current converters – Part 10: Assessment of mooring system for marine energy converters. This work was carried out under the maintenance team MT 62600-10. Ireland was represented on the technical body which was responsible for delivery of this document.

Another important document that the committee worked on in 2021 was the IEC/TC 114 strategic business plan which has been revised and sets out the priorities for the coming years. NSAI/ETC/TC 18 Chair Ray Alcorn sat on that committee to ensure Irelands views were well represented.

4.2.3 International/Regional Voting Results

IEC/TC 114: Ireland voted on a total of 2 no. documents in 2021 with a 100% overall voting record.

4.3 Regulatory Development/Update

IEC TC114 is a relatively young Technical Committee and currently develops Technical Specifications, reflecting an industry that is still involved in what is an emerging technology. Nevertheless, long-term consideration requires members to remain aware of European Regulations and Directives.

Within section 10 'Carbon Pricing and Cross-cutting Policies' of the 2021 Climate Action Plan¹, the Government commit to ensuring Ireland is at the cutting edge of scientific and technological innovation by introducing a transformational programme of research and development. This will include marine renewable energy.

The Government also state that the Maritime Area Planning Bill², when enacted will put in place a comprehensive and coherent marine planning regime for the development of offshore renewable energy.

Measures such as these demonstrate the Government's continued recognition of the important role marine energy will play in achieving Ireland's ambitions to decarbonise the energy system.

 $1 \\ \underline{\text{https://assets.gov.ie/203558/f06a924b-4773-4829-ba59-b0feec978e40.pdf}}$

2 https://www.oireachtas.ie/en/bills/bill/2021/104/

5 Irish Publications/Reviews

5.1 Publications

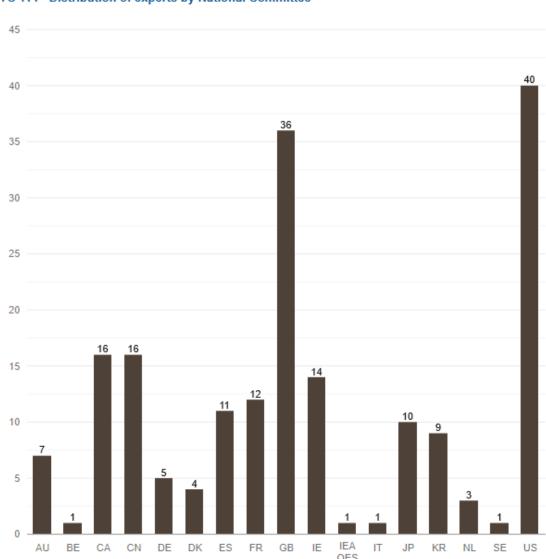
The Committee did not publish any national deliverables in 2021.

5.2 Reviews

There are no existing national publications, so no reviews were carried out in 2021.

6 Work programme for 2022 onwards

The number of Irish experts from ETC TC 18 engaged with IEC Standards development and active in IEC TC 114 remains relatively strong. Ireland is currently ranked 5th for number of active members in 2021 with only the UK, U.S., Canada and China out-ranking Ireland. The work programme for 2022 will see Irish experts continue to play a pivotal role in the development of International Standards for Marine Energy and the committee will seek to maintain the influence already established.



TC 114 - Distribution of experts by National Committee

FIGURE 1 - IEC/TC 114 DISTRIBUTION OF EXPERTS (IEC EXPERT MANAGEMENT PLATFORM)