

INSTITUTION OF CIVIL ENGINEERS – REPUBLIC OF IRELAND REGION

ANNUAL REPORT 2021

PRESENTED BY RoI BRANCH CHAIR KEITH ELLIOTT AT AGM, 11 OCTOBER 2021

This Report is presented under the subject headings of the ICE RoI Branch Business Plan submitted to ICE HQ in January 2021.

1. Qualification and Membership

a) Meetings

The Committee of the ICE Republic of Ireland Branch met monthly from September 2020 through to June 2021. With the Covid-19 pandemic preventing face-to-face meetings since March of 2020, all meetings were held online using the Zoom platform. This proved very successful and enabled attendance by Committee members from a wide range of locations including Limerick, Roscommon and even, on occasion, the UK.

Currently, membership of the Committee is quite strong, with a combination of mature and younger members. One of the unexpected consequences of the Covid-19 pandemic was the addition to the committee of three new members who felt able to volunteer only because of the online meeting facility. Additionally, there was a noticeable improvement in attendance at meetings because people did not have to make the journey to Clyde Road in Dublin. Consequently, the Committee has decided to continue to use the Zoom platform when physical meetings resume, to facilitate attendance by members who cannot attend in person for whatever reason.

Notwithstanding the above, pressure of work and other commitments has made it difficult for several committee members to participate as fully in Committee activities as they would wish. As a result, there has been some difficulty in filling some of the Officer roles. The Vice Chair stepped down from the Committee in January 2021 and the Hon. Secretary has expressed a wish to be relieved of the role. Additional committee members are needed (a) to maintain the dynamism of the Committee and ensure a steady flow of ideas for Branch activities and events and (b) to provide a pool of potential candidates to take on the Officer roles as they arise and thus ensure that the RoI Branch continues to thrive.

As in previous years, the December 2020 committee meeting was a joint meeting with Engineers Ireland's Civil Division. It is planned that this will take place again in December 2021, which will be the seventh year of this collaboration.

b) Graduates and Students

There is an active GSNet Committee in place which has met regularly during the year. The GSNet Committee interacts with third-level colleges in a number of different ways. Due to the Covid-19 pandemic, opportunities for such interactions were restricted over the 2020-21 academic year and this is an area that requires attention in the current academic year.

Given the constraints on face-to-face meetings imposed by Covid-19, it was felt that other means needed to be found to engage graduates and students in ICE activities. The Committee committed funds specifically to enable the GSNet committee to arrange virtual events such as quiz evenings,

which would have small monetary prizes to incentivise participation. The first of these events was organized earlier this year and proved successful.

The GSNet Committee also arranged an online seminar in December 2020 with a main Committee member who is an ICE Professional Reviewer, with a view to advising Graduates on preparation for the Professional Review. In this regard, the Committee encourages experienced ICE members in the Republic to consider becoming Professional Reviewers, as this is an area where those aspiring to Chartership in the region are not well served at present.

2. Knowledge and Professionalism

a) Technical Meetings

During the first half of 2021, the Committee organized a number of technical webinars using the Zoom Webinar platform, several of which were co-hosted with Engineers Ireland Civil Division.

These were:

- 18 January – *Computational Fluid Dynamics for the Buildings and Construction Sector*, by Dr Cristina Paduano, B-Fluid Ltd. Co-hosted with EI Civil Division;
- 25 February – *Engineers: Vital for Survival of the Planet*, by Fergal McEntee, Extinction Rebellion;
- 23 March – *The Second Generation Eurocodes: a preview of what is happening and what to expect*, Ken Murphy, NSAI and Jim Mansfield, Kavanagh Mansfield & Partners. Co-hosted with EI Civil Division;
- 22 April – *Water Management as a Land Use Issue: applying the Integrated Constructed Wetland concept towards reinstating functional ecosystems for water management*, by Dr Rory Harrington, VESI Environmental Ltd. Co-hosted with EI Civil Division.

In addition, thanks to an arrangement with ICE London the Committee Chair is now enabled to communicate directly with the 400+ members in the region. Regular communications have been issued by the Chair, aimed at highlighting upcoming events that may be of interest to members. The Committee thereby actively promotes and encourages attendance by members at technical and other meetings organised by ICE HQ and other regions. With these meetings now routinely hosted online, many more meetings are now accessible to ICE members regardless of their geographical location. Events promoted by the ICE Rol Committee in the past year included:

- The 2020 ICE Presidential Address by Rachel Skinner, November 2020;
- ICE Webinar on Mediation and Construction post Brexit, January 2021;
- ICE Brunel Lecture Series, February 2021 (promoted jointly with Engineers Ireland). For this lecture, the Committee arranged for a prominent ICE Rol member, retired Dublin City Engineer Michael Phillips, to participate in a panel discussion following the lecture.

b) Competitions

We currently have no plans to run competitions or actively promote participation in ICE competitions, due to the relatively small and widely dispersed membership in the Republic. However, ICE in the region was represented by a Committee member as a judge for the 2020 Irish Building and Design

Awards and by the Vice Chair and a previous Chair as judges for the BIM Ireland Irish Construction Excellence Awards. It is anticipated that these roles will be reprised in 2021/22.

These awards are highly regarded and attract a high calibre of entry from across all areas of engineering and construction, from design and project management to specialist sub-contractors.

Interestingly the awards ceremonies, which were online events due again to Covid-19, attracted much larger audiences than would have been seen at the in-person awards gala events of previous years. In the case of the Irish Construction Excellence Awards event held in November 2020, well over 1,000 paying guests participated, in contrast to the 500 guests that attended the 2019 gala dinner.

In addition, our Immediate Past Chair was a Judge for Engineers Ireland's Chartered Engineer of the Year (2020). This is an assignment he has been invited to undertake over the past number of years.

3. Education and Inspiration

a) Education

The question of Civil Engineering education at third level is a regular topic for discussion at Committee and is also extensively discussed at the annual joint committee meeting with Engineers Ireland's Civil Division. The subject was also discussed at length with ICE President Rachel Skinner during her recent online visit to Ireland.

While the Civil Engineering courses available in the Republic are of a high standard and by and large satisfy the qualification standards of ICE, there is an ongoing difficulty in attracting and retaining students in these courses. This is partly due to the high profile in Ireland of high-end manufacturing and technology companies, which tends to increase the appeal of other disciplines such as Mechanical, Manufacturing, Chemical and Electrical Engineering. There is also a dearth of significant Civil Engineering projects to attract the interest of potential graduates.

It remains a basic objective of the ICE Rol Committee to continue to promote Civil Engineering as a career choice by engaging with the Universities and the wider community wherever possible.

It should also be noted that members of the Committee, in their parallel capacity as Engineers Ireland members, pursue an active involvement in the accreditation of University courses, thus ensuring that appropriate standards of third level training are maintained.

In addition, as mentioned above, the GSNet team are engaging with the third-level institutions with a view to recruiting and encouraging student members.

Another matter that has exercised the Committee this year is the serious and worsening shortage of Engineering Technicians. This was also discussed with Rachel Skinner, Engineers Ireland President Orla Feely and members of Engineers Ireland Committees during September 2021. It was agreed in principle that a joint working group should be set up between ICE Rol and Engineers Ireland to develop solutions to this problem by leveraging recent experience in the UK, where Technician numbers have been increasing steadily over the past decade.

b) Inspiring the Next Generation

ICE in the Republic does not have a programme of engagement with schools, again due to our small and widely dispersed membership. However, as many ICE members have dual membership of ICE and Engineers Ireland, many of our members in their individual capacities and through their employers are visiting schools as part of the Engineers Ireland STEPS programme (www.steps.ie), culminating in

Engineers Week, which takes place each year in late February/early March. In 2021 the events of Engineers' Week took place online and ICE members initiated and/or participated in a number of these events.

4. Informing Opinion

a) Partnering Other Organisations

ICE Republic of Ireland enjoys a very close working relationship with Engineers Ireland. This is a multi-layered relationship with prominent members of the ICE Rol committee also being members of boards and committees within EI, including:

- Board of Examiners;
- CPD Standing Committee;
- Civil Division Committee;
- Benevolent Fund Committee;
- Professional Practice Committee.

Also, ICE Rol committee members support other key functions of Engineers Ireland including acting as Chartered Engineer Interviewers and as Third Level Accreditation Panel members.

In addition to the above, the Immediate Past Chair of ICE Rol was elected to Council of Engineers Ireland for a three-year term, 2020-2023, further strengthening the links between the two organisations.

As mentioned above, one of the outcomes of this close co-operation is the co-hosting of technical events with the Engineers Ireland Civil Division. As a result of this co-hosting of online events, very large audiences were achieved for some of our technical presentations. As an example, the presentation on the Second Generation Eurocodes in March 2021 attracted an attendance of just under 400, including almost 100 international attendees from 17 different countries. This is expected to become the norm for future events thanks to the adoption of digital technologies which facilitate co-hosting.

Several members of the ICE Rol Branch Committee also attended the Engineers Ireland Annual Conference, held online in October 2020. This provided valuable insights into current thinking in relation to sustainable development. It is the Committee's intention to attend the 2021 conference, again taking place online, on Wednesday 13th of October.

Engagement with other organisations is ongoing in a number of areas including:

- Chair, National Standards Authority of Ireland Construction Standards Consultative Committee;
- Board Member, Construction Industry Register Ireland Admissions & Registration Board;
- Member, Architects' Registration Board;
- Building Control (Amendment) Regulations (BC(A)R) – (2) members of the Plenary Group that engages with the Department of Housing, Planning, Local Government and Heritage;

- Member, Professional Conduct Committee of the Society of Chartered Surveyors of Ireland (SCSI) – by Ministerial appointment;
- Member, Construction Industry Council, Engineers Ireland delegate;
- Judge, Irish Construction Excellence Awards;
- Judge, CIOB Construction Manager of the Year Awards (Ireland);
- Judge, Irish Building & Design Awards;
- Judge, Engineers Ireland Chartered Engineer of the Year (2020).

It is a key objective of the ICE RoI Committee to encourage engagement and participation by ICE members in as many relevant areas as possible, with a view to maintaining and enhancing the profile of ICE in the Republic.

Engagement with other ICE Bodies

The close relationship established in recent years by the immediate ICE RoI Past Chair with ICE Northern Ireland Region was somewhat impacted by Covid-19 in 2020. However, the GSNet Committee has participated in some ICE NI events and it is hoped to build on this in the 2021/22 session. As we get to grips with the new online environment, there is potential to further improve communications with our neighbours in Northern Ireland.

Also, as in previous years, one of our committee members continues to represent us as the ICE Country Representative for Ireland on the ICE International Committee. It is noted that this role will become available shortly as the current Country Representative's three-year term comes to a close. The role will be advertised to the RoI membership in the coming weeks, and it is hoped that this will appeal to members seeking the opportunity to support the work of ICE.

Social Engagement with Other Professional Bodies

Unfortunately, due to Covid-19 the majority of social events in 2020 and 2021 were cancelled or postponed indefinitely. It had been hoped to resume at least some social or networking activities in 2021 but this has not happened as yet, due to the fact that Covid-19 vaccination of the majority of the population is only now being achieved.

Instead, the Committee has attempted to maximise the opportunities offered by online platforms to share technical evenings and other events with other organisations. To this end, we have invested in the Webinar feature that is offered as an add-on to the Zoom licences already purchased, for selected events during the year.

It is hoped that normal social interactions such as in-person meetings at Engineers Ireland in Dublin will gradually resume in the coming months, allowing ICE members to engage more fully with those of other institutions once again.

b) President's Visit 2021

The ICE President's Visit to Ireland is a co-hosted event between Engineers Ireland and the ICE RoI Branch and in recent years we have worked closely with Engineers Ireland to make the visit effective and relevant. These Presidential visits have been very successful in showcasing the work of ICE members in the Republic to the Presidents' teams and raising the profile of ICE here.

Covid-19 prevented a physical visit taking place in 2021. However, on the 20th of September 2021, the ICE RoI Committee co-hosted with Engineers Ireland a successful “virtual visit” to Ireland by ICE President Rachel Skinner. This was a full day of events and included the following:

- A morning of Sustainability-themed technical presentations by ICE RoI members:
 - (i) *Crown Square Development, Galway*, by Catherine O’Brien, Technical Director at PUNCH Consulting Engineers;
 - (ii) *Design of a Flood Alleviation Scheme in a Lowland Karst Region*, by Laurence Gill, Professor in Civil and Environmental Engineering at Trinity College Dublin;
 - (iii) *Generating Electricity from Fluvial Flows*, by Niall Gibbons, Capital Projects Engineer at Ervia;
- Joint Committee Meeting of ICE RoI with Engineers Ireland Civil Division and GB Region, attended by Rachel Skinner and Engineers Ireland President Orla Feely, Engineers Ireland Director General Caroline Spillane and ICE Director of Membership Sean Harris;
- Presidential Address by Rachel Skinner to an audience of ICE and Engineers Ireland members, with responses by Engineers Ireland President Orla Feely, the Managing Director of Ecocem Ireland Ltd. Susan McGarry and Environmental Consultant and Fellow of ICE PJ Rudden;
- Private meeting between Rachel Skinner and ICE RoI Committee, including GSNet Committee.

The visit was very successful, with some 35 ICE members attending the morning technical presentations and over 150 ICE and Engineers Ireland members joining the President’s Address.

The Joint Committee Meeting discussed various issues of mutual interest to ICE and Engineers Ireland including progress to date in Ireland and the UK on Carbon reduction policies, possible learnings from UK experience to address the shortage of Engineering Technicians in Ireland and opportunities for increased collaboration between ICE and Engineers Ireland.

During the private meeting between the President and the ICE RoI Committee, in addition to continuing the discussion on the above topics, we also discussed how to encourage people into Civil engineering as opposed to other disciplines, and the possibility of ICE considering offering a reduced membership fee to members who were also members of Engineers Ireland.

Incidentally, another event to fall victim to Covid-19 in 2021 was the usual reciprocal visit of the President of Engineers Ireland to Great George Street, which would normally have been attended by the ICE RoI Chair.

5. Forward Planning

There are a number of areas that need forward planning, viz.:

1. Vice Chair: At the RoI Branch AGM in October 2020 a Vice Chair was elected to support the incoming Chair. However, in the interim the Vice Chair decided to step down from the committee, leaving the role vacant. It is a priority of the Committee to elect a new Vice Chair who will hopefully commit to assume the Chair in October 2022 when the current Chair is due to step down. The Committee would be pleased to hear from any member based in the Republic of Ireland who would like to join the Committee with a view to stepping into the Vice Chair role at some point.

2. Hon. Secretary: As mentioned above, the current Hon. Secretary, who is also Chair of the RoI GSNNet Committee, has expressed a wish to step down from the Hon. Sec. role. The Committee would also welcome expressions of interest from members who might join the Committee with a view to taking up the Hon. Sec. role in due course.

3. Continue to develop our adoption of digital technologies to maximise our potential influence. This includes extending the use of Zoom to link in attendees to in-person meetings and making better use of the ICE website and social media feeds to publicise Branch activities. The Committee currently holds two Zoom user licences, to enable both the Chair and Hon. Secretary to schedule meetings and presentations. In addition, monthly licences for the additional Zoom Webinar add-on feature have been purchased on an *ad hoc* basis for certain presentations.

4. Continue the engagement with industry bodies where our “wearing of several hats” affords us networking opportunities as ICE. It is hoped that during the 2021/22 session there will be a return to the traditional networking opportunities presented by face-to-face meetings and events.

5. “Outstanding Contribution” Award. For several years now the ICE RoI Committee has made a special award each year to a member of the profession who has made an outstanding contribution to Civil Engineering in Ireland. This Award is now well established and is another means by which we can highlight ICE’s presence in the Irish Civil Engineering Sector. The 2021 award was yet another casualty of the Covid-19 situation, due to the cancellation of the ICE RoI Annual Dinner at which it would have been presented. It is the Committee’s intention to reinstate the award during the 2021/22 session, with the presentation being made either at an online event or at the Annual Dinner, if it is possible to stage this event at some point during the session.

6. Budget and Finance

A Treasurer’s Report covering the 2020/21 session and summarizing the current financial position of the ICE RoI Branch is presented separately to this Report.

Keith Elliott CEng, FICE, FIEI

11 October 2021