

Section: UK and Ireland Section**Reporting Officer: Eduardo Audiche - Secretary****Section Vitality**

Please provide information about the date of last Section elections, date of next elections, and do you have the practice of Vice-Chair becoming the next Section Chair. Section ExCom meetings (list them and provide brief summary if appropriate). List the activities carried out to retain and recruit members and the results obtained.

The last IEEE UK and Ireland Election took place in 2019 from November 4th to November 30th to elect the Vice Chair for period 2020 -2021 who will be the Chair during period 2022 – 2023. Professor Izzet Kale won the election against Dr, Zeyad Al-Shibaany. Next election will take place this year in November to elect the new Vice Chair for the period 2022 – 2023 who will be the Section Chair for period 2024 – 2025.

The section has set three priorities in line with membership development: 1) Getting closer to industry, 2) Initiating niche technical activities based on IEEE Future direction, and 3) Humanitarian activities.

1. Industry engagement is led by Industry forum and professional registration chairs. In July 2020, our section received IEEE industry engagement award. <https://www.ieee-ukandireland.org/uk-and-ireland-joins-poland-and-toronto-sections-as-winners-of-ieee-industrial-engagement-competition/>
2. Three local groups are targeted to be established in 2020-2021. Blockchain LG was launched in Feb 2020 after nearly 18 months of organisation. Future network initiative had its launch event planned in Dublin in May 2020 which was postponed in response to the lock-down situation and now it will be launched virtually on 25th March 2021. The Cybersecurity LG is planned to be formally launched this year but it started its activities early 2020.
3. After SIGHT committee approval in August 2019, the first SIGHT project was funded a week after the petition approval on supporting the sensory activity of autistic children. During the COVID-19 lockdown, the SIGHT committee has arranged a series of webinars to engage members in humanitarian centric discussions and being aligned with the IEEE motto of "Technology to advance humanity". Our SIGHT committee also will host the IHTC 2021 (International Humanitarian Technologies Conference) on December 2nd to 4th 2021 (Virtual Conference) <https://www.ihtc21.org.uk/>

The above strategies are set to organise events in response to the membership needs and interests and for better engaging members in the section activities:

Taking that there are a lot of members that do not know enough other members to then apply for senior membership and that getting people to senior membership helps with retention, one of the main focuses has been on supporting members to elevate to senior membership, which is done through a due diligence process. This has been successful for several hundred of our members but is very labour intensive. It is supported by a pool of volunteers that either help with the due diligence process and/or the writing of references.

As a section, we would like to get support to automate the parts of this due diligence process that are currently being executed manually by our volunteers and take up hours of our time. Everyone has been diligent in performing these actions but automating this would free up volunteering time to support more members in this process as well as time to deal with other elements of membership development.

Membership development has mainly been focusing on ensuring members are happy with their membership and so at various points, questionnaires have been sent to our members, to better understand them and give them an opportunity to inform us (ExCom) on what they would like to see more of through their membership. Due to the large geographical spread, over the recent years, our section has been starting to do more webcasting of talks that make them accessible to the section as such, rather than those that live "close enough", something we want to do more of, but which has technical requirements. We also ensure that we take up any opportunity to recruit new members, through e.g. IEEE booths at conferences, universities (mainly for student members), and then also talking to employers who e.g. are looking to promote professional membership to their employees.

Students

List of Student Branches (SB) in your Section, the newly formed or dissolved SBs, if any since the last meeting reporting (Oct 2020). List the student meetings held and Section activities addressed to Students and Young Professionals.

The UK and Ireland Section currently has 42 registered SB in the UK and Ireland Section. 34 of these are active and have submitted reports in the previous year, with the others in ongoing discussions.

The Section has seen rapid growth of enthusiastic student branches across over 30 universities, holding high quality and diverse events such as the Scotland area student branch meeting (February), the CISMA Webinar in Optical Sensing Technologies (May), the Manchester PES Day 2020 Webinar (June), the IEEE The Renewable Energies IEEE Webinar (June), and the ESA Expert Talks on Engineering and AI in Space, to celebrate Space Week Ireland.

Our successful revitalisation programme saw an increase of student branch reports from 8 in 2019 to 34 in 2021, with a further five appointments made to previously dormant branches and branch chapters throughout 2020. This previously resulted in a student branch rebate of £2919 being received to be invested in further student activities in 2021.

The UK and Ireland Section has seen a number of student branches participating in the IEEE Student Awards, including the Larry K. Wilson Award, Regional Exemplary Student Branch Award, Darrel Chong Student Activity Award and the Global IEEE Student Branch Website Contest. Many branches plan to participate virtually in the upcoming IEEEExtreme 24-hour programming competition, the IEEEmadC mobile application development contest and the IEEE Region 8 Student Paper Contest. In addition, the UK and Ireland Section student branches participated in the IEEE Day Virtual Celebrations.

The plan for 2021 is to further increase the appointment of enthusiastic officers to the remaining dormant student branches, with the objective to achieve a 100% reporting rate. Support will be provided to student branches to hold a diverse and interesting range of virtual events, and collaboration between student branches will be encouraged. Finally, a focus on developing student chapters within the section, with the aim of supporting high-quality technical events and webinars from distinguished lecturers will be undertaken, with funding made available to support this initiative.

Last year three events organized by our SBs were awarded with The Darrel Chong Student Activity Award:

- University of Leeds SB: 2nd IEEE UK & Ireland YP Postgraduate STEM Research Symposium
- University of Manchester PES SB: Manchester Energy and Electrical Power Systems Workshop
- University of Manchester PES SB: Women in Engineering Workshop

Additionally, the following SBs received the MGA Exemplary Student Branch Award:

- University of Manchester
- University of Leeds
- Glasgow Caledonian University

The following initiatives pertaining to Student and Young Professionals exist in our Section:

- Encourage timely reporting to ensure branch rebates and avoid branch closure - significant increase in reporting observed since 2020
- Support student branches with event hosting, for example:
 - Brazil-Scotland Meetings on Structured Light
 - CISMA Webinar in Optical Sensing Technologies
 - Manchester Energy and Electrical Power System Symposium (MEEPS)
 - IEEE The Renewable Energies IEEE Webinar
 - ESA Expert Talks on Engineering and AI in Space
 - Horizons of Optics, Photonics and Emerging Sciences (HOPES)
- Promotion of IEEE UK and Ireland activities at the IEEE vSYP Congress 2020
- Encouragement of UK and Ireland to enter IEEE Student Branch awards (Exemplary Student Branch, Darrel Chong, Student Branch Website)
- Preparation of a UK and Ireland entry to the IEEE Larry K Wilson award.

Affinity Groups

List of Affinity Groups (YP, LM, WiE, SIGHT, etc.), list of SB AGs, newly formed or dissolved AGs/SB AGs, if any since the last meeting reporting (Oct 2020). List the activities intended to support affinity groups.

The UK and Ireland Section has a well established Life Members, Women in Engineering and Young Professional Affinity groups. More recently the Section has also supported forming technical Special Interest Groups (SIGs). SIGHT in 2019, Blockchain was launched in February 2020. Future Networks Initiatives and Cybersecurity have been appointed. Future network initiative had its launch event planned in Dublin in May 2020 which was postponed in response to the lock-down situation and now it will be launched virtually on 25th March 2021. The Cybersecurity SIG is planned to be formally launched this year but it started its activities early 2020.

Life Members

They have planned to unveil the latest IEEE Milestone plaque at the Siemens factory at Eynsham, Oxford, later this year. The Committee has continued to work on the Milestone proposals in its pipeline. The EMI CT X-ray Scanner proposal has been approved by the IEEE History Committee, subject to agreement on the wording of the citation. A proposal from the Manchester Computer Science community commemorating the Atlas computer and the Invention of Virtual Memory is being submitted shortly. Other possible candidates for Milestones are under review and will continue to be worked on by the LMAG Committee.

Women in Engineering

WIE committee members often receive requests to speak at events or to organise hands on sessions across the Section. They have planned to develop a WIE Ireland network of volunteers to promote WIE at events (in collaboration with WIE R8). Also develop a database of female keynote speakers for recommendations to conference committees. WIE will apply for SIGHT funding to develop training support materials for neuro-diverse women in engineering and technical careers to cope with scenarios specific to these careers (e.g. Scrum sprint meetings) among other initiatives. WIE committee has also launched its new WIE Ambassadors scheme, to coincide with and celebrate International Women's Day this year with a focus on career development.

Young Professionals

The UK and Ireland Section were the 2020 winners of the IEEE Region 8 Outstanding Young Professionals Affinity Group presented at the recent IEEE Region 8 virtual Student and Young Professional Congress.

Although this award is specifically for recent activities, the judges noted the Affinity Group's consistent work in providing member value for students and young professionals over a number of years and congratulated them for their efforts and achievements.

With a team of 15 volunteers from industry and academia, the group is focused on hosting exciting events that generate interest and motivate members to develop their technical, interpersonal and leadership skills. Over the past 4 years, the Affinity Group has transformed itself from a fairly low base to a young vibrant group within the section, successfully hosting a number of events be it a half-day networking seminar, entrepreneurial bootcamp, or a three-day cross-regional conference attracting some high-profile speakers nationwide along with local as well as overseas attendees.

Special Interest Group on Humanitarian Technology

After SIGHT committee approval in August 2019, the first SIGHT project was funded a week after the petition approval on supporting the sensory activity of autistic children. During the COVID-19 lockdown, the SIGHT committee has arranged a series of webinars to engage members in humanitarian centric discussions and being aligned with the IEEE motto of "Technology to advance humanity". Our SIGHT committee also will host the IHTC 2021 (International Humanitarian Technologies Conference) on December 2nd to 4th 2021 (Virtual Confer-ence) <https://www.ihtc21.org.uk/>

Blockchain

Blockchain group was officially launched in February 2020. They plan to continue series of webinars (6 annually), expand format of online events (panel discussions, workshops, etc) and organise a virtual group meeting this year.

Future Networks

Future Networks will be formally launched on 25th March this year. The motivation and goal of the group is to foster and promote Future Networks activities in UK & Ireland, enhance visibility of IEEE and Future Network Initiative, increase IEEE membership, and promote public awareness of 5G and B5G wireless technologies among others. They also plan to organise at least one event per quarter.

Cybersecurity

This SIG was created early 2020 and it will have its formal launch next quarter. They provide a multidisciplinary environment for sharing the latest trends and knowledge across industry, government, and academia. So far they have delivered four webinars and it is expected at least 6 per year.

Blockchain, Future Networks and Cybersecurity special interest groups will be Section’s Organisation Units subject and are approved by ExCom in the Section ExCom Meeting held on 13th November 2020.

Chapters

List of Chapters and SB Chapters in your Section, the newly formed or dissolved Chapters, if any since the last meeting reporting (Oct 2020). Indicate how many have reported on time and received rebate. Highlight some of the activities.

Our Section currently has 35 of the possible 39 technical societies represented in the UK and Ireland. Those societies which we do not yet have a UK and Ireland chapter are and look to form are:

- IEEE Nuclear and Plasma Sciences Society (NPS05)
- IEEE Ultrasonics, Ferroelectrics, and Frequency Control Society (UFFC20)
- IEEE Intelligent Transportation Systems Society (ITSS38)
- IEEE Product Safety Engineering Society (PSE43)

Last year the Section a Chapter Chairs Forum was held to discuss the findings from the one-to-one meetings with Section’s Chair and Chapters’ Coordinator and Covid-19 related project opportunities among other areas . The table below summarises the agreed common strategies.

Technical	Contributing to bids / projects
	Deliver related technical webinars
	Publications
Membership Development	Setting up awards
	Support student chapter formation (subsidising student society members)
	Employability (start-ups / accelerators)
Others	Ethics standards/policies. Covid-19 certificates/ roadmap

In November 13th 2020, the Autumns Section Meeting took place where all Chapters Chairs presented their plans for 2021, goals and KPIs. These KPIs status and Chapters progress will be shown in our next AGM on 24th April this year.

We want to highlight that the IEEE UK and Ireland Power and Energy Society (PES) Chapter won ‘Region 8 Chapter of the year award’ in its large chapter category last November 2020. Earlier that year through the PES Chapter was awarded with the High Performing Chapter Program. US\$ 880.00 was given to the PES Chapter as an encouragement towards future work, as well as an important recognition of their continued effort in providing better services to the members and public, particularly, young people in universities and workplaces.

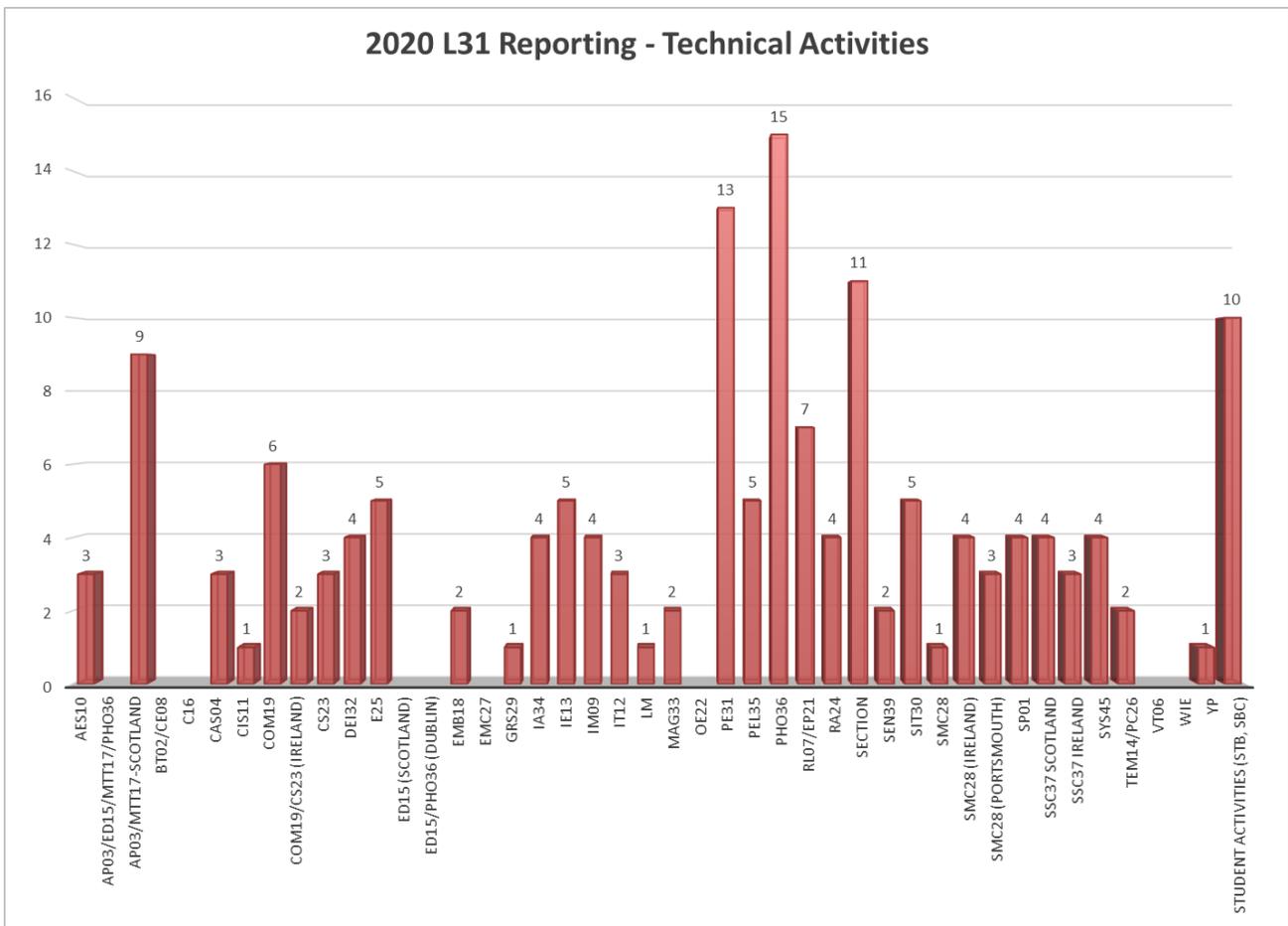
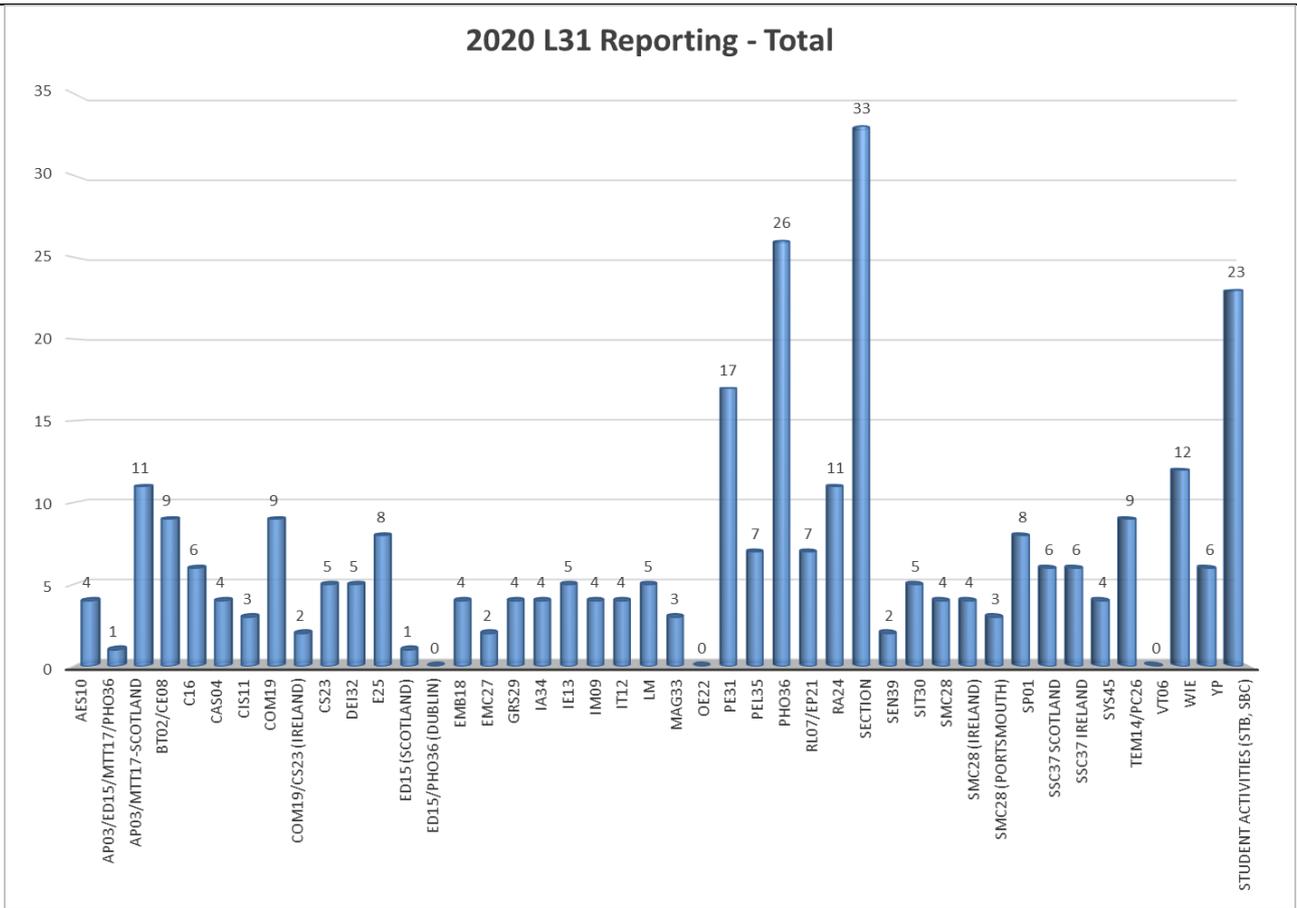
Following you will see the list of the Section’s Chapter and AGs with their L31 reports submitted by 03-03-21. It is possible that the number of activities will change as Chapters have until 15th March to report all their events.

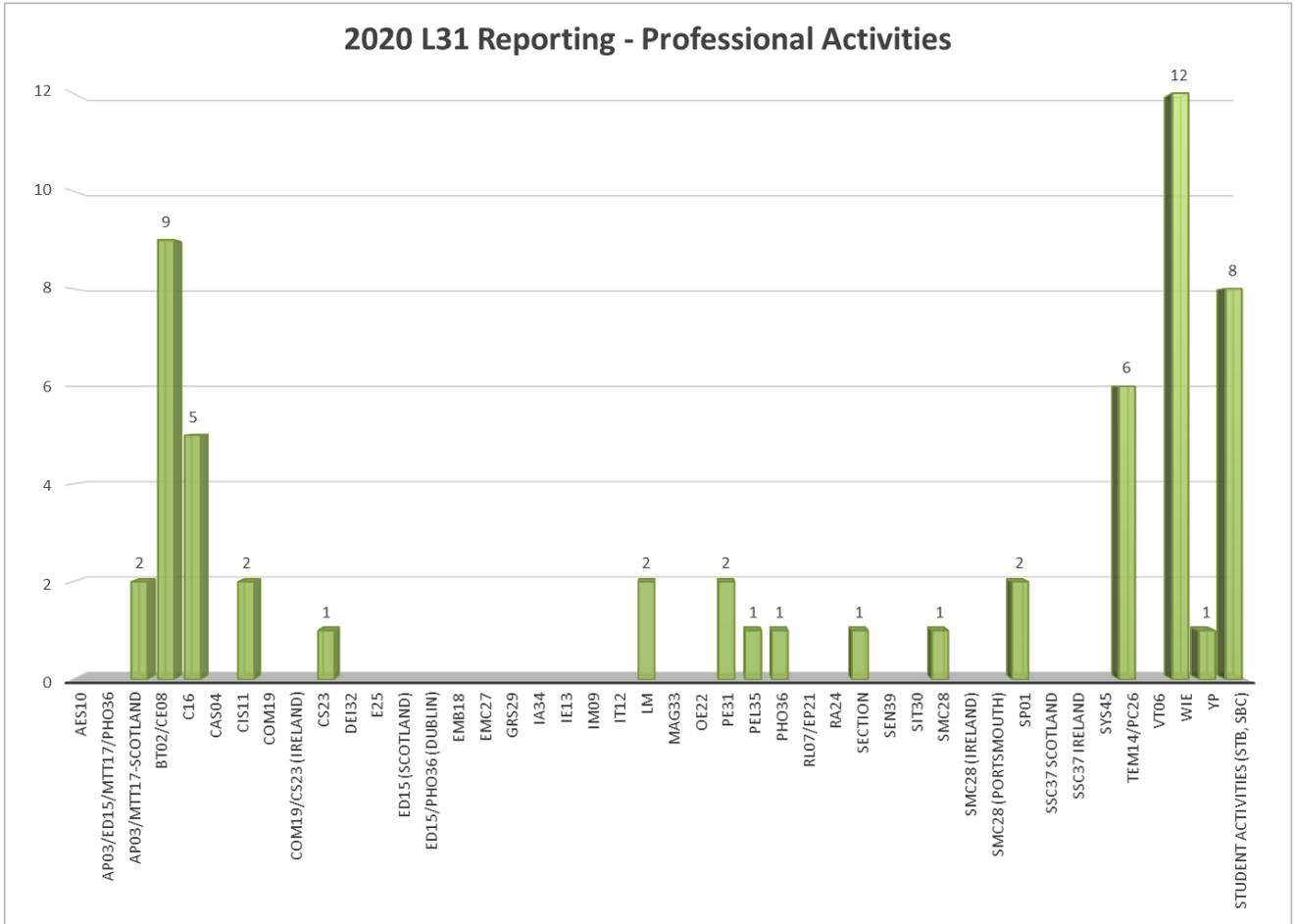
Also, it can be seen from the charts the total activities, the technical events alone and professional activities separate. The Section wishes to open a motion where Technical and Professional activities can be considered indistinctly as part of the minimal requirement for Chapters to be compliant. We have checked the type of professional activities carried out and they

also fall as Technicals. We have cases such as WiE which organised 12 high-quality events and were classified as “Professional” instead of Technical and despite all the planning and hard work it will be considered as no compliant due to having zero “Technical” events.

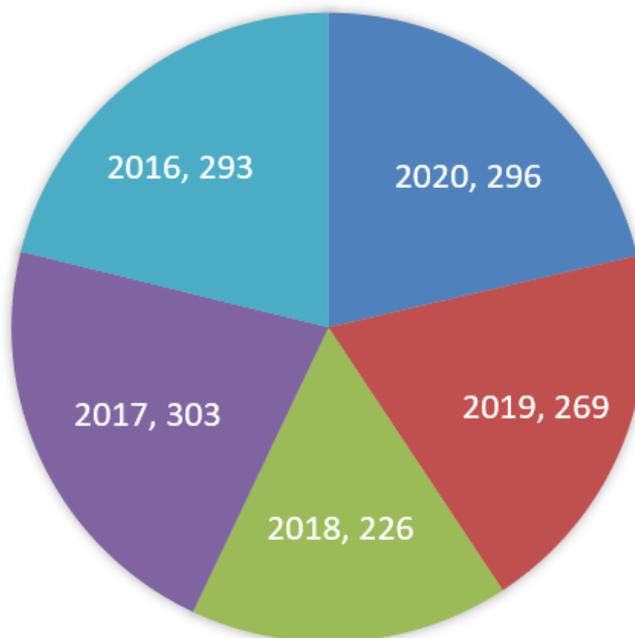
Finally, it can be seen the total L31 events reported during the last 5 years.

	Year on Year Reporting	Total	Technical	Profess.	Admin
	2020	0			
CH08505	AES10	4	3		1
CH08039	AP03/ED15/MTT17/PHO36	1			1
CH08863	AP03/MTT17-Scotland	11	9	2	
CH08401	BT02/CE08	9		9	
CH08031	C16	6		5	1
CH08030	CAS04	4	3		1
CH08381	CIS11	3	1	2	
CH08045	COM19	9	6		3
CH08415	COM19/CS23 (IRELAND)	2	2		
CH08032	CS23	5	3	1	1
CH08678	DEI32	5	4		1
CH08452	E25	8	5		3
CH08738	ED15 (SCOTLAND)	1			1
CH08729	ED15/PHO36 (DUBLIN)	0			
CH08284	EMB18	4	2		2
CH08086	EMC27	2			2
CH08842	GRS29	4	1		3
CH08239	IA34	4	4		
CH08623	IE13	5	5		
CH08379	IM09	4	4		
CH08258	IT12	4	3		1
LM80015	LM	5	1	2	2
CH08035	MAG33	3	2		1
CH08432	OE22	0			
CH10142	PE31	17	13	2	2
CH08113	PEL35	7	5	1	1
CH08211	PHO36	26	15	1	10
CH08185	RL07/EP21	7	7		
CH10141	RA24	11	4		7
R80015	Section	33	11	1	21
CH08804	SEN39	2	2		
CH08667	SIT30	5	5		
CH08371	SMC28	4	1	1	2
CH08650	SMC28 (Ireland)	4	4		
CH08814	SMC28 (Portsmouth)	3	3		
CH08072	SP01	8	4	2	2
CH08307	SSC37 Scotland	6	4		2
CH08286	SSC37 Ireland	6	3		3
CH08834	SYS45	4	4		
CH08778	TEM14/PC26	9	2	6	1
CH08709	VT06	0			
WE80015	WIE	12		12	
YP80015	YP	6	1	1	4
	Student Activities (STB, SBC)	23	10	8	5
	Sum	296	156	56	84





FIVE-YEAR L31 TOTALS



Industry

List the activities carried out to foster relations with Industry and the results obtained.

The United Kingdom and Ireland section has an Industry Engagement Officer, also a Professional Registration Officer, these two key officers ensure we have continuing collaboration with the industry. UK and Ireland Section is currently working on three main scopes:

- Our Industry Forum, through which we have researched and responded to UK industry needs which fell in three areas: re-skilling long standing employees with digital skills; Input to IEEE Standards for new technologies; and ongoing professional development and the demonstration of competence.
- Industry-led activities: technical and non-technical activities planned or organised by our section’s officers including: our flagship conference called IEEE British and Irish Conference in Optics and Photonics (BICOP); BlockChain our SIG launch event and webinar series; our support for RTSI 2022 (now 2023); International Forum on Research and Technologies for Society and Industry (IEEE RTSI); and our support for Internships towards industrial placement – facilitating student placements in UK & Ireland industries.
- Thematic area professional development: helping individuals develop skills that help them to perform as a rounded professional. Key development areas include personal, management, and business skills.

Whilst some of these activities have had to be delayed or put on hold due to the Covid-19 pandemic we continue to develop our offering. A key enabler to increasing industry engineer membership levels in the UK is believed to be the ability to offer Professional Registration as a Chartered Engineer or equivalent through the IEEE. A steering group has been established chaired by Brian Harrington (former Region 8 treasurer), and we have agreed to a path to Associate Membership of the Engineering Council, a key first step in establishing this capability in the next 6 months. Find below the plan of activities:

- Understand relationship between Engineers Ireland and the Engineering Council in respect to IEEE.
- Achieve full understanding of Engineering Council’s “Registration Code of Practice”.
- Complete exploration with chosen Licensed Institutes.
- Work towards an MOU with each of the Licensed Institutes where agreements have been reached.

Earlier in 2020, the IEEE Industry Engagement Committee organised a global competition for IEEE Sections to showcase their existing industry engagement activities/initiatives. Our section won the IEEE Industry engagement competition along with the Poland and Toronto Sections: (<https://www.ieee-ukandireland.org/uk-and-ireland-joins-poland-and-torontosections-as-winners-of-ieee-industrial-engagement-competition/>)

Industrial placements sponsorships were offered by the IEEE EDS chapter to the Section students and their applications were received in August 2020. It has been allocated 6 placement sponsorships so far to Region 8 and there are still 4 to be allocated: (<https://www.ieee-ukandireland.org/sponsorships-towards-industrial-placement-offered-by-ieee-eds-society/>).

The Region 8 Action for Industry Recognitions were awarded to the following Section’s members:

- Sarah Lee
- Steve Nightingale
- Nihal Sinnadurai
- Mike Smith
- Richard Whitehead

Activities since the last report

Highlight some of the activities in your Section, with special attention to the things that work well, and things that don’t, so that your acquired know-how can be used by other Sections.

Since lockdown started, the Section decided to upgrade its Zoom account in order to offer our ExCom an alternative to IEEE WebEx to organise and host meetings and webinars for their chapters' events. The Secretary put in place a procedure for Chapter Chairs to request webinars / meetings to have the events set up and receive the necessary guidance to host them. At the same time the webinars are advertised through our Sections channels (eNotice, website & twitter) and the recording is later uploaded on our website to give our members the opportunity to watch the events on demand.

The Section has recognised that delivering a professional-looking webinar or a smoothly conducted meeting goes beyond simply making the technology available. To enable this, it has produced guidance for users, such as:

- Best practice in setting up the webinar
- Pre-webinar checks to ensure that the audio and video are working
- A practice run-through so that the presenter is familiar with the platform
- How to record the event and the permissions required to do so.

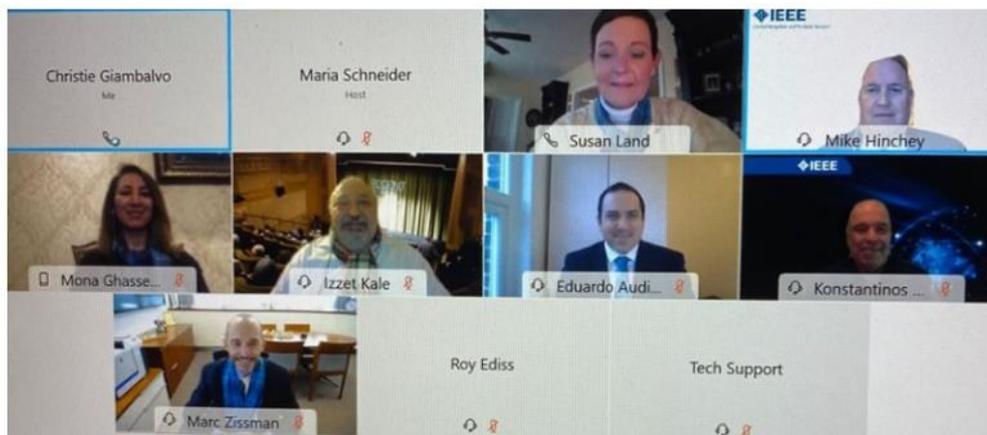
The advantage of recorded online events is that an enduring record remains and, in the case of webinars, can be made available on-demand. To take advantage of this new opportunity, the Section has set-up and made available a Vimeo account where the recordings can be uploaded and then linked to the website and social media. To avoid webinar organisers having a significant amount of extra work to do, they simply record the event and make it available on a Google Drive or Dropbox, and then the Webmaster uploads, processes and makes it available. As experience with webinars increases, the Section is further enhancing the production of these webinars by making available front and back slides which are IEEE Section branded so that when a webinar is downloaded from the website, the link with IEEE and the Section remains. By making use of analytics, we can determine which thematic areas produce the most views and downloads which we can use to inform the future direction. In addition, as videos are good website traffic drivers from Google, this is likely to result in more visitor engagement with the Section website.

Chapters and AGs always are looking for having representation of volunteers and committee members from different regions. For instance, Education Society Chapter are co-chaired for two officers from Wales and England with a recent representative in Scotland. Future Network Initiatives (SIG) is another example being co-chaired by two officers, one in England and other Ireland. Before COVID-19, face-to-face events were held in different geographic locations to cover the entire Section (records of Section ExCom meetings can be find on this link: <https://www.ieee-ukandireland.org/section-meetings>), which represents a significant challenge.

On 18th December 2020 took place our IEEE UK and Ireland Section Annual Christmas Lecture. Due to Coronavirus, the event was held online instead of its traditional home of the Regent Street Cinema at the University of Westminster.

Programme:

- Welcome – Dr Mona Ghassemian, Chair, UK and Ireland Section
- Opening Address – 2020 IEEE President-Elect Kathy Land
- Lecture 1 – PACT – Private Automated Contact Tracing for COVID-19 by Dr Marc Zissman (MIT)
- Lecture 2 – Advancing Ethical Aspects in AI Systems and Technologies: The Four Words Defining Our Future by Konstantinos Karachalios



The Event can be watched on demand here: <https://www.ieee-ukandireland.org/watch-again-ieee-uk-and-ireland-section-annual-christmas-lecture-2020/>

Planned activities

Highlight some of the future activities and initiatives in your Section.

The UK and Ireland Section priorities are:

- 1- Getting closer to Industry. IEEE for Industry (Corporations, Government, Individuals).
 - Professional Registration
 - Industry internship programmes
 - Follow IEEE industry engagement
- 2- Engage in IEEE Future Initiatives. New Technology Focus Areas
 - Blockchain, Future Networks and Cybersecurity)
- 3- Contributions to Humanitarian activities. Advancing Technology for Humanity.
 - Conferences, events, talks related to COVID-19, IEEE IHTC 2021, Section SIGHT project (Stepping stones).

Chapters, Affinity Groups, Special Interest Groups, Future Directions, Student Branches, and Section's officers benefit from a variety of Section's channels to help communicate and disseminate all their activities and events. These advertisements are complementary to the Chapters' channels such as LinkedIn groups, twitter, Facebook, newsletters, etc. The UK & Ireland Section manages mainly three channels: eNotice, Website, and Twitter.

Our Section website is a strong channel to communicate section activities to members. It has vital information for members and continue to be a source for dissemination of member related and IEEE activities. Our Section News column offers current list of activities (<https://www.ieee-ukandireland.org/section-news/>).

IEEE UK and Ireland Section PES Chapter Forms Women in Power Committee (<https://www.ieee-ukandireland.org/ieee-uk-and-ireland-section-pes-chapter-forms-women-in-power-committee/>). The main mission of Women in Power (WiP) is to advance the world through the creativity and innovation of diverse leadership, and to foster the careers, connections and talent of women in the power industry to achieve their full potential and become leaders of the future.

Regarding Section Awards and Recognition, the Section has three key aspects planned:

- IEEE awards (global) which require to follow a nomination process. Our Awards and Recognitions Officer, Prof. Jan Sykulski, will work through getting these applications submitted when our members meet the requirements.
- Promote members elevations to Fellow grade through our Awards and Recognitions Officer.
- Section's recognition process creation. Nomination forms are being created to encourage CCs, Officers and members to nominate outstanding volunteers in any of the diverse categories available. The award ceremony to be held during the section spring AGM on 24th April 2021.

The Section is organizing the IEEE International Humanitarian Technology Conference (IEEE IHTC) 2021 to be held virtually from 2nd to 4th of December this year.

IHTC is a Multi-Regional Conference Series rotating between R7 (Canada), R8 (Africa, Europe and Middle East), and R9 (Latin America and Caribbean). This inter-disciplinary conference series focuses on showcasing challenges, success stories, lessons learnt, case studies and technological innovation related to achieving the UN Sustainable Development Goals (SDGs), ICT4D and the application of Humanitarian Technologies (including Disaster Relief and Disaster Recovery) and facilitating engagement by stakeholders from the public, private, education and research and societal sectors around the world.

We place a particular emphasis on facilitating participation and sharing of experiences by key stakeholder groups from low and lower middle-income countries as well as low resource communities.

Established in R7 where previous editions took place in 2014 and 2017, IEEE IHTC 2021 takes place in R8 as a Virtual Conference this year, organised by Volunteers from IEEE UK and Ireland Section (UK and Ireland SIGHT and SSIT IST-Africa SIGHT) as well as Region 8, Region 7, Region 9 and UK and Ireland SSIT, SMC and Systems Council Chapters.

More details here: <https://www.ihtc21.org.uk/>

How Region 8 can be of help to your Section, members, and activities

List any challenges your Section is facing and what support is required from the Region 8. Please, also, give us your suggestions for agenda items that you want to be discussed during the R8 Committee meeting.

- Closer to Industry: Region 8 may be able to assist by providing legal support on the MoU we are preparing to be signed with IET, IEL, etc.
- Attract and Support Students and Young Professionals: Region 8 may be able to assist by supporting programmes that can support employability of recent graduates during pandemic.
- Membership: As a section, we would like to get support from region 8 to automate the parts of this due diligence process that are currently being executed manually by our volunteers and take up hours of our time. Everyone has been diligent in performing these actions but automating this would free up volunteering time to support more members in this process as well as time to deal with other elements of membership development.