

Annual Report 2020

Our mission

The European Communications Office (ECO) is the permanent office of the European Conference of Postal and Telecommunications Administrations (CEPT), an organisation where policymakers and regulators from 48 European countries co-operate and contribute to developing more vibrant and dynamic markets for electronic communications and postal services.

The ECO provides expert advice and administrative support to CEPT to help it to develop and deliver its policies and decisions effectively and transparently. The Office is a European centre of expertise in electronic communications providing a platform for CEPT member countries and concerned stakeholders to discuss, debate and collaborate on advancing European communications policy for the benefit of all Europe's citizens.

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Chairperson's Foreword

This year is my last as Chairperson of the ECO Council, as my two-term chairpersonship comes to an end in 2021. It has given me pause for reflection on the past six years and the work that has been achieved by the Office in that time.

It has been a busy period, and the ECO has proved time and time again that it is vital to CEPT and its three committees. It has assisted the Council in developing policies and decisions; it has prepared draft deliverables; provided a range of specialist supports; assisted in many conferences; hosted countless meetings; prepared many ECO bulletins; conducted a multitude of questionnaires, and helped to advance the objectives of CEPT and its participating Administrations.

In addition, the Office has continued to invest in the tools and services that provide spectrum information to all of the relevant stakeholders. The investment in SEAMCAT, EFIS and the ECO Document Database has been ongoing.

In my time as Chairperson of the ECO, I have had the pleasure of witnessing the Trojan work which was done to prepare for two World Radiocommunication Conferences – in 2015 and 2019 – and the enormous effort that went into reporting from both. I have also witnessed the IT strategy and platform of the ECO undergo major changes.

The Office has repeatedly proved itself to be the centre of expertise in postal and electronic communications. I have never seen anything less than 100% commitment and professionalism from this small team of 12 – even with the various personnel changes in that time.

To his credit, the ECO Director has led a dedicated and professional team with whom it has always been a great pleasure to collaborate. I'd particularly like to thank him for his continuous support and encouragement during my time as chair.

The past year has been a challenging one but despite the obstacles, the ECO team has once again demonstrated its flexibility and resilience. The adoption of online tools to carry out virtual meetings has been key to ensuring that CEPT's vital work continues.

Over the past few years, the ECO Council has been addressing the climate emergency, and before the pandemic it had started the process of reducing physical and face-to-face Council meetings by replacing them with web meetings where possible. I am loathed to say there have been any benefits to COVID-19 after the hardship it has brought on so many people around the world but the reduction in our carbon footprint must surely be one. In 2020, we held two ECO Council meetings virtually. While I understand the importance of face-to-face interactions, a combined approach of virtual and physical meetings must be the way forward.

My work here would not be complete without one final call for signatories to our Convention. The Convention is open for accession by any State whose Administration is a Member of CEPT. You will be warmly welcomed.

While this may end my six-year chairpersonship of the ECO, I have been involved with the organisation for a number of years, having been appointed as Vice-Chairperson in 2013. It has been an eye-opening and rewarding experience and has reaffirmed by belief that the work of the ECO is invaluable. Long may it continue.

Marta Leandro Chairperson of the ECO Council

Director's Statement

If there was ever any doubt about the significant role that telecommunications play in our lives, 2020 was the year that put those doubts to bed. From home-working to web meetings, the pandemic has highlighted the importance of having a well-functioning telecommunications network. Likewise, 2020 proved that what we had done in the years preceding it – laying the groundwork for telecommunications to cope with changing demands – was critical.

Collaboration has also been key this past year, and since mid-March I have been working closely with the CEPT presidency to keep members updated on plans for CEPT meetings. We co-ordinated with the three CEPT committees and made sure that policies were aligned right across CEPT. At all times, the safety and well-being of our CEPT colleagues has been a top priority.

The Office can be quite proud in how it reacted swiftly and professionally to the altered work environment brought about by the pandemic. We facilitated and hosted many web meetings and were instrumental in introducing a code of etiquette for those meetings, which has been used across the whole CEPT family.

There has been an incredible number of meetings with an incredible number of attendees – on some occasions more than 200 people attended. Such high attendance figures were certainly due to the virtual nature of the meetings – it is much easier to log on from the comfort of your own home than to get on a plane and spend a couple of nights in a different country. However, we cannot dismiss the importance of face-to-face communication and all the associated benefits it brings, and I look forward to seeing some resumption of in-person meetings in the future.

In 2020, we prepared to say goodbye to Freddie McBride, our Numbering Expert and Deputy Director of ECO as his contract ended. The Irishman did an outstanding job in his role over the past eight years and will be dearly missed both as a deputy and as a colleague. Freddie's departure left the Office with the dual task of finding a new expert and a Deputy Director. I never thought I would hire a new staff member without meeting them in person – and if I am honest I railed against the idea initially – but the pandemic has resulted in all kinds of firsts. In October, after a series of online interviews, Vassil Krastev from Germany was selected to join our team as an Expert in Numbering and Network Regulation. I welcome him and am confident he will be a great addition. The role of Deputy Director, meanwhile, went to Jaime Afonso, from Portugal. Jaime joined the ECO in early 2019 and is highly competent, well liked and respected by the team here.

It has been said before in our annual reports that the only constant in life is change, and this past year has certainly proved the point. From start to finish, the entire ECO team have been extremely impressive in how they have handled the challenges – especially as they juggled working from home with family demands. COVID-19 may have changed the way in which the staff worked but it didn't alter their professionalism, and I thank them for it.

Pormo fenten

Per Christensen Director of the ECO

The ECO: Our role, our team

Our role

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The European Communications Office (ECO) provides expert advice and administrative support to CEPT and its three committees. We help CEPT to develop and deliver its policies and decisions effectively and transparently. Our duties are threefold: to provide a European centre of expertise in electronic communications; to support and contribute to the work of the three CEPT Committees; and to manage CEPT's day-to-day activities. We also have a core objective of maximising the effectiveness of CEPT's Electronic Communications Committee (ECC).

The primary objective of the ECC is to enable the efficient, effective and harmonised use of the radio spectrum, satellite orbits and numbering resources across Europe. To achieve its mission, the ECC develops common policies and regulations for Europe in the field of electronic communications, taking into account European and international legislation. It also prepares European common proposals to represent European interests in international organisations, especially in the International Telecommunications Union (ITU).

The ECO supports the ECC by:

- providing a platform based on trust and openness to improve collaboration across its membership and extending its reach beyond Europe;
- ensuring its communications are transparent, consistent and effective;
- delivering new initiatives and providing strategic input to its work; and
- supporting CEPT's bottom-up approach to policy development by consensus.

We help CEPT to develop and deliver its policies and decisions effectively and transparently.

We work effectively as a team and we strive to identify new and innovative ways to maximise our impact and value to CEPT.

Meet the ECO team

The ECO team comprises 12 persons, usually based at its offices in Copenhagen, Denmark. The team includes the Director, six experts in the field of electronic communications – recruited internationally from across Europe – and five experienced team members from Denmark with responsibility for facilities management, IT, finance, human resources and general day-today administrative support to CEPT and its three committees.

Together, our team have the expertise and experience necessary to deliver the specialist services required of the ECO. We work effectively as a team and we strive to identify new and innovative ways to maximise our impact and value to CEPT.





Per Christensen

Director, Denmark



Freddie McBride Deputy Director, Ireland (Numbering and Networks, Com-ITU)



Peter Faris Ireland (Spectrum Engineering, Frequency Management, Mobile Broadband)



Doriana Guiducci Italy (Spectrum Engineering, Frequency Management, WRC preparation, liaison with academia and research bodies)



Susanne Have Croatia (Spectrum Engineering, SEAMCAT, Frequency Denmark (CEPT, ECO Council, CERP,



Zeljko Tabakovic



SAT MoU, Administration)

Mette Tobiassen Denmark (Finance, Human Resources, Projects)

Management, Broadcasting Plan Management)

Anne-Dorthe Hjelm Christensen Denmark (Public consultations, ECO Documentation Database, EFIS, Administration)



laime Afonso

Incoming Deputy Director, Portugal (Frequency Management, Com-ITU, EC co-ordination, ETSI co-ordination)



Robin Donoghue United Kingdom (Frequency Management, EFIS Management)



Vibeke Hansen Denmark (Webmaster, Reception, Premises, Meetings, Administration)



Kenneth Karlsson Denmark (IT support and development. Technical enquiries, Projects)

As the first COVID-19 lockdowns came into effect across the world last year, organisations and individuals had to react. The European Communications Office was among them. Here, some of our staff members reflect on what the changes have meant for them both personally and professionally.

When Denmark introduced lockdown measures on 13 March, 2020, the ECO's staff, like so many around the world, prepared to work from home. What was supposed to be a temporary measure ended up being extended for much of the year. The office, to its credit, has adapted extremely well.

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For Kenneth Karlsson, IT and Technical Specialist at ECO, March was extremely busy. *"In the beginning I tried to adjust people's workplaces to new conditions and going forward we managed to set up everybody with monitors, keyboards, computer mice, desks and chairs,"* he said.

On the communications side, Kenneth quickly implemented systems to make the planning of GotoMeetings more efficient and transparent. Microsoft Teams was used for internal meetings, which, Kenneth says, the staff were quick to accept and extensively use.

For Kenneth himself, life during COVID-19 has led to some changes. He starts his day earlier and tends to finish later as his wife works from home as a daycare provider. *"So there can be some breaks during the day,"* he said.

As with millions of homeworkers around the world, the new way of working has meant more time with family – especially for our experts who, in normal times, travel internationally to meetings across Europe, and beyond. In 2020, in-person meetings were replaced with virtual ones.

Despite the environmental and personal benefits that have resulted, the art of meaningful communication can sometimes be lost over email and on web-meetings, according to Zeljko Tabakovic, Expert in Spectrum Engineering.

"Sometimes what is meant, what is said and what is understood are three different things. Different levels of language and cultural and personal differences between participants in online meetings can make things harder to progress," he said.

Zeljko was working at the ECO for less than a year when the initial lockdown was introduced. He and his wife decided to stay in Copenhagen, so it was over a year – when it was safe to travel – before they were able to visit family in Croatia.

"Roughly six months after we arrived in Copenhagen, COVID-19 broke so we did not have a lot of friends or contacts outside the office. The family link has been missing and without social contacts we feel lonely sometimes," he said. Expert Doriana Guiducci has spent the past year alternating between Denmark and her home country of Italy – returning home to family when the schools in Copenhagen were closed.

She was in the middle of moving when the first cases of COVID-19 were diagnosed in Denmark so had to change some plans. *"Initially I mainly worked on my laptop on the living room table. It delayed the setting up of the home-office, until I finally could move into my place in the autumn,"* she said.

The new way of working is completely different to what went before, according to Doriana.

"In short, everything is online; no more travels; almost total lack of in-person contact with anyone in over a year, and a tendency to fill in every single minute of the day with web-meetings. This can be positive because accessing seminars and training is much easier but it can also be overwhelming," she said.

"There is a complete mixture of working life and private life. You end up cooking pasta while listening to the closure of a web-meeting in your headset, not to mention that the daily family burden has increased enormously with all the family home and remote schooling."

Timing was better for Expert Robin Donoghue who had moved to a larger apartment with a spare bedroom for home working in late 2019.

"I was extremely fortunate that I had the space to work that did not interfere with home life. I did, however, find that the desk height and my chair were unsuitable for long-term home-working. With modification to the desk and a new chair provided by the ECO, these problems were promptly solved," said Robin.

"The ECO later upgraded my home broadband and this has proved very reliable for all the on-line meetings we have hosted," he added.

Robin lived in the UK before joining the ECO in November 2018 but he and his wife decided to stay in Copenhagen when COVID-19 hit because their teenage daughter goes to school in the city.

"Over the course of the pandemic the restrictions have periodically altered. We felt it important that she had as much usual contact with her school friends as possible. So, when permitted, by staying in Copenhagen, she was able to maintain these usual social contacts," he said. When the office closed in March, Robin stopped commuting – not that he had much of a commute anyway. *"I live in central Copenhagen so had an easy cycle of 15 minutes."*

Robin agrees with Zeljko that virtual meetings lack the discussions that often emerge outside the formal agenda. *"It has not been easy to replicate these contacts,"* he said.

Peter Faris, Expert in Spectrum Engineering, added that it is more challenging to reach agreement on contentious issues in webmeetings which could be more easily resolved by an informal faceto-face discussion between the concerned parties.

"These challenges have led to a number of high priority work items being delayed. There are also the technical and administrative challenges with web-meetings – scheduling across different time zones, audio complications, how to request the floor etc," he said.

In March, Peter travelled to Norway to spend time with his partner for what was supposed to be a long weekend. The trip turned into several weeks. "My initial setup was very basic, just a laptop on a dining room table. When I returned to Copenhagen in June the ECO upgraded our home office setup to provide an office desk and chair with a large monitor," he said.

Vibeke Hansen, Webmaster Editor and a member of the Administrative Team, has attended the office just two or three times a month since COVID-19 hit to carry out tasks such as picking up post and making sure the plants don't die.

"The difference between working at home and in the office is that you can be online all the time and this is of course a challenge to divide work from home time but it also gives you the great benefit of flexibility," she said.

"There are a lot of benefits working from home especially the fact that you do not have to commute to work and you can see your family (especially the kids) more; but I definitely miss the social aspect when being with colleagues in the office."

The year was certainly challenging, but as Vibeke said: "We have proved to be a dynamic organisation which is able to adapt to big changes with great impact on our work life and home life."



Supporting CEPT



European Conference of Postal and Telecommunications Administrations

- 48 European countries cooperating to regulate posts, radio spectrum and communications networks

The ECO provides a secretariat for CEPT (including its Presidency)

and its three autonomous business committees.

Our structure



CEPT has a Co-Presidency comprising the chairmen of the three committees.

CEPT CEPT Electronic Communications Co



The ECC develops common policies and regulations for Europe in the field of electronic communications and related applications and prepares European positions and common proposals to represent European interests in international organisations, especially in the ITU.

The European Committee for Postal Regulation (CERP) is responsible for postal regulation, as well as European co-ordination and preparation for meetings of the Universal Postal Union (UPU).

of CERP.

Mr Chris Woolford, UK, is Chairman of the ECC.

Mr Germán Vázquez, Spain, is Chairman

The CEPT Co-Presidency co-ordinates the activities of the three business committees in order to contribute to developing more vibrant and

- As the permanent office of CEPT, the ECO supports the Presidency as follows:
- 1) It handles day-to-day correspondence to and from the Presidency, with some secretarial and advisory support for co-ordination between the co-Presidents;
- 2) It provides and maintains content for the different sections of the CEPT web portal that relate to the Presidency and CEPT as a parent organisation for its three committees;
- 3) It prepares reports to the membership on the activities of the Presidency and provides advice and assistance to the individual committee Chairs where appropriate;
- 4) It collects CEPT member financial contributions, used to pay for the ECO's support and external expenditure as required, namely the costs of CEPT Assemblies, and some of the facilities provided for CEPT delegations at international conferences; and
- 5) It makes logistical arrangements and provides secretariat support for CEPT Assemblies as required.

The CEPT Assembly is the supreme body of the organisation, and is convened as required. There was no need to call for an Assembly meeting in 2020.





The Committee for ITU Policy (Com-ITU) is responsible for European co-ordination and preparation for meetings of the ITU.

Ms Cristiana Flutur, Romania, is Chairwoman of Com-ITU.

dynamic markets for electronic communications and postal services – for the social and economic benefit of all Europe's citizens.

2020 in brief

We doubled our GoToMeeting capacity at the ECO to fully support the work of all CEPT groups during the COVID-19 pandemic

The ECO team organised support the work of CEPT Committees, with over 11 000 delegates registering for

The estimated number of minutes spent with the web meetings totals around 125 000 minutes, spanning approximately 480 meeting days

Our experts actively contributed to these meetings shared mainly between the six international experts from our team, plus the Director

We participated in meetings and events outside of the CEPT framework, promoting our deliverables and the positions agreed within the committees

DocDB received more than 273 700 page views from around the world. Of our over 700 ECC DocDB

The CEPT portal, managed by the ECO, page views

We released v5.4.0 and v5.4.1 of SEAMCAT, which included important improvements and new features such as on propagation models, interference calculation and enhancements to user interface

The ECO created and managed 16 questionnaires and processed 330 individual responses in order to fully inform the work of the ECC

> We published 3 ECC newsletters containing 8 specific articles on spectrum and numbering management topics

We carried out 36 public consultations, which were used to inform the substance of new or revised ECC Deliverables. The office analysed and processed 264 responses to them

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We continued to strengthen collaboration with the academic world involved in research on spectrum issues

> In 2020, 36 countries contributed to the financing of the ECO



SECTION TWO Review of the Year

CEPT faced an unprecedented challenge in the face of the COVID-19 pandemic in 2020. The restrictions and difficulties encountered by the entire world affected almost all face-to-face meetings planned for the year, leading to their cancellation, postponement or, most often, replacement by web meetings. The ECO office remained closed for most of 2020 and the ECO staff worked remotely during this period. Notwithstanding this, the ECO committed to support all CEPT groups in the continuance of their work.

Being mindful of the massive and unforeseen impact of the coronavirus crisis on the sectors in which CEPT works, a certain degree of flexibility of deadlines was allowed. We were cognisant of the fact that COVID-19 could affect interactions, particularly in the participation of public consultations endeavouring CEPT deliverables. By allowing flexibility, the contributions of these stakeholders, e.g. responses to public consultation as handled by the ECO, could still be addressed within the relevant CEPT groups.

2.1 Providing specialist support to the CEPT Committees

One of the ECO's core duties is to actively contribute to the wo in particular the ECC. We aim to maximise the ECC's overall ef first-class administrative support, regulatory and technical ex support services.

Our work in supporting the CEPT Committees is manifold. In 2020 we:

- · Participated in and actively contributed to Working Groups and Project
- Promoted the ECC's deliverables externally and helped advance topics
- Supported the development of the 2020-2025 ECC Strategic Plan;
- Assisted the CERP Chairman with the development and distribution of schedule and maintained the content on the CERP web page;
- Continued to upgrade and improve our tools and services such as SEAN Information System;
- Provided guidance on rules of procedure and working methods for each
- Conducted public consultations and guestionnaires on behalf of CEPT (
- Provided a central source for specialist information.

Contributing to the improvement of ECC's efficiency and its working processes

ECO experts strive to have a positive impact on the ECC's activities through their continuous work as embedded members of various Working Groups and Project Teams. Our team members participate as recognised observers in almost every meeting of the ECC and its many subordinate groups. We assist in the preparation and management of the meetings and the necessary follow-up work.

Our continued presence and active participation in these meetings demonstrate our important role in striving to continuously improve the ECC's efficiency, the effectiveness of its working processes and, ultimately, the quality of its deliverables.

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fectiveness by providing
pertise and a range of specialist

Teams right across the ECC; of interest internally;	15
the CERP newsletter, managed the meeting	EUROPEAN
1CAT and EFIS, the ECO Frequency	COMMUNICATIO
h of the committees when required; Committees to fully inform their work; and	ONS OFFICE

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We aim to maximise the ECC's overall
effectiveness by providing first-class
administrative support, regulatory and technical
expertise and a range of specialist support
services.

Structure of ECC – December 2020



ECC Strategic Plan 2020-2025

2020 was an instrumental year in setting the renewed key milestones, vision and objectives of the ECC, which aim to strengthen the development and co-ordination of electronic communications across Europe. Over the next five years the ECC will develop policies and regulatory measures that will help Administrations to address current key issues, while at the same time monitoring and considering longer-term developments in regulation, technology and usage which may influence its work in future. The ECC will implement policies by following cross-cutting strategic priorities and through the major high-level "topics" as detailed in the 2020-2025 ECC Strategic Plan.

The ECO was pivotal in supporting the ECC in developing the Plan which was approved by the ECC plenary in July 2020. The Plan sets out the major opportunities and challenges for the ECC over the next five years. It also identifies the key topics which embrace much of its essential work in the medium term such as wireless broadband, including 5G, and connectivity, and new initiatives and innovations – such as next generation satellite systems. There will also be a review of future use of the UHF band (470-960 MHz) in line with the WRC-23 agenda item.

The ECO plays an important role in assisting the ECC in the implementation of the Strategic Plan.

Our actions in 2020 were executed with the following objectives in mind:

- To promote the ECC's achievements through the development of electronic newsletters and communications initiatives;
- To facilitate an exchange of views through the organisation of workshops on thematic issues and the development of training sessions to increase stakeholders' awareness of ECC activities;
- To encourage the implementation of ECC deliverables by CEPT Administrations and assist Administrations in making proposals for studies within the ECC;
- To increase the visibility of the ECC through presentations at relevant workshops and events;
- To support the ECC through continuous co-operation with other bodies, including the European Commission, ETSI, other external organisations and academia;
- To respond to the needs of various stakeholders and provide the necessary support to Administrations in maintaining their national data in the system.

Further details on the ECO's specific activities in support of these objectives are outlined in later sections.

The ECO's participation in a group is driven by its objective to achieve positive outcomes through constructive engagement and by providing contributions to further the group's work, in particular, during the development of ECC Deliverables and the definition of CEPT common positions.

We help prepare and submit contributions to meetings in areas where our expertise is both beneficial and relevant to the work. As described in subsequent sections, our experts analyse the responses from public consultations and from questionnaires, a task that is essential as an evidence-based approach to fully inform the development of ECC Deliverables. Our bespoke tools, such as EFIS and SEAMCAT, facilitate the research and analysis that is required to provide sound reasoning and justification for the ECC's policy work. With EFIS, we contribute to ECC activities by analysing spectrum usage and related information. With SEAMCAT, we provide a software tool to carry out detailed compatibility and sharing studies between radiocommunication systems.

Our bespoke tools, such as EFIS and SEAMCAT, facilitate the research and analysis that is required to provide sound reasoning and justification for the ECC's policy work.

As a result of our involvement in the full range of ECC activities and our important co-ordination role, we also contribute to fostering co-operation between different groups on topics of mutual interest. This is an integral role for us in order to increase efficiency and consistency within the ECC and to avoid duplication of effort across different groups.

When meetings are in progress, our primary role is to provide assistance to the Chairmen and to advise and support the groups in their activities. Our central position and objective perspective give us unique insights on the groups' work and often lead us to conduct drafting activities and to provide guidance on resolving specific issues.

Our central position and objective perspective give us unique insights on the groups' work and often lead us to conduct drafting activities and to provide guidance on resolving specific issues.

When a meeting ends, our support continues. We editorialise and process draft deliverables, as well as developing summaries of meeting outcomes for publication on the ECC web page.

In 2020, we actively contributed to the vast majority of ECC work items which led to new deliverables. Occasionally, the ECO is invited to provide a Chairman for a Project Team or a Forum Group. Our leadership is called upon particularly in cases where we have been playing a central role in the related topic. In this context, our Spectrum Expert Zeljko Tabakovic has chaired since October 2019, the Project Team STG, which is responsible for the development of the CEPT compatibility tool, SEAMCAT, within the Working Group Spectrum Engineering (WG SE).

Supporting the ECC on procedural matters and working arrangements

The ECO plays a central role in the ECC's overall governance, in particular on matters related to rules of procedure and working methods. ECO experts develop and maintain an in-depth understanding of these fundamental documents. We are often called upon to clarify various articles and provisions by members on issues such as the principles for appointment of Chairmen and Vice-Chairmen and participation of observers in meetings. The Office also endeavours to ensure that the ECC is driven by a consistent set of rules, that its working arrangements are efficient and that it makes the best use of electronic means as appropriate.

ECC Working Methods



In order to support the smooth running of the virtual online meetings, the ECO supported the ECC in launching the basis of "rules of engagement" for web meetings. In particular, we established the so-called "netiquettes" to ensure that virtual meetings were efficiently handled. These rules included how each participant should identify themselves; the procedure to request the floor; principles on setting the camera and microphone, and the use of the "chat" feature, which is available in the GoToMeeting (G2M) platform used for online meetings in CEPT.

ECO devised an online voting procedure to elect officials within ECC Groups during virtual meetings. This was successfully implemented during the second online meeting of the Conference Preparatory Group in December 2020, to elect the two new Vice-chairmen. Voting took place using the online questionnaire tool through an anonymous single-choice questionnaire, which respected the secret ballot requirement. The questionnaire was made accessible only to the members of a special group, set up solely for the purpose of the election. The Office provided detailed information and instructions for the electronic voting procedure to those delegates nominated by Administrations to cast their vote. Two separate elections took place for the two vacant positions, and each election required a single round.

The Electronic Working Arrangements have also been updated to reflect the increase in demand for web meetings during the COVID-19 pandemic.

The Office maintains a set of co-operation agreements – Memoranda of Understanding (MoU) and Letters of Understanding (LoU) – between the ECC and its external partners. The Office has a standing objective to assist the ECC in identifying possible future LoU partners.

The year was a particularly active one in terms of the new LoU signed between the ECC and its partners. Six new LoU were signed in order to establish a close working relationship and foster co-operation with the following organisations:

- Access Space Alliance;
- Dynamic Spectrum Alliance (DSA);
- European Emergency Number Association;
- The International Telecommunications Satellite Organization;
- LoRa Alliance;
- The International Association of Public Transportation.

The ECO, following a request from the ECC, undertook a thorough review of existing partnerships with other organisations where it was found that, in general, these partners have contributed actively to the work of ECC. Obviously, the dynamics, the level of participation and the number of contributions varies, depending on various aspects such as the resources available in those organisations, and the type and complexity of topics under discussion in the ECC. In addition, the list of active LoU was updated, e.g. in view of the fact that some organisations were disbanded.

Conducting questionnaires – promoting a fullyinformed approach to policy development

Questionnaires are an integral part of ensuring an evidence-based and fully informed approach to policy development within the framework of the three CEPT Committees: ECC, Com-ITU and CERP. These questionnaires are generally used to gather preliminary information from Administrations and other stakeholders to improve the development of deliverables and to identify relevant technical, regulatory and market trends.

The ECO assists the relevant groups in the development of the questionnaires, acts as a contact point to release them and collects the corresponding responses. In most cases, the ECO also processes the information collected through the questionnaires and analyses and summarises the responses. Those responses are then considered by the responsible group in order to decide how to best utilise the information. Questionnaires can also be initiated by national Administrations seeking to benefit from the experiences of colleagues in other countries on certain topics.

In 2020, the ECO managed 16 questionnaires to CEPT Administrations and other stakeholders on behalf of ECC groups and national Administrations. The questionnaires addressed a wide range of topics in the spectrum and numbering management areas, and the ECO processed 330 responses in total. All of these questionnaires were managed using the ECO's online questionnaire tool which has been available on the CEPT portal since 2013. The tool facilitates the distribution of the questionnaires and collates the responses received, which makes the task of analysing the results much more efficient. We now have the results of over 150 questionnaires stored in our systems. This is a valuable repository of information and a first point of reference for CEPT Administrations when considering a new policy proposal or work item.

Questionnaires managed by the ECO in 2020	Replies received
Electronic questionnaires triggered by ECC groups	
Questionnaire on WPT Devices that are currently available in the European Market	22
Questionnaire on Iridium Licences	29
Questionnaire on Globalstar Licences	29
Questionnaire to CEPT Administrations on Earth Stations Recorded on Ship Station Licence	22
Questionnaire on Numbering for eCall and associated tariffs on eCall callback	15
Questionnaire on article 106 of the EECC - refunds	11
Questionnaire on free circulation and use as well as on exemption from individual licensing	27
Questionnaire on Internet sites offering ECS using national numbers	11
Questionnaire on actual and expected fixed service usage in the 26 GHz frequency band in Europe	37
Questionnaire to CEPT Administrations on Interference Statistics 2020	32
Questionnaire to CEPT Administrations on satellite monitoring activities	22
Questionnaire to CEPT Administrations on signing of MFCN-BSS Arrangement	18
Electronic questionnaires on numbering and network matters triggered by national administrations	
Belgium Questionnaire: Access to emergency services and provision of location data for emergency communications of nomadic number-based voice services	10
Latvia Questionnaire: Institutional responsibility for the national numbering plan	17
Romania Questionnaire: Google Forwarding Numbers	9
Slovenia Questionnaire: 116 000 number overview	19

Developing the SEAMCAT spectrum analysis tool

SEAMCAT in brief

The Spectrum Engineering Advanced Monte Carlo Analysis Tool (SEAMCAT) is a software tool which can be used for modelling, simulation and analysis of sharing and compatibility scenarios between radiocommunications systems. SEAMCAT is managed, developed and maintained as an open source and free-of-charge tool by ECO in co-operation with the SEAMCAT Technical Group (STG), a project team of the ECC Working Group Spectrum Engineering (WG SE) and stakeholders. SEAMCAT as a tool is platform independent, reliable and transparent in calculations, flexible to simulate different scenarios, user friendly and of reasonable computation speed on personal computers.

The algorithms in SEAMCAT use the process of repeated random sampling of parameters which allows statistical modelling of diverse complex spectrum engineering and wireless compatibility situations. SEAMCAT can assess the potential interference between different radiocommunication systems that operate in shared, overlapping or adjacent frequency bands. SEAMCAT is distributed with a predefined set of libraries that are at the user's disposal but allows the user to build customised libraries – such as radio systems, antennas, spectrum masks, propagation models etc. SEAMCAT is not designed as a black box and users can design, adapt, exchange system and simulation parameters, as well as to see intermediate results of calculations and export results. Users are welcome to join the SEAMCAT community to contribute to the development of the software and its libraries.

SEAMCAT is managed, developed and maintained as an open source and free-of-charge tool by ECO in co-operation with the SEAMCAT Technical Group.

Interested in joining the SEAMCAT development community? Find more information at: https://seamcat.cept.org



The tool is updated on a regular basis and is downloadable free of charge at: https://seamcat.cept.org

Development of SEAMCAT continued with two official version releases and seven test versions in 2020. SEAMCAT development is actively focused on Administration and other user needs encountered in simulation studies, enhancements and introducing new features, as well as reliability and quality improvements of the tool. In 2020, 64 different items were included in the software including new features, additions, enhancements and corrections. The current official version is v5.4.1, released on 24 April 2020. ECO also continuously works on updates of the online SEAMCAT handbook and in 2020 started to work on the revision of ECC Report 252 in order to help users in handling the tool. Work has also been done on the issue tracking system, code repository enhancements and SEAMCAT web portal developments.



As well as maintaining and developing SEAMCAT, the ECO continues to raise awareness of the tool. The following timeline presents the main activities related to SEAMCAT during 2020:

January	Release of SEAMCAT v5.4.0 Alpha 2
February	Release of SEAMCAT v5.4.0 Beta 1
March	Release of SEAMCAT v5.4.0
	Release of SEAMCAT v5.4.1 Alpha 1
April	Release of SEAMCAT v5.4.1
յսկյ	Release of SEAMCAT v5.4.2 Alpha 1
October	Release of SEAMCAT v5.4.2 Alpha 2
December	Release of SEAMCAT v5.4.2 Alpha 3

Responding to the ECC needs for SEAMCAT development

The main purpose for the continuous development of SEAMCAT is to provide the ECC and its stakeholders with an open-source, free-of-charge software tool that allows them to perform coexistence studies. With that objective in mind, the ECO and the SEAMCAT Technical Group (STG) work in close co-operation with the relevant ECC groups and respond to their needs.

It is important to remember that SEAMCAT was conceived as a co-operative project in which CEPT Administrations contribute not only with ideas and suggestions but also with specific proposals for the enhancement of the tool. In that respect, the ECO continuously encourages CEPT Administrations and industry stakeholders to increase their involvement in the development of the tool, as they are ultimately the main beneficiaries of this work.

It is a very positive endorsement of the efforts made within CEPT that spectrum engineers involved in coexistence studies outside of Europe can also benefit from access to a continuously evolving tool. 21

SEAMCAT Technical Group

The STG is a project team under WG SE that joins the expertise of Administrations and industry with the aim to:

- Provide technical support on the development of SEAMCAT, including the drafting of supporting user manuals;
- Liaise with and contribute to relevant groups within the ECC to respond to their needs related to SEAMCAT implementation; and
- Promote SEAMCAT in Europe and beyond.

STG decides which changes should be made to the software to respond to the needs both of ECC Working Groups and Project Teams. In 2020, STG addressed a wide range of topics, including: the development of new and improved SEAMCAT tools; introducing new and updated propagation models; enhancements in antenna gain plugin; advancements in systems; extension to the command line; large simulations performance enhancements; improving calculation speed, and improvements to the graphical user interface.

The importance of the work of STG is vital for the development of ECC Deliverables that encompass coexistence studies between wireless systems which require the use of a Monte Carlo simulator. Therefore, stakeholders involved in activities in WG SE project teams are regularly invited to take part in STG's work.

Conducting consultations to deliver better policies

The ECC adopts a transparent and evidence-based approach to developing its deliverables. Listening to, and carefully considering, the views of all concerned stakeholders is critical to delivering fair and effective policies and regulations. Central to the success of this approach is the public consultation process; the ECO takes responsibility for conducting consultations on behalf of the ECC (available at https://cept.org/ecc/tools-and-services/ecc-

22 ECC (available at https://cept.org/ecc/tools-and-services/ consultation).

The role of the ECO in the consultation process is two-dimensional:

- Administrative responsibility: This includes the editing and formatting of the draft deliverables, the launching of the consultation process, the collection of the responses and, in many cases, the submission of a formal response to the consultation.
- Expert analysis: We perform a detailed analysis of the responses received. Those responses can include general comments, which provide views on the topics under consideration, and specific proposals (editorial, substantive or technical) intended to inform the draft deliverable under consultation. An amended version of the draft ECC Deliverable is then produced which takes due account of the views expressed by all stakeholders. This output of this activity frames the discussions that lead to the final approval of ECC Deliverables and, ultimately, their adoption and publication in the ECO Documentation Database (DocDB).

In 2020, we carried out 36 public consultations, which were used to inform the substance of new or revised ECC Deliverables. In total, we processed and analysed a total of 264 public consultation responses from Administrations and other stakeholders, which represented an increase of around 15% compared to 2019.

Listening to, and carefully considering, the views of all concerned stakeholders is critical to delivering fair and effective policies and regulations.

Maintaining a record of important deliverables (DocDB)

The ECC's policies on spectrum and numbering matters are given effect through its deliverables, namely ECC Decisions, Recommendations and Reports. Once these deliverables are approved at ECC or Working Group level, we make them publicly available in DocDB (https://docdb.cept.org).

DocDB also provides access to related ETSI standards, European Commission Decisions and applicable EU legislation for each ECC Deliverable thereby providing a one-stop shop for those seeking context and background for these policies.

ECO	ECO	Documentation Database		00	4		
wespect communications office	The ECO 0 and reports legal acts a technical st respective	ocumentation Database provides an easity accessible fixing of ECC deliverables (decisions, or (a) the field of racia operation, numbering and networks regulation. Residued documents, including of ETB denixels and analyzed and the second to all demands on these applicable. At instead EC do analized produces by (ETB) and behical guidance nome developed by REDCA; can be downloa websites. A brief description of the finalizer of this database have available here.	internations relevant EC diverables, ced from their	00			
Latest news		Popular	Quick Ser	arch			
Dec 17 2010 Newsletters and ECO B	uleges	CO Go to BRS ECO Frequency Information system	Quick search		Search	Search	
21 20 2010		Download all files	Types				
lectronic Communication	ons Committee	the files includes the links to all the files	Al	TAT first	Active		
ia-38 2019		List of all Harmonised European Standards used in the European Common Allocation Table	Frequency	Con nes			
lorking Group Prequen	cy Management		(tion)	65	N94z		
a 38 2019		Implementation Overview for ECC Decisions	Application T	icm.			
pdate History		SRD implementation in Europe is found under ERC Recommendation 70-03 on Short Range Devices.	Application term			1	
		PMSE implementation in Europe is found under ERC Recommendation 25-10 on Audio and Video PMSE.	ETSI Harmoni	zed Standard		1	
		Fixed Service Implementation in Europe is found under ECO Report 04.	Organising Group				
			WONaN				

In 2020, there were 273 716 page views of DocDB from users all over the world. They had access to all the documents available in DocDB, including over 700 ECC Deliverables in force, an improved archive of withdrawn or superseded deliverables and many additional informative documents. This corresponds to 447 ECC Reports, 76 CEPT Reports, 108 ECC Recommendations and 113 ECC/ERC Decisions. Over 40 000 documents were downloaded from DocDB in 2020.

What is EFIS?

Since its establishment in 2002, the ECO Frequency Information System (EFIS) has been administered by the ECO and managed under the supervision of the ECC through its EFIS Maintenance Group (EFIS/MG). ECC Decision (01)03 defines the needs for EFIS for the whole CEPT membership.

In 2007, EFIS became the 'European Spectrum Information Portal'. By doing this it fulfilled EC Decision 2007/344/ EC on the harmonised availability of information regarding spectrum use in European Union Member States.

Some popular documents are automatically created from the Data held within EFIS. This includes the European Common Allocation Table (ECA Table) in ERC Report 25.

ECO	ECO Frequ	ency Information System	
european communications office	EFIS is the tool to ful information regardin EFIS.	fill EC Decision 2007/344/EC on the harmonised ag spectrum use in Europe and the ECC Decision	availability of ECC/DEC/(01)03 c
Latest News		Popular	Quick Search
Tue Sep 08 10:10:49 CEST 2020		Documents	Search by
Background on EFIS			General
		ECO Report 03 ECO Report 03 on the licensing of mobile bands in	Frequency
ERIS Questionnaire 2018 - 5	Summary	Europe.	from
		ECO Report 04	Frequency table
Wed Oct 03 14:58:56 CEST 2018		National Implementation information about Fixed	- Europe (ECA) -
New EFIS API		are provided in ECO Report 04	- ITU (Region 1) - Albania
Tue Mar 09 14:45:45 CET 2021			Austria
News		European Common Allocation Table (ECA Table) in ERC Report 25	Azerbaijan Belarus
Mon Mar 02 12:18:11 CET 2015		Parameter at the 20.02	Belgium Bosnia and Herz
Rights-of-Use Statistics		ERC Recommendation 70-03 on Short Range Devices	Bulgaria
			Search

Following the WRC-19, the ITU-R published the Final Acts for the revised Radio Regulations in March 2020. The EFIS/MG and ECO developed a draft revision of the ECA Table, which was approved for public consultation at the 96th WG FM meeting in June 2020. ECC subsequently approved the publication of the revised ECC Table at their 54th ECC meeting in November 2020, which now reflects the Radio Regulations Edition 2020.

The ECO completed the lengthy task of compiling all the necessary changes, agreed by ECC, into EFIS to enable a new version of the ECA Table to be created on 20 November 2020.

Some 46 CEPT Administrations now publish national frequency information in EFIS. All information in EFIS is available to the public at https://efis.cept.org/.



Providing a central source of specialist information

To support the ECC in its goal to be a focal point in Europe for information on electronic communications, the ECO provides relevant information on various topics. It does this through the ECC website and through our suite of tools, which are further described in this Report. A short, non-exhaustive guide is provided below. It describes the main types of information made available on the ECC website and in our databases and includes links to the respective areas.

	SUBJECTS	DOCUMENTS	NATIONAL INFORMATION	SPECIALIST SERVICES	EVENTS
ECC Website http://cept.org/ecc	Group area: provides access to information on ongoing activities and progress within each group belonging to the ECC structure Topics: information on a wide range of topics and long-term studies on which the ECC is currently working or has recently developed regulations	Meeting documents: access to contributions, working documents and meeting reports from all groups within the ECC Newsletters: three to four ECC electronic newsletters published each year to promote ECC work items and their context within regulatory and market developments Framework: reference documents which set up the framework and targets of ECC activities	Contact points: national contacts of CEPT administrations and on special topics Regulatory information: information on national regulations applicable in specific spectrum and numbering topics	Consultation: information on public consultations and links to draft deliverables under consultation Questionnaires: links to current and past questionnaires carried out to fully inform the development of ECC deliverables	ECC Meeting calendar: information on upcoming meetings News: information outcomes of recent meetings, events and monthly summaries of ECC activities Workshops: information, presentations and summary Presentations: made by ECO and ECC officials at different fora
ECO Documentation Database (ECODOCDB) https://docdb.cept.org		Deliverables: library of Decisions, Recommendations, Reports approved by ECC with associated archive and information Related documentation: links to relevant documents (from EC and ETSI) related to ECC deliverables	Implementation status: national implementation of ECC deliverables		
ECO Frequency Information System (EFIS) https://efis.cept.org/	Modules: specific features gathering information (ECC deliverables, national usage, associated statistics) on key spectrum topics (short range devices, mobile bands, fixed service, PMSE)	Regulatory references: links to ECC, EC and ETSI relevant documents Spectrum inventory: library of information documents for spectrum inventory purposes	Frequency tables: tables of frequency use in national CEPT administrations Spectrum inventory: national information on frequency usage and spectrum rights		
ECC Work Programme Database (ECC WP DB) https://eccwp.cept.org/	Work items: Follow the progress of, and find additional information on, individual items in the work programme of ECC and its subordinate groups				
SEAMCAT https://seamcat.cept.org	Software: Access to SEAMCAT software, source code, release information and system requirements	SEAMCAT Handbook and ECC Report 252 as well as links to the document area of the SEAMCAT Technical Group		SEAMCAT community: Information on bug reporting, related templates, bug reporting instructions and practical tips	SEAMCAT Workshops: Links to information on upcoming SEAMCAT workshops
700 MHz Information Repository http://700mhz.cept.org/			700 MHz repository: national information on the coordination status in the 700 MHz band		

In addition to the tools and services described in other sections of this Report, the ECO develops and maintains several pages on the ECC website dedicated to key topics such as those highlighted in the ECC Strategic Plan. They are designed to respond to some of the needs identified within the ECC by CEPT Administrations and other stakeholders.

The main objective is to reflect on the progress made in the ECC Work Programme on work items related to these topics, to develop material which may complement, inform, support or promote ECC Deliverables and to make specific information – i.e. national contact points, national regulatory frameworks etc. – available to stakeholders. For historical purposes, we also maintain an archive of past topics which were previously the focus of ECC work.

ECO Bulletins

The purpose of the ECO Bulletin is to highlight technical, regulatory and market developments in the area of electronic communications in regions outside of Europe. This specialist information, compiled by ECO, validates and further informs the ECC's work by examining and comparing the policy approaches taken in other regions of the world. It also helps identify issues that could potentially be addressed in Europe in the near future. In 2020, we produced three ECO Bulletins, which were submitted to each of the three ECC Plenary Meetings, and then disseminated them to the relevant subordinate groups. They addressed 37 articles covering a broad range of developments in spectrum and numbering management around the world.

Providing specialist support to Com-ITU

Com-ITU's main focus in 2020 was on preparations for the ITU's World Telecommunications Standardisation Assembly (WTSA-20). The ECO assisted Com-ITU's Project Team on strategic ITU-T issues (PT TU-T) in the preparation of 28 European Common Proposals for the conference. Ultimately, WTSA-20 was postponed until 2022 due to the COVID-19 pandemic but a lot of the preparatory work has been completed nonetheless. Postponing WTSA-20 was a decision for ITU Council, and the ECO provided GoToMeeting facilities to Com-ITU for co-ordination activities in advance of meetings of Council throughout the year.

Com-ITU also started its preliminary preparations for the ITU's World Telecommunications Development Conference (WTDC-21) which is scheduled to take place in Addis Ababa, Ethiopia on 8-19 November 2021. The ECO set up a new group web page and e-mail reflector for WTDC-21 and assisted the chairperson with co-ordinating three web meetings in 2020.



2.2 Meeting the objectives of the ECC Strategic Plan

The ECO plays an important role in assisting the ECC to implement its five-year strategic plan as outlined in previous sections. The strategic plan outlines the policy goals, key challenges and priorities that lay the foundation for the ECC's activities over the course of the five-year period. The ECO contributes to the overall fulfilment of the plan through its specialist support, which is outlined in the following sections of this report. We are also assigned particular tasks in the context of the ECC's role as a focal point in Europe on electronic communications and its co-operation with other bodies.

The new CEPT Roadmap for 5G and beyond

Following the decision of the ECC to discontinue the CEPT 5G Roadmap (in place since 2016), the ECO was tasked with developing a new "refreshed" roadmap to support future work, with forward-looking activities concerning 5G and its evolution towards future technologies.

The new CEPT Roadmap for "5G and beyond" builds on the previous Roadmap and identifies new topics which are foreseen as relevant in the short/medium term. It takes into account the **2020-2025 ECC Strategic Plan** which identifies wireless broadband and connectivity as a major topic to be studied during this period.

The new Roadmap contains elements on spectrum harmonisation as well as other spectrum challenges such as the use of active antenna systems, the possible role of new technologies such as artificial intelligence and blockchain in spectrum management, and the regulatory options and challenges for frequencies in the 'THz' range.

The CEPT Roadmap for "5G and beyond" will be regularly reviewed in order to report on the progress of ECC activities as well as to update the list of actions where appropriate. ECO is assisting this review process by identifying necessary updates to be presented to the ECC Steering Group for consideration.

ECO also maintains a **topic page** on the ECC website on 5G developments within CEPT, in order to keep the wider user community informed on the ECC's activities related to the Roadmap. This page is regularly updated with information on new deliverables and progress of work items.

Setting up the new Preparatory Cycle in CEPT for WRC-23

After the conclusion of the World Radiocommunication Conference in 2019 (WRC-19), CEPT started the new preparatory cycle for the Conference in 2023 (WRC-23), relying only on virtual meetings.

The Conference Preparatory Group (CPG) of the ECC was reorganised and four new Project Teams were created to address the agenda items for WRC-23 on science and regulatory issues, space issues, aeronautical, maritime and radiodetermination issues and the review of the UHF band.

An entirely new management team for CPG and its project teams was appointed. The election of the two Vice-chairmen required that ECO set up an online voting procedure as meetings took place only online for the whole year (as described above). The Office assists the CPG management team, and the ECO expert is in constant contact with its members, also, to anticipate possible unexpected issues that might raise in consideration of online-only meetings.

The new structure and activities of CPG were properly reflected on the ECC website and a careful revision of the content was conducted, to ensure appropriate continuity between the start of the WRC-23 preparatory cycle and the work for the previous conferences. In this migration and update, the Office assisted delegates who wished to continue following or to start joining the work of CPG towards WRC-23.

As the work within CPG and its project teams unfolded, a new co-ordination team has been established, composed by delegates from CEPT Members who are responsible for the preparation of specific WRC-23 agenda items. The Office supports the Co-ordination Team, whose main task is the development of the CEPT Briefs and European Common Proposals to the Conference.

ECO ensures that co-ordinators are provided with the most updated information and material needed to fulfil their tasks and can properly represent CEPT in meetings in ITU and in other Regions.

The Office maintains a specific group on the website restricted to the Co-ordination Team with the latest updates to progress their work, including guidance to prepare proposals for WRC-23 and information on the work of other regional organisations.

The WRC-23 Co-ordination Team includes also a new member, who is the CEPT Co-Chair at the ITU for the Network of Women for WRC-23 (NOW4WRC23). This initiative was promoted in ITU and welcomed in CEPT to encourage and empower more women to participate in WRC-23. Several actions such as the creation of forum discussions or the invitation to join the ITU mentorship programme have already been proposed and started within CPG and the other Project Teams with the assistance of ECO where requested.

ECO has embraced the key takeaways and lessons learned from WRC-19 to offer the best support in the WRC-23 preparatory cycle. For instance, ECO is continuously maintaining and strengthening the contacts as focal point towards other regional organisations, being aware that dialogue and co-operation during the preparatory cycle would ease the achievement of mutually satisfying results at the Conference. Tools that were particularly appreciated and helpful for CEPT co-ordination during WRC-19, such as the ECO chat system, have now been made available to CPG and its project teams. In general, the Office has attempted to anticipate any effort that would provide CPG with the most effective assistance, as this will also help the best possible support later at WRC-23.

Promoting ECC Deliverables and activities through electronic newsletters and communications initiatives

As the administrative office of CEPT, the ECO leads in promoting the work of the three business committees. In particular, the Office has an explicit role in developing a communications programme to promote the activities, results and achievements of the ECC towards all its stakeholders, internal and external. As part of this brief, the ECO publishes a periodic online newsletter three to four times per year. The ECC Newsletter is designed to provide readers with a greater insight into the world of spectrum management and numbering in an accessible form while providing information on some of the important technology, regulatory and market developments in Europe.

In 2020, the Office released three editions of the ECC Newsletters containing eight articles on various spectrum and numbering subjects. In addition to the publication and distribution of the three published editions, we also identified the topics for inclusion and our experts authored six articles covered in those editions. Two articles were enriched by the contributions of the ECC Chairman, Chris Woolford, and Alexandre Kholod, chairman of the ECC's Conference Preparatory Group (CPG).



- The May edition included three articles. Two articles, on maritime very high frequency (VHF) communications and on the fixed service, underscored, respectively, their vital role in enhancing ship safety and the efficient operation of ports. They showed how the fixed service is one of the main backhaul choices for mobile transport networks including 5G. A further article gave an overview of how STIR/SHAKEN works to validate Caller Line Identity (CLI), and provided the latest from the United States/Canada on its implementation and the actions foreseen in the ECC.
- The August newsletter also contained three articles. The ECC Chairman wrote an article introducing the new Strategic Plan for the period 2020-2025 and explaining how the ECC intends to achieve its mission during this period. Another article, from the CPG chair, provided an overview of CEPT's plans and preparations in advance of the next World Radiocommunication Conference (WRC-23). A third article, on eCall state of play, examined the progress that has been made since eCall became mandatory in 2018, and the plans for the future.
- The most recent edition of the newsletter, published in December 2020, addressed two articles on 5G and ITS.
 The 5G article described the role of the ECC in the harmonisation of several important frequency bands and explores the latest developments in the ECC to facilitate 5G rollout, including the new CEPT Roadmap for "5G and beyond". The second article, on both rail and road intelligent transport systems, examined the key role spectrum plays in facilitating advancements in ITS and provided the most recent update on the ECC activities in this issue.

The Office has an explicit role in developing a communications programme to promote the activities, results and achievements of the ECC.

The newsletters were distributed electronically to almost 5 250 stakeholders and were published on the ECC website. You can subscribe to the ECC Newsletter for free on our ECC newsletter page, where an online archive of earlier editions is also available.

Throughout the year, the ECO also informed ECC Newsletter subscribers about the ECC's main activities and events, such as the results from the ECC Plenary meetings held in 2020, notifications on upcoming workshops, and on the outcomes of those workshops.

Subscribers were also notified about questionnaires, public consultations and any releases of new versions of our tools and services.

The publication of ECC Newsletters and of news releases are backed up by short notifications, disseminated through the ECC Twitter account, @CEPT_ECC, which is managed by the ECO. Our use of Twitter continues to remain focused on the communication of factual information, rather than opinions, concerning the ECC's activities. During ECC workshops and major conferences, such as WRC, we endeavour to provide frequent updates to our Twitter followers on relevant issues and insights as they arise.

In order to describe the more routine activities within the ECC in greater detail, we also maintained our efforts in the development and publication of monthly news summaries on the ECC website. These monthly summaries provide a snapshot of the main outcomes of ECC Working Group and Project Team meetings and events that take place each month. They are developed from contributions provided by the ECO experts responsible for the various ECC groups. Throughout the year, the monthly summaries were published as news items on the ECC web page. (https://www.cept.org/ecc).

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ECC MONTHLY NEWS SUMMARY FOR DECEMBER 2020

This summary provides a roundup of the main outcomes of ECC Working Group and Project Team meetings which have taken place in December 2020. Due to the ongoing coronavirus crisis, all meetings of ECC groups have been moved online for the eable futur

During this time, we will endeavour to provide updates on the work of the different ECC groups. For further information, please watch out for communications from the CEPT Presidency which will be posted <u>here</u>, keep an eye on the <u>ECC Meeting</u> <u>Celender</u> and for e-mail communications from the respective ECC groups of which you are a member.

Included for this period.

- 1-3 December: SE19 progressed on the draft ECC Report on microwave PMP technologies based on active antennas for 5G backhau!
 2-4 and 7 December: SE40 resolved all comments from public consultation on the draft revision of the ECC Report 271, dealing with the 2-4 and 7 December: F856 instances on comments from paths consultation on the draft revision of the ECC Report 271, dealing with i
 potated stays with the SpaceX-NDSC constitution
 3 December: EFIS/MG apreed a revision of the Decision (01)/03 Anner 1 to be forwarded to WG FM
 4-11 December: CPG approved intial craft CEPT Breets, assigned the general apenda tens of WRC-23 to PTA and provided further
 guidance to PTB and ECC PTI on studies on Article 21 of the Rado Revision(10)/03 Anner 10 be forwarded to WRC-23 to PTA and provided further
 guidance to PTB and ECC PTI on studies on Article 21 of the Rado Revision(10)
 9/10 December: FMS6 initiated the amendment of ECC/REC/05/06 and ECC/REC/05/062

- . 9-10 December: STG progressed the work on the enhancements of the SEAMCAT software for the Generic System Plugin. Cellular tem, EPP, Tools
- . 11 December: SE7 progressed work on a draft ECC Report on coexistence studies for the potential introduction of new terrestrial
- abbitations operating in the 2483.5.2500 MHz frequency band. 14-16 December: \$421 continued is work on a drate ECC Recommendation on receiver resilience to transmission in adjacent frequency ranges, and a rate ECC Report on measurement methodologies for 55.0453 in the feet. 15-16 December: FMSB Arthritist developed the ECC Report on the dististion of markine voice VHE and started development of the ECC Decrement method he sensitive his developed the ECC Report on the dististion of markine voice VHE and started development of the ECC Decrement method he sensitive his developed the ECC Report on the dististion of markine voice VHE and started development of the ECC
- Decision on regulation to operate Autonomous Maritime Radio Devices (AMRD) in CEPT 14-16 December: SE24 made progress on the draft ECC Reports for all its work items.
- 15-17 December: WG NaN adopted two amended ECC Recommendations and approved one further deliverable for public consultation
- WG NaN agreed to withdraw ECC Recommendation (04)04: + 16-18 December: FM44 continued discussions on the update of ERC Decision (99)06 regarding S-PCS satellite systems operating below

1-3 December 2020 - The Spectrum Engineering Project Team SE19, fixed service (F5), met via web meeting SE19 has made good progress on the draft ECC Report on microwave PMP tech developed the working document towards a questionnaire to collect the views from administrations and industry in order to provide the basis to

Organising workshops on thematic issues and developing training sessions to increase awareness of ECC working methods and activities

Thematic workshops provide an excellent platform for exchanging information, raising awareness of ECC activities and informing ECC Deliverables and follow-up activities. The ECO plays a central and leading role in organising these events.

The ECO had envisaged the organisation of a thematic workshop in 2020 on Satellite related topics aiming to address the technical and regulatory challenges raised by new satellite technologies and applications (e.g. mega constellations, satellite M2M/IoT, ESIM), as well as the need to continue to meet the requirements of existing applications. Moreover, the ECO planned to hold a SEAMCAT workshop for beginners at the end of 2020 in Copenhagen. Both workshops were ultimately cancelled due to the pandemic, however the ECO remains committed to organising these events at the earliest opportunity.

Increasing the visibility of the ECC through presentations at events

During the year, ECO experts attended a range of conferences and workshops where we delivered presentations on thematic topics while promoting the work of the ECC on related matters. These events provide the Office with an opportunity to share information with relevant stakeholders and to increase awareness and understanding about the ECC's areas of expertise, its policies and regulations.

EUCAP 2020

ECO, in co-operation with Academia, had planned to convene a session on "IRACON Spectrum Sharing: challenges and opportunities for 5G and beyond" at the 14th European Conference on Antennas and Propagation (EuCAP2020). The Conference was scheduled for 15-20 March 2020 in Copenhagen, Denmark, but was cancelled due to the COVID-19 pandemic. ECO submitted a paper on "Regulatory requirements and characterisation of transmitter and receiver parameters to set a novel framework for spectrum sharing" which has been **published in the Conference** Proceedings despite the cancellation of the physical event. An associated presentation was also submitted and was made available as part of the virtual conference programme.

Presentation at RED-CA

The Radio Equipment Directive Compliance Association (RED-CA) is an association of Notified Bodies under the Radio Equipment Directive. It meets twice a year. The RED-CA host these meetings to discuss current issues relating to radiocommunications with representatives of the EU Commission, ECC, ETSI, ADCO RED and authorities from MRA countries. The ECO presented at both the May and October 2020 web-meetings. In our presentations, the ECO highlighted the recently published ECC Deliverables, information about national implementation of equipment operating below 9 kHz, the 8th update of the SRD Decision and the update of the European Common Allocation Table (ECA Table) in ERC Report 25.

Supporting the ECC and CEPT through continuous co-operation with other organisations

The ECC represents European interests in the ITU on matters related to the use of the radio spectrum, satellite orbits and numbering resources. The ECC also recognises the benefits of a strong partnership with all key stakeholders, including ETSI and the European Commission, to facilitate the delivery of technologies and services for the benefit of society. In this context, the ECO plays a fundamental role in building effective working relationships with these key partners of the ECC so that policy, regulation and standards development activities are aligned. In order to increase the visibility of the ECC's achievements, the ECO is also active in helping the ECC extend its reach on a range of topics towards other external organisations, including the other regional telecommunication organisations, and also towards universities and research institutions.

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The ECO plays a fundamental role in building effective working relationships with key partners of the ECC so that policy, regulation and standards development activities are aligned.



ETSI

The European Telecommunications Standards Institute, ETSI, is an essential partner of CEPT and its committees, in particular the ECC. The ECO plays an important role in this partnership through its direct participation in ETSI activities and its close co-operation with the ETSI secretariat.

The primary objective of our involvement in ETSI activities is to ensure that the technical requirements resulting from the regulations and studies developed by the ECC are understood and properly taken into account in the related standardisation activities within ETSI.

The ECC and ETSI 's arrangements for co-operation on standardisation and regulation for radiocommunications devices and systems is formalised in a Memorandum of Understanding (MoU).

The ETSI Technical Committee on EMC and Radio Spectrum Matters (TC ERM) is our main focus concerning radio spectrum issues. It is within this forum that the co-operation process is initiated in response to an industry proposal for a new system, service or application. A work item is created and considered for adoption in accordance with the ETSI Technical Working Procedures which are part of the ETSI Directives. The ETSI work programme is then updated accordingly (https://portal.etsi.org/).

Sometimes a proposal for a new or revised radiocommunications system, service or application is first presented within the ECC, typically within the ECC Working Group Frequency Management (WG FM). In such cases, the relevant ECC group will inform ETSI TC ERM about the proposed new work item and, when relevant, will advise the promoter of the new system to initiate a system reference document (SRdoc) and/or European standard through the relevant ETSI mechanisms. You can read more about the co-operation process at **cept.org** One of TC ERM's duties is to be responsible for ETSI's interface with the ECC on radio matters. In 2020 the ECO closely followed the TC ERM to contribute to the continued consistency between ECC and ETSI activities. The ECC website contains a **dedicated page** describing how our two organisations work together. It includes a set of documents and tools designed to strengthen the synergy between ECC and ETSI.

This page contains useful reference information, developed in co-operation with the ETSI Secretariat, including:

- A SRdoc mapping spreadsheet providing a mapping of ETSI SRdocs (published and drafts) and the resulting ECC activities (mainly work items from the ECC Work Programme Database and then, once approved, corresponding Deliverables in the ECO Documentation Database).
- A relationship matrix reflecting the work and information connections between groups within both organisations, including where there is ongoing co-operation between the different ECC and ETSI groups. The matrix is updated several times per year, subject to requirements.
- A brochure which provides an introduction to the regulatory environment in Europe for radio equipment and spectrum.

In the field of numbering and networks, the ECC and ETSI maintain close co-operation on numbering and networks matters through technical liaison and participation by representatives of both parties in relevant working group, project team and technical committee meetings in accordance with the MoU. In 2020, the ECO, representing ECC interests, continued its participation in ETSI's Special Committee on Emergency Telecommunications (EMTEL). EMTEL has the status of a Special Committee within ETSI, which provides the group with the flexibility to produce Technical Reports as well as Technical Specifications.

The ECO also maintained its close co-operation with ETSI's Technical Committee Network Technologies, ETSI's centre of expertise on network technologies, which provides architecture and protocol specifications for network interoperability and interconnection. A dedicated NaN technical liaison officer from ETSI NTECH continues to participate in each WG NaN meeting and provides progress reports on NTECH's work programme. 31

EUROPEAN COMMUNICATIONS OFFICE



ADCO RED and RED CA

Directive 2014/53/EU, "The Radio Equipment Directive (RED)", specifies requirements that products must meet in order to be placed on the market and put into service. It includes the essential requirements for radio equipment to both use and support the efficient use of radio spectrum in order to avoid harmful interference. The implementation of the RED at European level involves several organisations including the European Commission and ETSI. The ECC has a key role to play in this area through its technical expertise in radio spectrum. The ECO has been active for many years in supporting ECC in this context. It led us to act as an ECC focal point with two influential bodies for the implementation of the RED: the Administrative Co-operation in RED (ADCO RED) and the RED Compliance Association (RED CA). Both of these are major groups of European regulators in the RED compliance area. In 2020, we attended two meetings of ADCO RED and two meetings of RED-CA where the ECO presented the ongoing activities in ECC, as described above.

ITU

ECO experts participate in the relevant study group meetings of ITU within the ITU-R (Radiocommunication) and ITU-T (Telecommunication Standardisation) sectors. Our participation in these meetings provides us with the opportunity to promote European achievements to other regions of the world and to engage and exchange views with regulatory experts on activities and developments outside of Europe. In 2020, the activities of ITU were impacted by COVID-19, and participation in relevant ITU-R and ITU-T activities was undertaken on a virtual basis.

Promoting relationships between the CEPT and the other regional telecommunication organisations

As the CEPT secretariat, the ECO acts as a permanent point of contact with other regional telecommunication organisations recognised by the ITU. We are the point of contact in the course of preparations for the main ITU conferences. In 2020, CEPT's engagement with ITU 2020 was dominated by preparations for World Telecommunication Standardisation Assembly, WTSA-20.

The ECO organised the participation of CEPT delegations in meetings of the Inter-American Telecommunication Commission (CITEL), the African Telecommunications Union (ATU), Arab Spectrum Management Group (ASMG) and Asia-Pacific Telecommunity (APT). Our central position in the exchange between CEPT and the other regional telecommunication organisations helped us to facilitate closer working relationships and a spirit of co-operation, collaboration and compromise.



Asia-Pacific Telecommunity (APT)



Arab Telecommunications Council of Ministers/League of Arab States (ATCM)



African Telecommunications Union (ATU)



Regional Commonwealth in the field of Communications (RCC)



General Secretariat of the Organisation of American States for the Inter-American Telecommunication Commission (CITEL)

European Commission and European Union relevant activities

The ECO continued its task of providing regular support to the ECC as an observer representing the ECC at all the 2020 meetings of both the Radio Spectrum Committee (RSC) of the European Commission (EC) and of the Radio Spectrum Policy Group.

In particular, the ECO prepared the summary report of ECC activities for each RSC meeting and supported the ECC Chairman during his presentation, when required. In 2020, we also participated in two ECC-EC consultation meetings held in March and October as part of the ECC Delegation.

Our involvement in these activities is mainly driven by the need to ensure an efficient interface between the ECC and the EC in implementing the Radio Spectrum Decision. Furthermore, it also provides us with valuable background information that we can feed into our activities within the relevant ECC groups, in particular when developing CEPT Reports in response to Mandates from the EC.

The Radio Equipment Directive Expert Group (RED EG) replaced the Telecommunication Conformity Assessment and Market Surveillance Committee. It assists the European Commission in questions concerning the implementation of the Radio Equipment Directive (2014/53/EU, RED) and in the preparation of legislative proposals and policy initiatives concerning radio equipment. The RED EG is composed by the Member States' authorities, European standardisation bodies, the association of conformity assessment bodies and organisations operating at European level such as manufacturers, industrial users, equipment vendors and others. In 2020, the ECO participated in two meetings of the RED EG.

The ECO also continued to support ECC Working Group Numbering and Networks to foster and maintain a close working relationship between the CEPT and the Body of European Regulators for Electronic Communications (BEREC) through collaboration at the working group level. The European Electronic Communications Code (EECC) entered in to force on 20 December 2018. The ECO/ ECC exchanged letters with BEREC on co-operating on numberingrelated provisions in the code where BEREC has been assigned tasks and the ECC/ECO can provide technical expertise. The main objective of this relationship is to leverage the different skillsets of both groups to encourage further co-operation and avoid duplication of effort in the implementation of the new provisions.

2.3 Managing our operational support

The ECO is committed to delivering first-class support to CEPT and its committees through the provision of a wide range of administrative, operational and expert services. This back-end support is vital in the day-to-day operations of CEPT as it provides our stakeholders with timely and relevant information on technical, regulatory and market developments, as well as providing a central point for enquiries and facilitating communications between our members throughout Europe.

Our objective is to ensure that relevant information is available to people when they need it, and we do this through managing, maintaining and updating various information sources on our web portal throughout the year. We also provide meeting facilities, both physical and virtual, as well as offering administrative support to CEPT and its committees as required.

Managing CEPT's family of websites



The CEPT portal provides a window for the world to explore the work of CEPT and its committees.

The CEPT portal provides a window for the world to explore the work of CEPT and its committees. It provides a common platform to the websites of CEPT, its three business committees (ECC, Com-ITU and CERP) and its permanent Office (ECO) – the five entities that constitute the CEPT family.

Building up on the previous analysis to fully evaluate our system hardware and software components with the objective of defining the next generation of the CEPT portal, we proceeded in 2020 with the preliminary work with a view to updating the platform. We invited through TED (Tender Europe Daily) five companies into a market dialogue, in order to gain knowledge of possible solutions, licensing structures and co-operation terms. This was a very productive process, and this work resulted in a roadmap of how we will progress with implementing an updated and more structured platform as the basis for the future development of the CEPT portal.

Throughout the year we deployed releases 18, 19, 20 and 21 which all consisted of a series of minor error corrections and updates but, partly because of the Covid situation, no major new changes in 2020 were implemented to the CEPT Portal.

The ECO is committed to protecting the privacy of personal data in order to be compliant with the EU General Data Protection Regulation (GDPR). Therefore, in 2020, Administrations and all other stakeholders registered in the CEPT website were invited to verify if their personal data, as stored in our systems, were correct and up to date. This review resulted in a substantial reduction (to almost half) of the previously existing number of CEPT portal user accounts. Read our data policy here.

THE CEPT PORTAL IN 2020	
Number of user profiles registered to the portal	2 853
Unique visits*	90 204
Page views	1 231 130
Bounce rate**	36.5%

 * Multiple visits having the same IP and date are counted as one unique visit
 ** Bounce rate is calculated from single-page visits (visits where users have only seen one page) divided by the number of entries on the site

Managing our databases

Apart from EFIS, DocDB and SEAMCAT, the ECO also manages and updates other important online information systems on which our main European stakeholders and other interested parties rely.

Maintaining and upgrading the ECC Work Programme Database



The ECC Work Programme Database (WP DB) is part of a suite of software tools developed by the ECO to provide the ECC and its constituent bodies with online facilities for maintaining and updating their respective work programmes on an ongoing basis. It provides our external stakeholders with visibility on our work items and associated timelines. ECO experts supporting the work of the various ECC groups take the lead on maintaining the information on work items in the WP DB.

This provides users with useful features in terms of providing an overview of current and past work items, a search and filtering facility and the ability to create Gantt charts to illustrate the work of any ECC group. The WP DB has become an integral tool for managing the ECC's work while providing interested parties with a high-level view on the overall scope of the ECC's activities.

At the end of 2020, the WP DB contained information related to over 608 ECC work items, either active or finalised, including an up-to-date status on the 130 work items which were in progress over the course of 2020. The WP DB is available at https://eccwp. cept.org/.

Information repository on progress for co-ordination of the 700 MHz band

Following the implementation of the digital dividend in the 700 MHz band (i.e. change of use of the band 694-790 MHz from broadcasting to mobile services), the ECC developed and currently maintains a tool that allows users to monitor and review the progress of bilateral and multilateral co-ordination negotiations between CEPT countries on the use of this band. The repository is available on the website with the possibility for Administrations to continue to upload information when appropriate. Further development of the tool has been stopped in accordance with a decision taken by the ECC plenary.

		700 MHz Repository	
Transmitters (per country		
Austra (AUT)	Detanio many & 1	Contrast (US)	Lipsane or 2019-08
Canadia (HRV/)	Definited departs & etc.		Uplatel in 204-08
France (F)	Desared paper # 728		Lipdated on 2017-68
Instand (IRL)	Desired Inches # 211	Contrast UNL	Upstilled on 2018-04
Lummbourg (LLDI)	Detailed makey # 20	Contract ON	Lipitalet on 2015 in
Manager (MNE)	Detailed Station & 100	The second second	Ledaled in 2017-10
Netherlands (HCX.)	Detaelt money # and	Tama parameter 1004	Liplanet on 2018-10
Remarka (RCK/)	Depart Spice # 1	Contained Street	Updated in 2017-01
Simula (SA)	Defared Baser 4 12	instanting ON	Upcame or 2016-06
Description of the second second	transformed and		Updated on 2018-42

The PSAP Directory

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The PSAP Directory is a directory containing contact information for Public Safety Answering Points (PSAPs) to be used as a backoffice support tool for PSAPs to contact each other when a need arises. For example, the directory would be used in the event of an emergency call where assistance may be required in another country. The PSAP Directory came into service on 1 December 2018 and now contains contact information for 22 PSAPs across Europe. We were delighted to welcome PSAPs from Bulgaria and Denmark who joined the directory in 2020. It is expected that this number will continue to increase in the years ahead which will make the PSAP Directory an integral tool to facilitate PSAP communications. The information contained in the PSAP Directory is confidential in nature and is only accessible to participating PSAPs.



Promoting electronic working arrangements

The CEPT Committees are committed to improving the efficiency of working processes by making use of electronic methods of working to complement physical meetings. In this respect, we provide our stakeholders with access to four main tools and services dedicated to electronic working:

Web-meeting facilities: Our web-meeting facilities are based on the use of the commercial 'GoToMeeting' platform combined with the meeting management features integrated into our portal. They are now part of CEPT's routine in terms of meeting management.

Since mid-March 2020, due to the COVID-19 outbreak, all CEPT meetings have taken place online, via the GoToMeeting platform. This platform became the key cornerstone to support the different groups within the three business committees which attracted more than 11 000 registrations to the meetings. ECO experts can arrange on request the use of GoToMeeting to accommodate virtual participation in meetings hosted externally.

Group email facilities: For the three CEPT Committees and their subordinated groups, we provide and manage a range of dedicated group email addresses to facilitate ongoing communications between the individual members of each group and across groups. The group mail functionality is enabled through an email list server which is integrated with the CEPT portal. When a user joins a group, they are automatically added to the email list for that group. An email group can relate to working group, project team or a group set up for collaboration on a particular work item. Users can customise their participation in various groups in their CEPT profile settings. In 2020, we managed more than 76 email reflectors to assist CEPT groups.

CEPT Forum: The forum features have been integrated into the CEPT portal since 2012 and have been further improved since then. The extent of its use depends upon the individual groups and project teams' needs. The CEPT Forum serves to complement physical meetings, web meetings and the email reflectors to progress the work on specific work streams and to exchange views on emerging topics of interest.

CEPT Chat system: This system is activated upon request to facilitate CEPT co-ordination at major events. The chat function is integrated with the CEPT portal and includes a feature to access the chat facility from a mobile device. This chat system is widely used for CEPT co-ordination at ITU conferences, most recently at WRC-19.

MeetingHub: As a result of the changed working environment, essentially based on virtual meetings, the ECO had the opportunity to gather further experience and feedback from the participants on the GoToMeeting platform. We foresaw the need to improve some features related to the management of meetings, e.g., the raise-hands functionality, chat and a more secure way to access virtual meetings. In this context, the ECO started the development of "MeetingHub", which is focused on assisting/complementing the current GoToMeeting platform.

Providing facilities for collaborative working

CEPT's work is based on collaboration between regulators and industry representatives from different countries across Europe. We provide first class meeting facilities at our premises at Nyropsgade, 37 in central Copenhagen, where we have been located since May 2014.

Our meeting rooms have internet access for delegates, as well as audio/visual facilities. We have supported remote participation in meetings hosted at our premises for many years. The remote participation facilities have also been upgraded with the option to use video connectivity and with GoToMeeting, now with improved audio guality in the large room, enabling far better integration with web meetings. This facility allows remote participation in meetings hosted at the ECO with a very high-quality audio/visual experience.

In 2020, the ECO hosted five meetings, spread across 12 days, attracting 190 delegates to our premises in Copenhagen. The number of meetings was significantly lower in 2020 than the previous years due to the outbreak of the COVID-19 pandemic. These meetings ranged from small working sessions with 12 participants to larger events accommodating more than 50 participants. As it was previously highlighted, against the backdrop of the pandemic, most of 2020 meetings were realised through a virtual platform, with more than 320 web meetings.

Number of delegates per physical meeting in ECO in 2020



Number of web meetings in 2020



* Plenary and its subgroups



Number of physical meetings 2015-2020

Number of meeting days in 2020



* Plenary and its subgroups



Providing meeting facilities at the ECO

Here at the ECO we have been providing first-class meeting facilities for our CEPT customers for many years. CEPT, and its three autonomous committees, develop harmonised policies in the fields of electronic communications and postal services. We achieve our goals collectively with a strong spirit of co-operation and collaboration where decisions are taken mainly by consensus.

Achieving consensus requires trust and empathy and face-to-face meetings allow participants to build trust, develop friendships and foster closer working relationships. Steve Jobs once stated that "there's a temptation in our networked age to think that ideas can be developed by email and iChat. That's crazy. Creativity comes from spontaneous meetings, from random discussions". Meetings at the ECO provide our clients with a platform for informal discussions and networking over coffee and lunch which can be just as important as the formal proceedings of the meetings themselves.

We have three meeting rooms at the ECO - Hamlet Plus, Ophelia and Gertrude - whose names are inspired by Shakespeare's famous tragedy which of course is set in Denmark.

> Further information on meetings at ECO is available on our website including on our meeting facilities, how to reach ECO and on hotels nearby.

SECTION TWO Review of the Year



Hamlet Plus

Total capacity 60 Participants Layout Classroom

Amenities

- Large co-view screens
- Projector with computer connections (HDMI, VGA, adaptors for iOS devices)
- Microphone and Sound system
- Remote participation facilities based on GoToMeeting
- Wi-Fi
- 230v standard European power sockets at each seat
- Writing materials
- Flipchart(s)
- Whiteboard
- Event Coordinator's setup support

Hamlet Plus can be split into two smaller meeting rooms (Hamlet and Horatio) with capacity for 40 and 20 participants respectively.



Ophelia

Total capacity 25 Participants Layout Boardroo

Amenities

- Large co-view screens
- Projector with compute (HDMI, VGA, Clickshare, devices)
- Sound system
- Remote participation fa GoToMeeting
 - Wi-Fi
 - 230v standard Europea at each seat
 - Writing materials
 - Flipchart(s)
 - Whiteboard

Ophelia was expanded in 2019 thereby increasing the capacity of the room from 15 to 25 participants.





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Gertrude

Total capacity 10 Participants

m	Layout	Boardroom	
	Amenities		
r connections	 Large screen (HDMI, VGA) 	with Computer connectio	
, adaptors for iOS	 Remote participation facilities based on GoToMeeting 		
	• Video confer	encing facilities	
cilities based on	• Wi-Fi		
	 230v standar available 	rd European power socket	
n power sockets	• Writing mate	erials	
	• Whiteboard		
	• Event Coordi	nator's setup support	

• Event Coordinator's setup support

Gertrude is our newest meeting room and can accommodate up to 10 people. It is ideal for holding breakout sessions from larger meetings taking place.



Supporting the CEPT Presidency

CEPT ALL ABOUT OUR ORGANISATION

In 2020, various meetings were undertaken to support the CEPT presidency in the context of maintaining CEPT stakeholders informed on the developments concerning the coronavirus pandemic and its impact on the overall activities in CEPT. Since March 2020 the CEPT Presidency and the ECO has endeavoured to keep updated the plans for CEPT meetings, and CEPT presidency and ECO published six communications during 2020.

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Moreover, the ECO assisted the CEPT Presidency in the routine activities, such as: the invoicing and collection of CEPT member financial contributions; correspondence with the CEPT

Co-Presidency; responding to requests about CEPT, and maintenance of the sections of the website which relate to the CEPT Presidency.

Supporting the European Committee for Postal Regulations (CERP)

During 2020, CERP members worked remotely to follow Universal Postal Union (UPU) issues and also the studies published by the EU Commission related to the process of evaluation of the current Postal Directive. It is expected that the new EU regulatory postal framework will be the main topic to work on for the next year. As in the other CEPT Committees, the CERP has strengthened its capacity to promote the creation of European common positions, particularly on UPU issues. ECO maintained its operational support to CERP and its Working Groups in 2020. This involved secretarial support, correspondence with the CERP Chairmanship, responding to correspondence from external bodies and maintenance of the CERP section of the website and CERP documentation. We also assisted on CERP outreach activities including on the development and distribution of three editions of the CERP newsletter.

We also organised and facilitated around 20 web meetings of the CERP Steering Committee, CERP Plenary and its working groups and promoted the use of our tools and services used by the other CEPT Committees to CERP throughout the year.

Supporting the satellite monitoring Memorandum of Understanding

Due to the highly specialised and costly nature of satellite monitoring facilities, a group of European national authorities have established an agreement under the Satellite Memorandum of Understanding (SAT MoU) to share access to the space radio monitoring station located in Leeheim, Germany. The agreement facilitates satellite monitoring activities within CEPT, particularly to investigate interference involving satellites. In 2020, the signatories of the agreement are: Cyprus, France, Germany, Liechtenstein, Luxembourg, The Netherlands and Switzerland.

Among the monitoring activities carried out in Leeheim, one can highlight those triggered by the Working Group Spectrum Engineering Project Team SE40 responsible for Space Service compatibility. In 2020, SE40 triggered a new satellite monitoring campaign of Iridium's NEXT constellation following the last update of the software aboard the satellites of the Iridium configuration. In this context, the ECO provides secretariat support to the SAT MoU management committee and manages CEPT's SAT MoU account, which was set up to cover the costs of using the Leeheim facilities. The ECO also acts as the interface between the SAT MoU and the ECC.



Leeheim, Germany

In terms of the promotion of the SAT MoU, the ECO maintains a document describing SAT MoU activities since July 2013 and a leaflet that summarises the importance of the SAT MoU in the satellite monitoring activities. Further information can be found here.



SECTION THREE Governance and Financial Summary

Structure and Governance

The ECO is governed by the ECO Council which consists of representatives of the Contracting Parties to the Convention for the establishment of the European Communications Office ('The ECO Convention'). The Convention inter-alia defines the terms of reference for the ECO and its funding arrangement.

In 2020, 35 countries were officially contracting parties to the ECO Convention while 36 countries contributed to the financing of the ECO. The ECO Council Chairperson and the ECO Director have entered discussions with some of the CEPT Administrations who are not currently members of the ECO Council in order to attract new signatories to the ECO Convention. The Council has governance responsibilities, which include agreeing the ECO's budget and work programme on an annual basis. These are prepared by ECO staff under the guidance of the Director. The Council's preferred method of working is by consensus.

The ECO Council held its 22nd and 23rd meetings (online) in May and December 2020 respectively. Ms Marta Leandro of Portugal has been Chair of the Council since her election in May 2015 and was re-elected for a second three-year term in May 2018. Dr Samuel Ritchie of Ireland has been Vice-Chairman since December 2015 and was re-elected for a second three-year term in November 2018.

Financial Summary

The ECO was approximately 98% financed by the following 36 countries in 2020:

Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and Vatican City.

The remainder is from directly funded services (e.g. administration of the CEPT and the Satellite MoU).

The following figures provide a financial summary for 2020:

Statement of income and expenses

INCOME

EXPENDITURE

Staff Costs (salaries, pension contributions, etc.)

Operating Expenses (outsourcing, projects, professional fees, travel)

Office Facilities (rent, building related expenses)

Expenditure total

Operating balance for end of year

Based on exchange rate of DKK 1 = EUR 0.134

DКК	EUR
18 319 480	2 462 527
11 436 393	1 537 294
3 664 236	492 551
1 533 492	206 134
16 634 121	2 235 979
1 685 359	226 548



Countries participating in the ECO Council

In 2020, the following 36 countries were part of the ECO Council: Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and Vatican City.





european communications office

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