european communications office

EUROPEAN COMMUNICATIONS OFFICE
ANNUAL REPORT

OUR MISSION

THE EUROPEAN COMMUNICATIONS OFFICE (ECO) IS THE PERMANENT OFFICE OF THE EUROPEAN CONFERENCE OF POSTAL AND TELECOMMUNICATIONS ADMINISTRATIONS (CEPT), AN ORGANISATION WHERE POLICY MAKERS AND REGULATORS FROM 48 COUNTRIES ACROSS EUROPE COLLABORATE TO HARMONISE TELECOMMUNICATION, RADIO SPECTRUM AND POSTAL REGULATIONS.

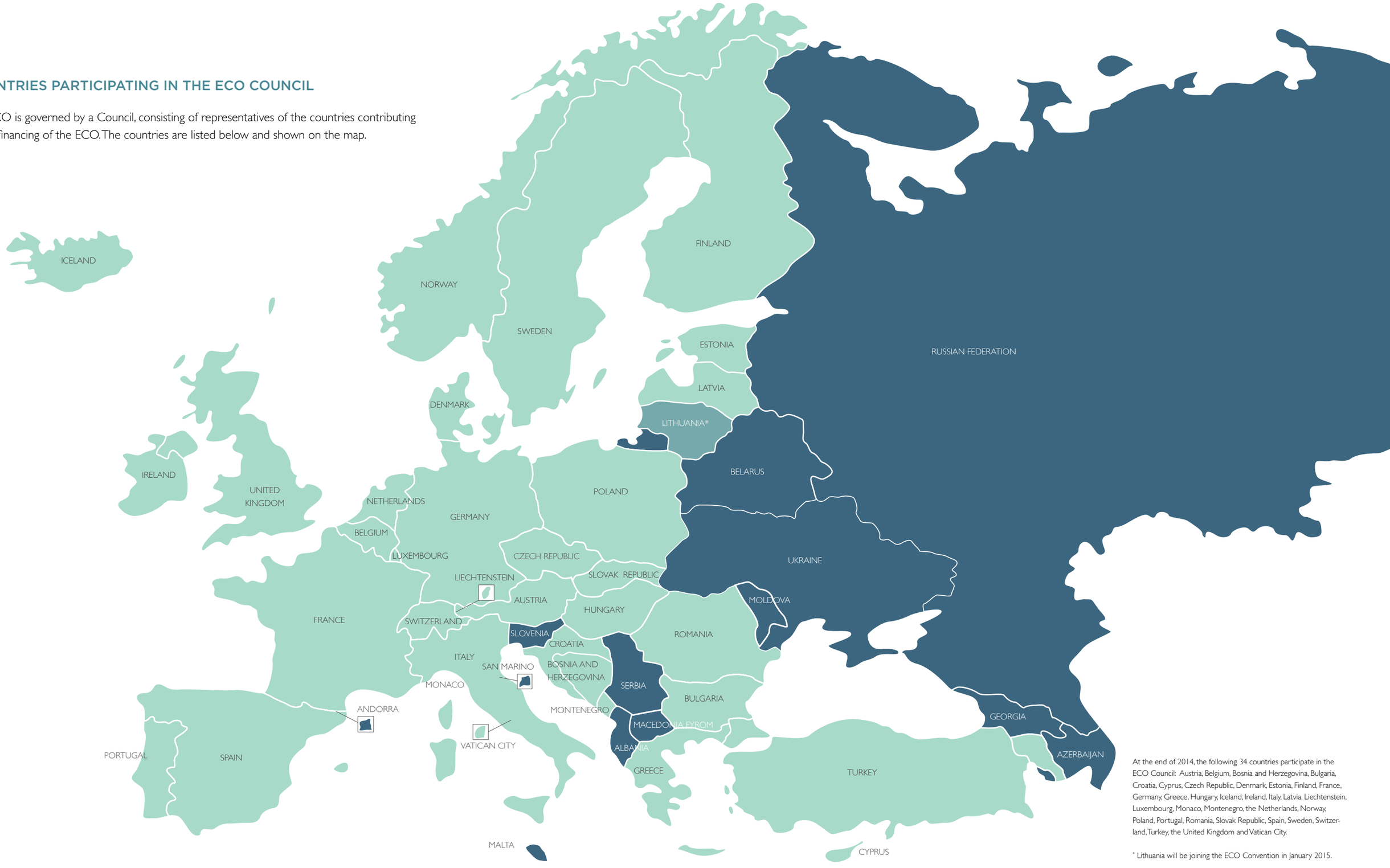
THE ECO PROVIDES ADVICE AND SUPPORT TO CEPT TO HELP IT TO DEVELOP AND DELIVER ITS POLICIES AND DECISIONS IN AN EFFECTIVE AND TRANSPARENT WAY. ITS CORE DUTIES ARE TO PROVIDE A EUROPEAN CENTRE OF EXPERTISE IN ELECTRONIC COMMUNICATIONS, TO CONTRIBUTE TO THE WORK OF THE THREE CEPT COMMITTEES AND TO MANAGE CEPT'S DAY-TO-DAY ACTIVITIES.

THE ECO FURTHER SUPPORTS CEPT MEMBER COUNTRIES AND OTHER STAKEHOLDERS PROVIDING A FORUM TO DEBATE AND ADVANCE EUROPEAN COMMUNICATIONS POLICY FOR THE BENEFIT OF ALL EUROPE'S CITIZENS.

CONTENTS

COUNTRIES PARTICIPATING IN THE ECO COUNCIL

The ECO is governed by a Council, consisting of representatives of the countries contributing to the financing of the ECO. The countries are listed below and shown on the map.



At the end of 2014, the following 34 countries participate in 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, Luxembourg, Monaco, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Spain, Sweden, Switzerland, Turkey, the United Kingdom and Vatican City.

* Lithuania will be joining the ECO Convention in January 2015.

CHAIRMAN'S FOREWORD

There's been a continued focus this year on working collaboratively to deliver a range of initiatives, particularly within the framework of the ECC Strategic Plan. Over the past year, we have seen significant progress in many important areas of work. On wireless broadband, the ECO has assisted the ECC in developing a new technical framework for the harmonised use of the 700 MHz band, and a Long Term Vision for the future use of the UHF band, below 694 MHz. There's also been a lot of constructive collaboration on short range devices and Ultra Wide Band to promote greater worldwide harmonisation, and on the evolving use and efficient management of mobile network codes.

Some interesting work has also been undertaken on the Earth Exploration Satellite Service to help them become even more useful. These important services provide a wealth of valuable information to scientists, policymakers and the public alike, about the state of the Earth and its environment. But these are only some examples of the many ways in which the ECO has helped to keep Europe at the forefront of innovation and competition and you can read more in the pages that follow.

The ECO has also provided a range of specialist support to Com-ITU during the year, most notably in the form of assistance with European preparations for two major ITU events: the World Telecommunication Development Conference and the ITU Plenipotentiary Conference.

In recent years, the ECO has been committed to increasing the efficiency of many of its tools and services. This is an ongoing feature and was once again a key priority area in 2014. Most significantly, a number of improvements have been developed within EFIS, the ECO's Frequency Information System, to enhance its value. Further improvements have also been made to a number of tools which support our electronic working arrangements.

The electronic communications market doesn't stand still and the ECO is continually working on new forward-looking regulatory measures that help ensure Europe is effectively prepared for the new technologies that are rapidly developing in this fast-moving digital era. As we enter 2015, the ECO looks forward to working with the ECC on its new Strategic Plan for 2015-2020 which has a continuing focus on managing, monitoring, and enabling new trends in the electronic communications landscape. We also look forward to working with our many other partners who play such a key role in facilitating so many new and innovating initiatives that benefit us all.

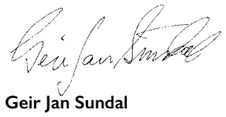
In addition to an office move, 2014 also brought some senior management changes across CEPT. Within the ECC, in March, Sergey Pastukh was appointed Vice Chairman. Sergey took over the ECC Vice Chairmanship from me as I was required to step down having reached the end of my six year term. However, I remain Chairman of the ECO Council until my retirement in May 2015 from the Norwegian Communications Authority and look forward to continuing to participate fully in all of its activities until then.

In March 2014, Thomas Weilacher was appointed as the new Chairman of the ECC's Working Group Frequency Management, succeeding Sergey Pastukh. My Council colleagues and I wish Sergey and Thomas every success in their new roles at the ECC.

In May, Ljubisa Mitevski of the Former Yugoslav Republic of Macedonia (FYROM) was appointed as the new Chairman of CERP, succeeding Ulrich Dammann. As part of this role, Ljubisa also became co-President of CEPT. After six constructive years of leading CERP, I would like to thank Ulrich on behalf of the ECO Council for his valuable contribution. I would also like to welcome Ljubisa to his new leadership roles at CERP and CEPT.

In August, José Carrascosa joined the ECO as its new spectrum expert. José replaces Alexander Gulyaev who left the Office in July having reached the end of his contract period. Alexander has been a major asset to the team and we wish him well for the future. We would also like to welcome José to the ECO.

As our current Director Mark Thomas comes to the end of his eight year fixed term contract in March 2015, my Council colleagues and I would like to take the opportunity to thank him for his outstanding contribution. He will be leaving us with an impressive record on which to build both strategically and operationally and we wish him every success for the future. We spent some time looking for a suitable successor to Mark and have great pleasure in welcoming Per Christensen to the role in April 2015. Per has many years of highly relevant knowledge and experience of working in the electronic communications sector and across CEPT, the ECO Council, the EU and ITU as the Danish representative, making him uniquely placed to drive the ECO further forward at this exciting and challenging time.



Geir Jan Sundal
Chairman of the ECO Council

DIRECTOR'S STATEMENT

I am often asked by friends about my job at the ECO. I explain about radio waves and the need to manage them. A new concept for most, but they all understand. I start by talking about mobile and smart phones, because they all use them. But then I mention only a few of the other ways in which use of the spectrum touches our lives. Even if I could recite the ITU Radio Regulations from start to finish, I guess the room would be empty by the time I finished.

Similarly, when you look at the work we have done at the ECO in the last year, a large part of it is triggered by the demands of wireless broadband. Over the next few years there will be excitement and argument as European countries seek to prepare and auction new frequency ranges for it.

2014 saw no relaxation in this progress, and Europe now has several ranges of frequencies harmonised for wireless broadband. We worked towards arrangements in 2.3 GHz using the LSA (Licensed Shared Access) concept to protect incumbent services where necessary, 1.5 GHz 'supplementary downlink', and cross-border coordination recommendations at several mobile broadband frequencies, not to mention the major Report 224 on a UHF Long term Strategy, identifying the possible scenarios which we need to be ready for as mobile and broadcasting converge. But perhaps the highest profile project is at 700 MHz, where CEPT has set up arrangements not just for mobile broadband, but also for a variety of services which national administrations can choose to facilitate in the centre gap and guard bands. This has been controversial: should the ECC harmonise where decisions on use are particularly national in nature? But smaller administrations may find it useful, and industry finds it useful. It increases the chance that national solutions can be realised instead of remaining paper dreams, and here the ECO works for a common good, enabling national variations.

All this takes a lot of technical analysis work, much of it done or facilitated by the ECO, together with other key contributions we have made. We have also given a lot of attention to everything else that isn't conventional public mobile broadband, even if some of these other matters are also driven by, inspired by, threatened by or displaced by it: in fixed links, in satellites, in short range devices, public protection and disaster relief, and wireless microphones. In parallel, our work on numbering and networks goes hand-in-hand with developments associated with broadband, including mobile – emergency call and number portability in modern and developing networks, the implication of machine-to-machine communications, and so on.

But the ECO's own services and tools also remain vital. In 2014, the EFIS system moved to a much improved presentation and functionality. This was not just with the software: we made a concerted effort to help many administrations to upload more and better data. We really appreciate this joint commitment, which cements the partnership nature of the ECO to the ECC.

For us at the ECO, the move to new premises in Copenhagen in 2014 was a big step, and I am very grateful to my colleagues for their commitment and engagement to this project. It has cut wasted space and our floor space now works harder. It's rather like spectrum management! We operate it more like 'licensed shared access' or 'primary/secondary' uses than true 'licence exempt': the duty cycles are too high for that! Our new layout brings staff closer together, and I hear more conversations, which is at the heart of our identity and our use of colleagues' collective brain power – making it better than the sum of its parts. The move also helps our longer term financial stability, a very important point as administrations need the ECO more than ever, and the need to keep costs down is also as important as ever.

I have been immensely proud to work as the ECO's Director since 2007. I believe strongly in the model of sovereign states working together by consensus, bringing to the wider European level their detailed knowledge and national accountability for the benefit of all those citizens whom they represent. This has been a very rewarding eight years not just for the work we have done, but for the privilege of working with a community of friendly, supportive and intelligent people. This applies within CEPT and outside it, and particularly to the ECO Council which has entrusted me with their Office and backed me throughout my time here. Most particularly, I am grateful to my wonderful colleagues here in the ECO who do all the real work!

I offer my best wishes to Per Christensen as he takes up the Directorship of the ECO; I know that, together with Bruno Espinosa, he will form a great management team in Copenhagen.

Mark Thomas
Director of the ECO

THE ECO: OUR ROLE, OUR TEAM

Our role

The European Communications Office (ECO) provides advice and support to CEPT to help it to develop and deliver its policies and decisions in an effective and transparent way. Our core duties are to provide a European centre of expertise in electronic communications, to contribute to the work of the three CEPT committees and to manage CEPT's day-to-day activities.

As well as providing operational support to CEPT and its three committees (ECC, CERP and Com-ITU), we also have a central duty to maximise the effectiveness of CEPT's Electronic Communications Committee (ECC).

The ECC brings together the 48 CEPT countries to develop common policies and regulations in electronic communications and related applications for Europe, and to provide a focal point for information on spectrum use. Its primary objective is to harmonise the efficient use of the radio spectrum, satellite orbits and numbering resources across Europe. It takes an active role at the international level, preparing common European proposals to represent European interests in the ITU and other international organisations.

In this context, the ECO seeks to complement and support the ECC by:

- improving collaboration across its membership and extending its reach beyond;
- ensuring its communications are open, consistent and effective;
- delivering new initiatives and providing strategic input to its work; and
- helping CEPT's consensus model of working to operate effectively.

Our team

Based in Copenhagen, Denmark, the ECO operates with a small team of 12. Our team is made up of seven experts in the field of electronic communications, recruited from across Europe, and five colleagues from Denmark who are responsible for managing our support and administrative services.

This provides us with a good combination of expertise and experience to help us achieve a high standard in the specialist services we provide. We work effectively as a team collaborating closely to identify how best to maximise our value across our many specialised activities.

First row from left to right: Vibeke Hansen, Stella Lyubchenko, Mark Thomas, Susanne Have, Merrete Wagner.
Second row: José Carrascosa, Freddie McBride, Jean-Philippe Kermoal, Thomas Weber, Bente Pedersen, Bruno Espinosa, Søren Conradsen.

The ECO team and their main areas of responsibility in 2014

Mark Thomas, Director, United Kingdom – will leave organisation on 31 March 2015 at end of contract period

Bruno Espinosa, Deputy Director, France (Spectrum Engineering (SE24), Frequency Management (FM51, FM52, FM55), ECC TG6, EC Coordination)

Alexander Gulyaev, Russian Federation (Regulatory issues, Mobile broadband (ECC PT1), PPDR (FM49), Radio Amateur regulations) – left organisation in July 2014 at end of contract period

Jean-Philippe Kermoal, France (Spectrum Engineering (WG SE, SE19), SEAMCAT, Mobile broadband (ECC PT1), ETSI Coordination, SAT MoU)

Stella Lyubchenko, Russian Federation (Spectrum Engineering (SE7, SE21, SE40), Frequency Management (FM44, FM53), Academic research, WRC preparation)

Freddie McBride, Ireland (Numbering and Networks (WG NaN), Com-ITU)

Thomas Weber, Germany (Frequency Management (WG FM, FM22, FM48, FM54, SRD/MG), EFIS Management)

José Carrascosa, Spain (Spectrum Engineering (SE24, SE7), Broadcast Plan Management) – joined organisation in August 2014

Søren Conradsen (Office IT, Web and mail services, Technical enquiries)

Vibeke Hansen (Webmaster editor, Reception)

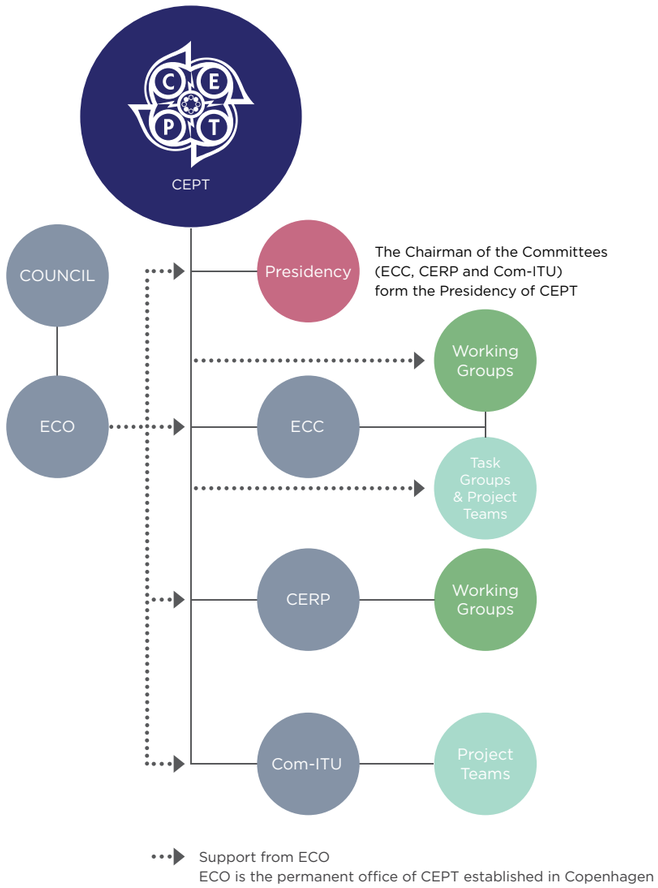
Susanne Have (CEPT, Council, Administration, SAT MoU)

Bente Pedersen (Public consultations, ECC deliverables' library ('DocDB'), EFIS, Administration)

Merrete Wagner (Finance, Premises, Human Resources)

SUPPORTING CEPT

The ECO provides a Secretariat for CEPT (including its Presidency) as an umbrella organisation for its three autonomous business committees.



The Chairmen of the three committees are also co-Presidents of CEPT.

CEPT ECC Electronic Communications Committee	CERP	ComITU
The Electronic Communications Committee (ECC) is responsible for developing common policies and regulations in electronic communications and harmonising spectrum use, as well as European coordination and preparation for meetings in the Radiocommunication Sector of the International Telecommunication Union (ITU). Mr. Eric Fournier, France, is Chairman of the ECC.	The European Committee for Postal Regulation (CERP) is responsible for postal regulation, as well as European coordination and preparation for meetings of the Universal Postal Union (UPU). Mr. Ljubisa Mitevski of the Former Yugoslav Republic of Macedonia (FYROM) is the new Chairman of CERP following his appointment in May 2014.	The Committee for ITU Policy (Com-ITU) is responsible for European coordination and preparation for meetings of the International Telecommunication Union (ITU). Mr. Marcin Krasuski, Poland, is Chairman of Com-ITU.

The CEPT co-presidency works together to deliver greater efficiency through the effective coordination of its work to create a dynamic market in the field of European posts and electronic communications for the benefit of society.

The ECO's support to the Presidency is mainly as a permanent office in the following areas:

1) the day-to-day handling of correspondence into and from the Presidency, with some secretarial and advisory support to coordination between the co-Presidents;
2) the provision and maintenance of content of the parts of the CEPT website which relate to the Presidency and CEPT as a parent organisation for its three committees;
3) the preparation of reports to the membership on the activities of the Presidency and assistance to the Chairmen with other aspects of reporting to the membership;
4) the invoicing and collection of CEPT member financial contributions, used to pay for the ECO's support and such external expenditure as required, namely the costs of Assemblies, and some of the facilities provided for CEPT delegations and international conferences;
5) (as required): preparation of facilities and secretariat support for CEPT Assemblies.

The CEPT Assembly is the supreme body of the organisation, and is convened as required. There was no Assembly meeting in 2014.

HIGHLIGHTS for 2014

OUR EXPERTS ACTIVELY CONTRIBUTED TO
116 MEETINGS
ACROSS DIFFERENT WORKING GROUPS AND RELATED PROJECT TEAMS WITHIN CEPT'S LEADING BUSINESS COMMITTEES: THE ECC AND COM-ITU

45 CEPT COUNTRIES
PUBLISH THEIR NATIONAL DATA ABOUT SPECTRUM USE IN OUR EFIS FREQUENCY INFORMATION SYSTEM, WHICH HAS BEEN VISITED
AROUND 100 000 TIMES IN 2014

WE'VE PUBLISHED
TWO ECC NEWSLETTERS
COVERING, IN EIGHT ARTICLES, A WIDE RANGE OF TOPICS ON SPECTRUM AND NUMBERING MANAGEMENT

OUR SURVEY ON ECC COMMUNICATIONS TRIGGERED RESPONSES FROM
225 STAKEHOLDERS

WITH THE
7 472 DOCUMENTS
UPLOADED IN 2014, OUR MEETING DOCUMENT SERVER HOSTS
31 322 DOCUMENTS

OUR WEBSITE, UNDER CONTINUOUS DEVELOPMENT, HAS BEEN VISITED
1.1 MILLION TIMES IN 2014

OUR EXPERTS HAVE CHAIRED
EIGHT SPECIALIST GROUPS
WHICH SUPPORT THE WORK OF THE ECC AND ITS WORKING GROUPS ON A RANGE OF RADIO SPECTRUM AND ELECTRONIC COMMUNICATIONS ISSUES

WE HAVE CARRIED OUT
40 PUBLIC CONSULTATIONS
COVERING A WIDE RANGE OF TOPICS TO ENHANCE ECC POLICIES

OUR SPECTRUM ENGINEERING ANALYSIS TOOL SEAMCAT WAS DOWNLOADED BY
800 PEOPLE
FROM ALL AROUND THE WORLD

THE ECO DOCUMENT DATABASE, GATHERING
960 PUBLISHED ECC DELIVERABLES,
HAS BEEN VISITED MORE THAN
520 000 TIMES IN 2014

WE'VE HOSTED
36 MEETINGS
ATTRACTING OVER
825 PARTICIPANTS
FROM ALL AROUND EUROPE

WE HAVE ADMINISTERED AND PROCESSED
22 QUESTIONNAIRES
TO SUPPORT ECC POLICY DEVELOPMENT

WE HAVE ORGANISED
FOUR WORKSHOPS
TAILORED TO SPECIALIST AUDIENCES

WE HAVE DELIVERED
15 PRESENTATIONS
AT DIFFERENT KEY EVENTS

SECTION 2

REVIEW OF THE YEAR

2.1 PROVIDING SPECIALIST SUPPORT TO THE CEPT COMMITTEES

The ECO is the European centre of expertise in electronic communications. We contribute extensively to CEPT's Electronic Communications Committee (ECC) and are active across all of its projects and activities.

By providing expertise and a range of specialist support services to the ECC, and its many working groups and project teams, we are able to maximise its effectiveness and enhance its efficiency.

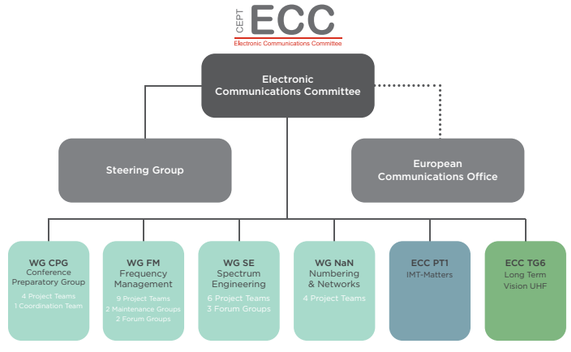
We also provide specialist support to the other CEPT committees where needed, in particular Com-ITU.

Thomas Weber, ECO, right, consulting with the FM49 Chairman, Laurent Bodusseau, France, during the FM49 meeting at the ECO, Copenhagen in September 2014.

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

The principal contribution of ECO experts to the ECC is their continuous activity as embedded members of its various Working Groups, Project Teams and Task Groups. The exact level and balance of our contribution varies from group to group but it is always significant. This involves the participation of ECO experts in almost all the meetings of the ECC and its many subsidiary bodies, and their assistance in the preparation and management of the meetings and the follow-up work thereafter.

Taking into account the structure of the ECC, the ECO's role is quite essential, through its central position, to improve the efficiency of the ECC and streamline its working processes.



ECC Structure (October 2014)

In 2014, ECO colleagues participated in 112 meetings within the ECC, reaching approximately the level of 285 man-days shared mainly between the six international experts from our team, plus the Director.

In some cases, the ECO is invited to provide a Chairman to a Project Team or a Forum Group. In 2014, we chaired six Project Teams and Maintenance Groups which support the work of the ECC and its Working Groups on a range of issues. These include:

- Project Team SE19 (Fixed Services) of the Spectrum Engineering Working Group (WG SE);
- Project Team SE40 (satellite services) of the WG SE;
- Project Team STG responsible for the development of the CEPT compatibility tool, SEAMCAT, within the WG SE;
- SRD Maintenance Group of the Frequency Management Working Group (WG FM) responsible for Short Range Devices (SRD);
- EFIS Maintenance Group responsible for the development of the EFIS tool within WG FM up to May 2014; and
- Project Team FM52 (band 2.3-2.4 GHz) of the WG FM.

We also led the activities of two Forum Groups: the Forum Group on Radio Amateur issues of the WG FM and the WG SE Forum Group responsible for the development of a spectrum engineering reference document.

Our presence is visible across a wide range of operational support services, involving the ECO experts with back-office support from the ECO's general staff, through the implementation in groups of many ECO facilities and services (including the group's use of the website, maintenance of the work programme database, operational running of consultations and questionnaires, and checking approved deliverables before publication).

Although sometimes less visible, the ECO's participation within a group goes well beyond this operational support and has a direct influence on the ECC's work. It ranges from the development of input contributions to meetings, assistance to Chairmen during meetings through the provision of advice, leadership in drafting activities and support in the follow-up work for draft deliverables, as well as the development of summaries of meeting outcomes for publication on the ECC website.

Many specialist groups across the ECC have benefitted from the ECO's input. As described in subsequent sections, the analyses developed by our experts of the responses from public consultations and from questionnaires are essential to the development and completion of ECC deliverables. In addition, as part of our activities in the development of EFIS and SEAMCAT, we are the first to contribute to ECC activities by providing either analysis of spectrum usage and related information within EFIS or by carrying out detailed compatibility and sharing studies within SEAMCAT.

As a result of our involvement in the full range of ECC activities, we are well-placed to act as the liaison point or help with coordination between the various groups. This is an enabler role and we use it to provide efficiency and consistency within the ECC.

This coordination role is also used to help strengthen the relationship within CEPT between the ECC and other committees, in particular Com-ITU and also between the ECC and other organisations such as ETSI, the European Commission and ITU.

In addition to the deliverables adopted by the ECC, the ECO can sometimes develop its own studies intended to complement the ECC's work. This leads to the development of ECO Reports. In 2014, the revision of ECO Report 03 on the licensing of mobile bands was completed after we considered the updated information provided by the CEPT administrations.

ILLUSTRATION OF THE ECO'S IMPACT ON THE DEVELOPMENT OF AN ECC DELIVERABLE – ECC REPORT 225

A good example of the ECO experts' participation and influence in developing ECC Deliverables was the development of ECC Report 225 on 'Establishing Criteria for the Accuracy and Reliability of Caller Location Information in Support of Emergency Services'. The Report in question was developed within WG NaN's Project Team Emergency Services (PT ES) which was established in April 2013 with the sole objective of producing this important deliverable. Primary research and preliminary consultations with a wide range of stakeholders took place in the second half of 2013 to gather evidence as a basis to develop the document. A first stable draft of the Report was developed during the first half of 2014 with the public consultation commencing in August 2014.

There were high expectations from the emergency services community and the European Commission to see the Report delivered by the end of 2014 in order to inform future policy decisions. The ECO expert with responsibility for this project coordinated the analysis of the responses, acted as rapporteur at physical meetings and web meetings and undertook a number of drafting responsibilities in order to finalise the Report. This required the ECO expert to work very closely with the Project Team chairman and the ECO's neutral position was used at times to reach consensus on a number of issues addressed in the report where there was initially a wide divergence of views. The Report was adopted on schedule by WG NaN in October 2014 and the reaction to its findings from the relevant stakeholder groups has been very positive.

ECO BULLETIN

Another illustration of the ECO contribution to the ECC process is the development of bulletins on activities in radio communications in other world regions which are brought to the attention of each ECC Plenary meeting (usually three times per year) and then spread within the relevant sub groups. The main objectives are to inform the ECC about initiatives related to spectrum management in other regions of the world, to enable comparison to be made with the regulatory approach in other regions and to identify issues which could potentially be addressed in Europe in the near future.

In 2014, we produced three bulletins which addressed more than 30 different topics with an emphasis put on reporting about worldwide initiatives on the spectrum use within the UHF band, on activities regarding the 5 GHz frequency range and on regulatory developments relative to direct air-to-ground communications.

Conducting consultations to deliver better policies

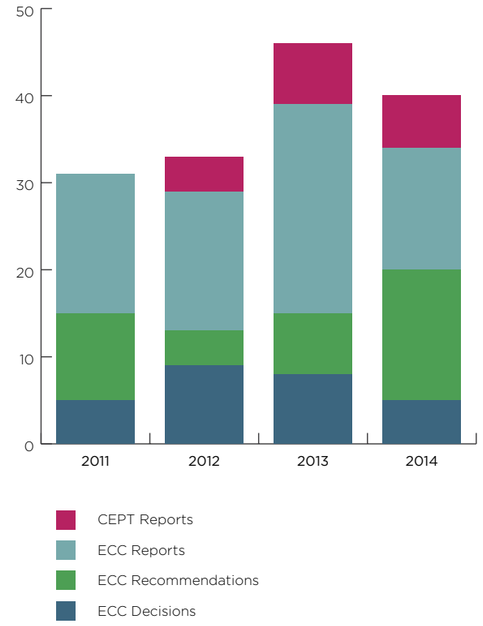
The ECO is responsible for conducting consultations on behalf of the ECC (available at: http://cept.org/ecc/tools-and-services/ecc-consultation) as part of the approval process of ECC deliverables. In addition to bringing together member administrations, our public consultation procedures set out the ways in which other stakeholders can get involved in order to contribute to the improvement of the ECC's policies.

The role of the ECO in the consultation process contains two dimensions:

- Administrative responsibility in launching the consultations and collecting the responses;
- Applying our expertise in performing a detailed analysis of the consultation responses received and submitting recommendations and proposals to the relevant body within the ECC. This includes, when appropriate, the development of a revised version of the draft ECC deliverable under consultation, so that the views expressed by stakeholders are properly reflected. This activity is an essential element of the final approval process of draft ECC deliverables towards their adoption and publication.

In 2014, we carried out 40 public consultations which were used to inform the substance of new or revised ECC deliverables, all of which were then published in the ECO Documentation Database (see page 39). Five of these related to ECC Decisions, 15 to ECC (or ERC) Recommendations, 14 to ECC Reports and six to CEPT Reports in response to mandates from the European Commission.

As a result of these 40 public consultations, we received and processed a total of 203 responses from administrations and other stakeholders. The number of responses triggered by each draft deliverable during a public consultation can significantly differ. Whilst three of them did not lead to any comment, four public consultations resulted in more than 15 replies each, with a maximum of 28.



PROCESSING THE RESPONSES FROM PUBLIC CONSULTATION EXAMPLE OF ECC REPORT 224 ON THE DEVELOPMENT OF A LONG TERM VISION FOR THE UHF BROADCASTING BAND

In June 2013, the ECC agreed to set up a specific task group, TG6, to develop a new long term vision for the use of the UHF broadcasting band in Europe.

As a result of intense activities across five TG6 meetings, gathering more than 60 participants each between October 2013 and May 2014, the draft ECC Report 224 was approved for public consultation by the ECC Plenary meeting in June 2014. Due to the sensitivity of the issue and also taking into account the summer break, the ECC agreed to have an extended period[1] of public consultation for this document from 1 July to 9 September 2014.

At the end of the period, we received and processed a total of 28 responses, 12 of these coming from CEPT administrations and 16 from companies or organisations mainly from the broadcasting, the mobile communications and the wireless microphones sectors. Amongst these replies, three types of comments and proposals were submitted:

- 17 replies contained general comments, which provided views from stakeholders on the future use of the UHF broadcasting band and which expressed their opinion (supportive in most cases) on the work reflected in draft ECC Report 224;
- 18 replies included specific proposals to amend the draft Report, to improve its readability but without altering its substance;
- 11 of the responses submitted by administrations contained updates of national data related to TV use and consumption of audiovisual content to be included in the Report.

In order to assist TG6, the ECO developed three documents which formed the basis of the resolution of comments. This included an overview of the responses, a compilation of all the comments submitted and a revised version of draft ECC Report 224 containing all the change requests and suggestions for compromise text on areas where conflicting proposals had been received. This material helped TG6 in completing the consideration of the outcome of the public consultation and in revising draft ECC Report 224, which was then finally approved by the ECC Plenary in November 2014 and published in the ECO Documentation Database.

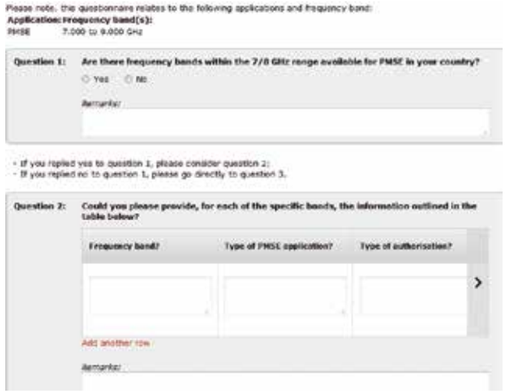
[1] 10 weeks instead of the six weeks minimum period for public consultation

Conducting questionnaires for improved regulatory outcomes

Questionnaires are developed within the framework of ECC working groups and project teams. The ECC uses them to gather information from administrations and other stakeholders to improve the development of ECC deliverables. The ECO assists the relevant groups in the development of the questionnaires and acts as a contact point in order to distribute them and to collect the corresponding responses. Our role in the process also includes the compilation and analysis of the responses in order to assist the groups responsible for their development.

In 2014, the ECO managed 22 questionnaires designed for administrations and, where appropriate, other stakeholders in the 48 CEPT countries.

In order to improve the benefits of the questionnaire and to facilitate the processing of data contained in the replies to the questionnaires, we developed in 2013 a dedicated tool to support electronic questionnaires. The tool is integrated in the CEPT portal and has been designed to meet the needs of the groups developing questionnaires and also to CEPT members and other stakeholders when responding to them.



After some trials at the end of 2013, the electronic questionnaire feature became in 2014 the primary means of issuing questionnaires within the ECC, with 17 out of 22 questionnaires using this tool. These questionnaires were developed and approved by groups within the ECC and converted into the electronic tool by the ECO. We also provide guidance and assistance, when required, to the respondees who are not yet familiar with the tool. Thanks to the benefits of this new feature and the resulting reduction in administrative burden, in 2014 we noted an increase within the ECC of the development of questionnaires. For example, some administrations involved within Working Group Numbering and Networks (WG NaN) of the ECC triggered some questionnaires in order to get feedback from other CEPT administrations on specific matters of interest.

ECC Questionnaires managed by the ECO in 2014	Replies received
Electronic questionnaires	
To collect information about authorisations for the Iridium mobile satellite system and earth stations under control of the Iridium system in CEPT countries	34
Contact points for verification of maritime radio operator's certificates	34
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Developing and maintaining the ECO Frequency Information System (EFIS)

In 2014, we brought significant improvements to EFIS in order to enhance its value and to maintain its position as a key tool for providing information on actual spectrum utilisation. The improvements are also related to the role played by EFIS in the European Union's spectrum inventory, which is part of the programme of initiatives set out in the EU Radio Spectrum Policy Programme (RSPP).

The EFIS database was visited about 100 000 times in 2014 by the interested public (e.g. frequency managers in industry, operators, administrations, test houses, sellers as well as interested users). The database is also attracting more and more users from outside of Europe.

What is EFIS?

The ECO Frequency Information System (EFIS), launched in 2002, is a tool which provides a valuable service to all those with an interest in spectrum utilisation.

Since its launch in 2002, EFIS has expanded considerably. 45 out of the 48 CEPT administrations now publish data in EFIS, the scope of the content is wider and there are many more features and facilities.

With EFIS, users can search for and compare spectrum use across Europe as well as related information such as CEPT activities, radio interface specifications and other national or international regulations.

In 2007, EFIS became the 'European Spectrum Information Portal', fulfilling EC Decision 2007/344/EC on harmonised availability of information regarding spectrum use in the European Union Member States. EFIS also plays a key role in the European Union's spectrum inventory, which is part of the programme of initiatives set out in the EU Radio Spectrum Policy Programme (RSPP).

EFIS is available to the public on the Internet either via the ECO website or directly under www.efis.dk.

SUPPORTING CEPT ADMINISTRATIONS IN PROVIDING THEIR NATIONAL DATA IN EFIS

The ECO supports CEPT administrations on a daily basis when updating or adding national data in EFIS on a demand basis.

This support is also offered to EU administrations with regard to their duties to provide information for spectrum inventory purposes. In this context, the ECO has continued some liaison work with the Commission's Joint Research Centre which the Commission has tasked with developing an electronic analysis tool for the inventory. In particular, the ECO has been providing data from EFIS to the Joint Research Centre.

GRAPHICAL VISUALISATION OF NATIONAL TABLE OF FREQUENCY ALLOCATIONS AND APPLICATIONS

In 2014, the EFIS web-design and graphical user interface was completely renovated and modernised.

Graphical visualisations are available for frequency allocations and applications.

The graphical visualisation tool can also be separately used outside the EFIS database on other webpages with the allocation and application terminology translated into different national languages. Administrations can generate pictures or use a link to the tool for parts of their national frequency allocations or applications tables and export them or show them on their own webpages.

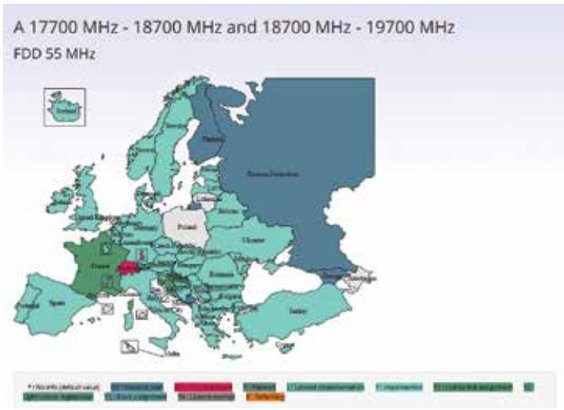
USE OF EFIS AS A TOOL TO GENERATE REPORTS AND COLLECT INFORMATION ON SPECTRUM USAGE

The EFIS project has developed a report generation feature, which facilitates the preparation of consolidated documents reflecting spectrum usage, national implementation and the status information. The feature, initially implemented in 2013, has been significantly extended in 2014.
The generation of ERC Report 25 (the European Common Allocation Table) has been improved.

In addition, this feature allowed the inclusion in EFIS of key deliverables containing information about spectrum use in Europe and related national implementations, such as ECO Report 03 on licensing of mobile bands, ERC Recommendation 70-03 on Short Range Devices and various Recommendations on Fixed Service channelling arrangements. Corresponding graphical visualisations are now also available from EFIS, some of which are illustrated below.

Graphical visualisation of information contained in ECO Report 03 on licensing of mobile bands.

The spectrum inventory information in EFIS has also been improved for some other radio service and application fields such as on some satellite services (in collaboration with the European Satellite Operators' Association) and professional mobile radio services. The ECO also keeps up-to-date the information on new spectrum utilisation proposals at various stages as defined in the ECC-ETSI collaboration process. This provides users with a complete overview on allocations, applications, documentation, and further information for specific frequencies and radio services and applications via the EFIS database.



Graphical visualisation of national implementation of fixed service channelling arrangements.

Developing the SEAMCAT spectrum analysis tool to match users' needs

SEAMCAT in brief

SEAMCAT (Spectrum Engineering Advanced Monte Carlo Analysis Tool) is a software tool based on the Monte-Carlo simulation method which permits statistical modelling of different radio interference situations. It has been developed to deal with a diversity of complex spectrum engineering and radio compatibility problems. It is developed and enhanced by the ECO, in cooperation with the SEAMCAT Technical Group (STG) an entity of the ECC Working Group Spectrum Engineering (WG SE).

It is a generic compatibility analysis tool which is neither system-specific nor service-specific. This enables it to address any interference scenario regardless of the type of victim receiver and interfering radio systems.

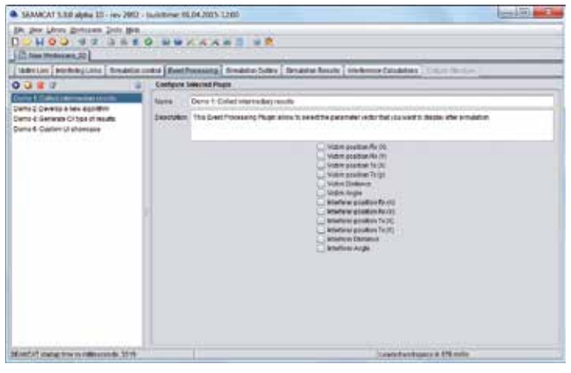
The tool is designed for systems, in particular terrestrial systems, that operate in shared or adjacent frequency bands. It can also evaluate radio equipment parameters (e.g. transmitter emission masks, receiver sensitivity and density of interfering transmitters) where all interference mechanisms can be taken into account.

The tool is updated on a regular basis and is downloadable free of charge at: www.seamcat.org. The ECO also provides an online handbook facility which is regularly updated at: www.seamcat.org/xwiki

In 2014, SEAMCAT development activities focused on the finalisation of the development of the Event Processing Plugin (EPP). The EPP is a very simple but powerful concept that each of the produced event results can be 'processed' by a plugin in the sense that it can make additional computation based on the event result and scenario settings for all modules. This means that the black box principle is no longer applicable as any intermediary results can be extracted. Furthermore, a new set of output types have been defined to allow the output vectors to be directly accessible from the SEAMCAT results interface.

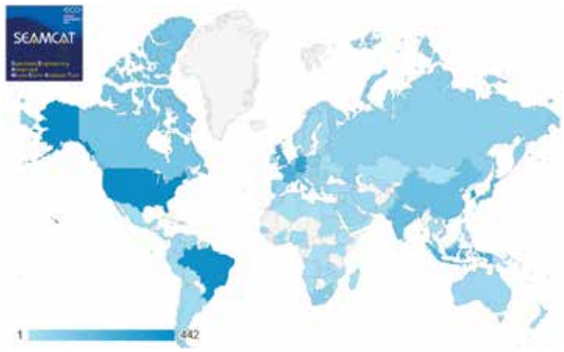
Some activities were dedicated to updating the source in order to bring consistency to the architecture of various modules in order to support in the long term the application of SEAMCAT for new radiocommunication system types.

In addition to the regular maintenance, SEAMCAT was also further developed with new technical features to respond to the needs of the relevant ECC groups.



A survey on the number of SEAMCAT downloads indicated that in 2014 around 800 people downloaded the software from both CEPT and non-CEPT countries.

The SEAMCAT webpage (www.seamcat.org) was also extensively visited worldwide in 2014.



Overview of the visit per country to the SEAMCAT website page for 2014 (www.seamcat.org).

The ECO organises public workshops on SEAMCAT, which are available to administrations, industry and universities for free. Details on our 2014 workshops are set out on page 29.

Providing a central source of specialist information

In order to respond to some needs identified within the ECC by CEPT administrations and other stakeholders, the ECO works together to provide, through dedicated pages on the ECC website, more accurate and up-to-date operational information in several areas, including:

- **Programme making and special events applications (PMSE):** The ECO has gathered information collected within the ECC on the use of spectrum for PMSE across the CEPT countries, including the regulatory and technical conditions. A list of contact points in CEPT administrations concerning PMSE related activities is maintained on a regular basis. This should provide assistance to the PMSE industry and users in getting access to the relevant information on the conditions of use of spectrum for PMSE across the CEPT countries. The page also summarises the various spectrum management activities related to PMSE.
- **Short Range Devices (SRD):** This page provides information on SRD, such as the applicable regulations in Europe and the relevant activities within the ECC. It also contains the indicative list of equipment sub-classes in accordance with the R&TTE Directive.
- **Satellite regulatory information:** We have updated the information regarding national satellite regulatory information and contact points, as well as information about the regulation for Earth stations onboard aircrafts (AES), onboard vessels (ESV) and on Mobile Platforms (ESOMPs).
- **Radio Amateur:** The ECO leads the activities of the ECC Frequency Management Working Group (WG FM) on amateur radio issues. We also act as the focal point with regard to the CEPT regulatory framework on amateur radio aspects, such as certificates and licences. In this context, in December 2014, we updated in cooperation with the International Amateur Radio Union (IARU) Region 1 Frequently Asked Questions (FAQs) related to Radio Amateur Regulations in CEPT. The FAQs are intended to help administrations in the consistent interpretation of CEPT radio amateur regulations and radio amateurs who intend to visit another country under the CEPT radio amateur regulations.
- **Maritime communications:** We have collected and published a list of national contact points for the verification of maritime radio operator's certificates. We also maintain the information on the main CEPT documents related to maritime communications and on national usage in CEPT for some maritime services such as on the usage of Personal Locator Beacons (PLBs), Emergency Position-Indicating Radio Beacons (EPIRB), UHF frequencies authorised in CEPT countries for Maritime Communications.
- **Numbering & Networks:** Numbering, naming and addressing schemes are managed by administrations at the national level in accordance with national and international legislation and agreements. The ECC and the ECO have been actively involved in assisting national administrations to address numbering and network policy issues in order to facilitate seamless communication for business and residential users worldwide. In that regard, we have updated a list of relevant documents and links related to numbering, including the links providing access to the numbering pages of the CEPT countries' national regulators.

Delegations of CEPT member states attending the ITU PP-14 conference.

Providing specialist support to Com-ITU

2014 has been a very busy and productive year for Com-ITU and thus, for the ECO's support to the Committee.

Our main area of involvement was in the context of European preparations for two major ITU events held in 2014: the World Telecommunication Development Conference (WTDC-14, Dubai, United Arab Emirates 30 March – 10 April 2014) and the ITU Plenipotentiary Conference (PP-14, Busan, Republic of Korea, 20 October – 7 November 2014).

We have in particular supported Com-ITU in the development, the streamlining and the processing of 11 European Common Proposals (ECPs) to WTDC-14 and 18 ECPs to PP-14. We have also helped in the cooperation between Com-ITU and the ECC for the identification of issues of common interest in the context of its preparation for PP-14.

In order to inform the work of Com-ITU fully in its preparations for PP-14, the ECO developed a document which provided information on the preparations taking place within the other regional organisations and which contained in particular the main proposals from the different regions. This document was used by Com-ITU as a reference for the development of the CEPT brief to PP-14.

During the WTDC-14 and PP-14, we also provided operational support to Com-ITU with the provision of the messaging/chat system implemented by the ECO and already used during previous ITU conferences in order to support CEPT coordination during these events.

We have also continued our monitoring of ITU-T (standardisation sector of the ITU) study groups' activities relevant to Com-ITU and we have participated in Com-ITU discussions related to ITU-T.

In addition, the Committee has, under our guidance, further developed its use of the website facilities offered by the CEPT portal and of the electronic working methods developed by the ECO to a level similar to the ECC.

2.2 MEETING THE OBJECTIVES OF THE ECC STRATEGIC PLAN

A principal driver of the ECO activities is the ECC's five year strategic plan, first published in March 2010. This outlines the policy goals, the key challenges and priorities which constitute the framework for the ECC's activities during the period 2010-2015 towards developing its unique position in the field of electronic communications.

Whilst the ECO contributes to the overall fulfilment of the ECC strategic plan through its specialist support as described in the previous section, it has been explicitly assigned some particular tasks in the context of the ECC's role as focal point in Europe on electronic communications and of its cooperation with other bodies.

Here we report on our actions in four specific areas:

- Development of electronic newsletters and communications initiatives to promote the ECC's achievements;
- Promotion of exchange of views through the organisation of workshops on thematic issues and the development of training sessions to increase stakeholders' awareness of ECC activities;
- Support to the ECC through continuous cooperation with other external organisations, academia and research programmes;
- Increase the visibility of the ECC through presentations at relevant workshops and events.

Promoting ECC deliverables and activities through electronic newsletters and communications initiatives

In 2014, the ECO has put significant efforts into consolidating the ECC's communications progressively set up since 2011.

The publication of two comprehensive ECC electronic newsletters has been the main element of this programme, supported by more routine tasks such as the publication on our website of news highlighting the main results of ECC meetings and of monthly summaries of activities within the ECC Working Groups, Project Teams and Task Groups.

In order to assess the ECC communications programme, in Autumn 2014 we issued a survey to find out the ways in which the ECC's key stakeholders like to keep up-to-date with spectrum and electronic communications news and to gain an insight on how our communications initiatives are being received.

In 2014, the ECO developed, with the support of officials from the ECC, coordinated and distributed two ECC electronic newsletters in April and October with the view to increase the visibility of the ECC's activities and to highlight some of the important issues being considered:

- The April 2014 edition addressed two areas of ECC activities related to broadband applications with one article setting the scene for the upcoming work looking at additional spectrum for broadband use on Wi-Fi and a second one describing the results of the regulatory update and relevant technical work for the 3400-3800 MHz 'mobile' band.

  In a further article, the ECO Director and Deputy Director assessed the challenges and opportunities faced by the Programme Making and Special Events (PMSE) sector with regard to the availability of spectrum for wireless microphones.

- In the October 2014 edition, the ECO authored three articles about the UHF frequency band 470-790 MHz. The first one was an overview of the relevant activities, highlighting the factors which make this part of the spectrum very attractive. The second article elaborated further on the outcome of the studies developing the technical conditions for the use of the 700 MHz range (694 to 790 MHz) for mobile broadband. The third part of the package summarised the findings of ECC Task Group 6 set up to develop a long term vision for the UHF TV band and especially to create a better understanding of the technical possibilities which could drive the future use of the 470 to 694 MHz band.

  We also developed, with the assistance of some other experts, a paper highlighting the benefits of the Earth Exploration Satellite Service (EESS) and describing the ECC's initiatives on spectrum for these applications.

  Covering the numbering side of the ECC, we contributed to an article on the efficient management of Mobile Network Codes which introduces the recent findings documented in ECC Report 212 on 'Evolution in the Use of E.212 Mobile Network Codes'.

The newsletters were distributed electronically to some 3845 stakeholders and released on the ECC website.

You can subscribe to the ECC e-Newsletter for free from the following link: http://www.cept.org/ecc/who-we-are/ecc-newsletters. An online archive of past copies is also available here.


ECC NEWSLETTER

October 2014 Articles

The UHF Battleground

Ready when needed - mobile broadband at 700 MHz

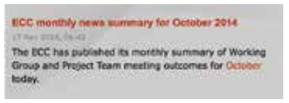
Long term vision for the UHF TV band

Earth Exploration Satellite Service: learning about our planet

Efficient Management of Mobile Network Codes and the need to keep Europe at the forefront of innovation and competition

The UHF Battleground: how to plan for the future when you can't really predict it

In 2014, we also maintained our efforts in publishing monthly news summaries on the ECC website. These bulletins provide a round up of the main outcomes of ECC Working Group and Project Team meetings and events which have taken place each month. They are developed from the contributions of the ECO's experts having responsibility for the various groups. Through the year, 11 monthly summaries have been published in the news area of the ECC main page (http://www.cept.org/ecc).


ECC monthly news summary for October 2014

The ECC has published its monthly summary of Working Group and Project Team meeting outcomes for October today.

We have also published news releases covering a number of significant topics such as: the summary of the outcome from the three ECC Plenary meetings held in 2014; the launching of public consultations on the draft Report on a long-term vision for the UHF broadcasting band and on a draft Decision for the harmonised use of the 700 MHz range for wireless broadband in Europe; the publication of an ECC Statement on Spectrum Monitoring as a tool for Spectrum Management; invitations to and details of the workshops organised within the ECC; and on the publication in December 2014 of the new ECC Strategic Plan for the period 2015-2020.

Following a strategy set up in 2013, we have maintained our limited but focussed activity on Twitter. The account, @CEPT_ECC, is managed by the ECO and is used to communicate information about the latest developments across the range of ECC activities, to spread the publication of ECC newsletters and press releases and to promote upcoming meetings, consultations, and workshops. Under this low-key approach, 57 tweets have been issued in 2014 and the account has 140 followers.

ECO SURVEY ON ECC COMMUNICATIONS

The ECO carried out a short communications survey in September and October 2014 to learn more about the ways in which its key stakeholders like to receive spectrum and ECC news updates and their attitudes towards the ECC website.

A paper questionnaire was issued to visitors attending meetings at the ECO in September. This was followed by an online questionnaire sent via email in October.

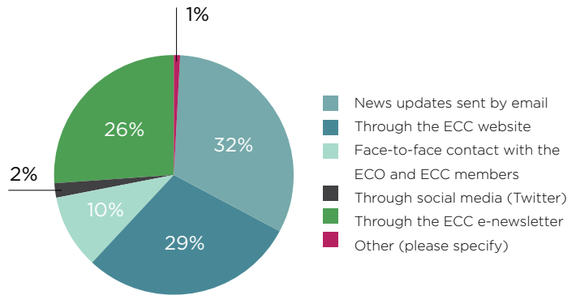
A total of 225 stakeholders responded to the survey – of these 98 completed the paper questionnaire and 127 completed the online questionnaire.

The survey focused on gathering feedback in four specific areas:

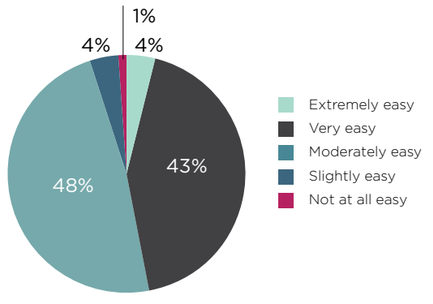
- Preferred sources of news media for general spectrum and telecoms news updates
- Preferred ways of keeping up-to-date with ECC policy news
- Experiences with the navigation of the ECC website and attitudes towards the look and feel
- Suggestions on ways to improve

Here are a few results from the survey:

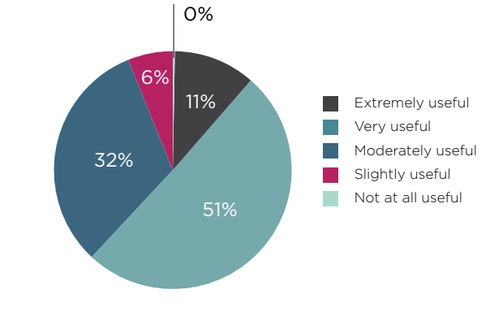
Q2: What is your preferred way of keeping in touch with ECC policy news?



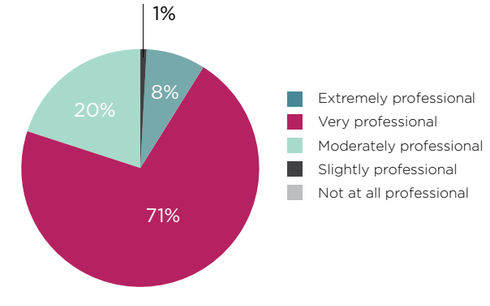
Q8: When visiting the ECC website, how easy is it to find the information you are looking for?



Q7: If you receive the ECC e-Newsletter, how useful is it in keeping you informed about ECC policy work?



Q9: How professional is the look and feel of the ECC website?



As part of the survey, a wide range of comments were received about ways to improve. These essentially fall into three categories: more frequent communications, use of customised mailing lists, and various improvements to the ECC website. These results will be further considered by the ECO.

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

In 2014, the ECO supported the ECC in the organisation of two workshops for some of our specialist audiences dealing with spectrum monitoring and the evolution in the use of E.212 Mobile Network Codes respectively.
We have also developed one workshop on European spectrum management and numbering specifically designed for newcomers in the area of regulations and one training session for beginners on SEAMCAT. Some details on these events are given below. Additional information on the workshops is available at: http://www.cept.org/ecc/tools-and-services/cept-workshops.

CEPT WORKSHOP ON HOW MEASUREMENT OF SPECTRUM OCCUPANCY CAN HELP SPECTRUM MANAGEMENT
Mainz, Germany, 15 January 2014

The ECO coordinated this workshop organised by the ECC. The event was hosted by the German administration in the BNetzA premises in Mainz and was attended by 68 participants.

The motivation for the workshop was the growing interest in the role of spectrum monitoring as a possible indicator of potential opportunities for more efficient use of the spectrum. The workshop offered the opportunity to discuss with all interested parties from administrations and companies the state-of-the-art with spectrum monitoring in this role, and how much it could potentially help frequency regulators. A series of presentations set out the experiences of a range of public and private sector bodies which run and develop measurement campaigns. This highlighted the challenges and opportunities of drawing meaningful conclusions. The workshop was followed by further analysis carried out within the ECC's spectrum monitoring project team (PT FM22), which then led to the publication in March 2014 of a statement approved by the ECC on the topic.

In addition to our involvement in the organisation of the workshop and in the follow-up analysis, one of our experts also contributed to the event with a presentation made by Thomas Weber on the assessment of sensing approaches to support cognitive radio solutions. Thomas Weber was also one of the panellists during the closing session, led by the ECC Chairman, which set up guidelines for further work.

Discussion panel during the closing session of the CEPT workshop on spectrum occupancy.

The ECC Chairman addressing the spectrum occupancy workshop during the panel session.

The WG NaN Chairman, Johannes Vallesverd (middle), introducing the workshop on the use of E.212 mobile network codes.

WG NAN WORKSHOP ON THE EVOLUTION IN THE USE OF E.212 MOBILE NETWORK CODES
Copenhagen, Denmark, 4 March 2014

As part of its activities on the development of ECC Report 212 entitled 'Evolution in the use of E.212 Mobile Network Codes', ECC Working Group Numbering and Networks (WG NaN) agreed to hold a public workshop to further inform its views on the subject prior to moving to the final adoption stage of the report. The workshop was hosted by the Danish Business Authority in Copenhagen and was attended by 26 participants representing national regulatory authorities, ministries, fixed and mobile operators, consultants and representative bodies.

The workshop provided the opportunity for a very useful exchange of views on issues addressed in the Report and helped the finalisation of the work.

The ECO was heavily involved in the preparation of the workshop.
In addition, our expert in numbering, Freddie McBride, provided two presentations describing the scope of ECC Report 212 and summarising the responses from the public consultation respectively. He also developed a summary of the workshop, which was then used in the WG NaN follow-up activities.

THIRD CEPT WORKSHOP ON EUROPEAN SPECTRUM MANAGEMENT AND NUMBERING
ECO, Copenhagen, Denmark, 4 June 2014

Following the positive response to our initiative started in 2012 and 2013, the ECO organised a third workshop on European Spectrum Management and Numbering. It was specifically designed for newcomers in the area of electronic communications, both working for national regulators and in the industry, as well as for those who would like to broaden their knowledge of modern regulation of spectrum management and numbering in Europe.

The workshop was attended by 25 participants. Presentations were delivered by ECO experts and by Michael Sharpe (ETSI Director of Spectrum and Equipment Regulation). They addressed the following areas:

- CEPT-ECC-ECO, who we are, what we do
- European Framework for the use of spectrum – ECC, EC, ETSI : who does what?
- Status of the European preparation for the World Radiocommunication Conference 2015
- Introduction to the ECC's activities on Numbering and Networks
- Description of some trends and principles in spectrum management
- ECO tools and softwares: overview of EFIS, SEAMCAT and the CEPT portal.

SEAMCAT TRAINING SESSION
ECO, Copenhagen, Denmark, 3 June 2014

In order to increase the extent of use of it spectrum engineering analysis tool SEAMCAT, the ECO organised a training session specifically designed for beginners. The programme included presentations on the basics of SEAMCAT and its key functionalities as well as various exercises and interactive tutorials to get participants more familiar with the tool.

Supporting the ECC through continuous cooperation with other organisations

The ECO plays a fundamental role in helping the ECC extend its reach beyond CEPT member administrations. During the year, we continued to build and enhance effective business relationships with a wide range of stakeholders through our active participation in a set of regular meetings and events, and as the first point of contact for relevant ECC activities.

ETSI

ETSI is an essential partner of the ECC and the ECO plays a key role in this cooperation through a diverse range of activities.

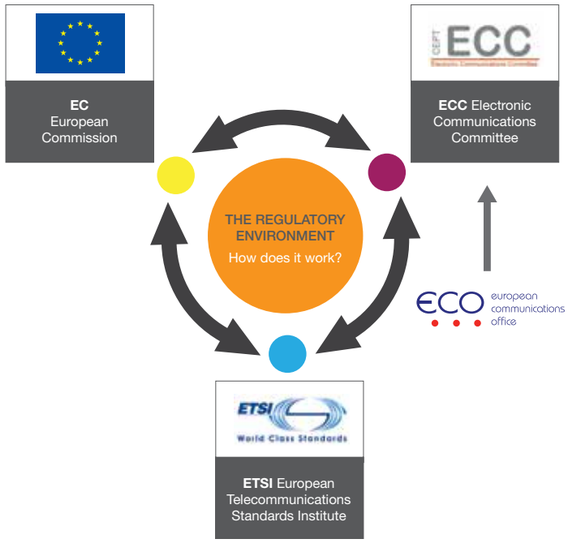
We develop and maintain, on the ECC website, a dedicated page (http://www.cept.org/ecc/who-we-are/ecc-and-etsi) describing how these two organisations work together, containing tools to strengthen the synergy between them and highlighting relevant information related to ETSI.

In 2014, we attended the three meetings of the ETSI TC ERM, which is responsible for ETSI's interface with the ECC on radio matters. The main goal of this participation is to contribute to the consistency between the ECC and ETSI activities and to promote in ETSI an awareness of the ECC's outputs and requirements, and vice versa. At these meetings, we have provided information documents on the approval of ECC deliverables either for publication or for public consultation.

We updated and published on the ECC website two tools devoted to strengthening the cooperation between the ECC and ETSI: one is a matrix which indicates the relationship between specific groups respectively within the ECC and ETSI and the other is a spreadsheet listing the ETSI Harmonised Standards under development which relate to approved ECC deliverables or ongoing ECC activities.

We also worked with the ETSI secretariat to ensure that the information related to ETSI (System Reference Documents under development and relevant ETSI Harmonised Standards) in our EFIS tool was up-to-date.

In addition, the ECO follows ETSI standardisation activities related to next generation networks, their infrastructure, security and identification. For this purpose, we participate in the ETSI Project End-to-End Network Architectures (EP E2NA) and its Technical Committee Network Technologies (TC NTECH). EP E2NA and TC NTECH are responsible for inter-alia developing a standard in response to a mandate from the European Commission on caller location information in support of emergency calls from IP-based networks which is very relevant to the activities of ECC Working Group Numbering and Networks. We also delivered a presentation to the NTECH meeting in December 2014 on relevant activities of the Working Group and its Project Teams. This helped in identifying a number of common areas of interest and addressed issues that could impact on future standardisation work.



EUROPEAN COMMISSION

The ECO continued its task of providing regular support to the ECC Chairman as observer at the Radio Spectrum Committee (RSC) of the European Commission and at the Radio Spectrum Policy Group (RSPG).

In particular, the ECO prepared the summary report of ECC activity for each RSC meeting. We have also presented to the RSC meeting in July 2014 an update on the new developments in EFIS and how the tool fulfils the requirements set up in the framework of the spectrum inventory.

We attended many events organised by the European Commission and, more significantly, as reported on pages 34 and 35, we have delivered presentations to three workshops organised by the European Commission in order to promote ECC activities and deliverables.

We also developed some working relationships with the Joint Research Centre (JRC), the European Commission's in-house science service, on issues of mutual interest such as the spectrum inventory and spectrum compatibility studies. This resulted in a closer involvement of the JRC in ECC activities.

ADCO R&TTE AND R&TTE CA

Following the agreement of June 2010 between the ECC, ETSI, the Administrative Cooperation in R&TTE (ADCO R&TTE reporting to TCAM) and the R&TTE Compliance Association (R&TTE CA) to strengthen the inter-organisational cooperation in the R&TTE equipment compliance area, the ECO continued in 2014 to provide the interface for bridging the relevant processes in the ECC and other organisations. In particular, we provided updates to both ADCO R&TTE and R&TTE CA on the ECC's regulatory activities.

Our involvement in ADCO R&TTE, the major group of the European regulators in the R&TTE compliance area, has increased in 2014 due to the growing number of topics of mutual interest between ADCO and the ECC. We have in particular presented the ECC's views and positions, when appropriate, with regard to ADCO's market surveillance campaigns and we have brought to ADCO's attention relevant information on ECC activities on interference statistics and on EFIS.

ITU

As part of our support to the ECC, we have also been involved in relevant ITU-R (Radiocommunication Sector) and ITU-T (Telecommunication Standardisation Sector) study groups. This provides us with the opportunity to promote European achievements to other regions of the world and also to increase our awareness of the activities and developments outside of Europe, and to enlarge in a significant way our range of valuable contacts.

Within ITU-R, we participated in the spectrum management working groups (WP 1B, and SG 1), mainly to support the ECC's work on short range devices (SRD) and to promote the EFIS and SEAMCAT tools. Based on a CEPT proposal, WP 1B agreed to set up a correspondence group on SRD classification, chaired by Thomas Weber, our expert on SRD issues, as illustrated by the presentation to WP 1B made by Thomas Weber on this topic. The target is to harmonise the terminology for SRD applications in the ITU-R as a pre-requisite for further regional/global harmonisation efforts.

Thomas Weber, in his capacity as Chairman of the ECC SRD Maintenance Group, was also deeply involved in the organisation of an ITU-R workshop, held on 3 June 2014, on SRD and Ultra Wide Band (UWB). He delivered a presentation to the workshop on the global harmonisation possibilities of SRDs in the UHF bands.

We also contributed to the work of the ECC WG NaN (Numbering and Networks) through our participation in ITU-T SG2, the lead study group for service definition, numbering and routing of electronic communications traffic. We were actively involved in amending ITU-T Recommendation E.212 with proposals submitted on behalf of the ECC Working Group NaN based on the conclusions of the recent ECC Report 212.

Freddie McBride, also spoke at a workshop organised on 2 June 2014 by ITU-T SG2 on Caller ID Spoofing. He reported on the latest ECC developments on Caller Location Identification.

OTHER ORGANISATIONS

In 2014, we continued our cooperation with various organisations, such as the International Amateur Radio Union (IARU Region 1) and the International Railways Union (UIC), in order to identify the issues of mutual interest between these communities and the ECC and to trigger their active involvement in some areas dealt with by the ECC.

ACTING AS A FOCAL POINT FOR THE EXCHANGE BETWEEN THE ECC AND THE OTHER REGIONAL ORGANISATIONS

In the context of preparations for World Radiocommunication Conferences (WRC), the exchanges between the various regional organisations have become more and more prominent. Since 2013, the ECO has acted as a permanent contact between CEPT and other regional organisations ensuring that the ECC Conference Preparatory Group (CPG) duly receives information about the course of preparations for WRC 2015 from the other five regional organisations.

This action is also enabling official participation from CEPT and the other regional organisations to the various relevant meetings. When approaching the upcoming Conference Preparatory Meeting (CPM) and WRC, focus will be shifted to organisation of bilateral meetings. As part of the routine process, the ECO is compiling the presentations, sometimes in multiple languages, providing CEPT positions to other regional organisations after each meeting of either CPG or its Project Teams depending on the schedule of regional preparatory meetings. Being part of the CPG management team, the ECO also has an active role in the preparation process between and during the meetings.

OVERVIEW OF ECO INITIATIVES SINCE 2010 TO STRENGTHEN THE COLLABORATION WITH ACADEMIA AND RESEARCH PROJECTS

One of the objectives assigned to the ECO by the ECC's Strategic Plan for the period 2010-2015 was to develop relations with universities and relevant scientific institutes that would be willing to do research in spectrum management and to give advice to research institutes on issues to investigate or on specific research and to explore relationships with European research programmes. As well as benefitting from the creativity which academia can bring into the field of spectrum management, it was felt that early guidance to the research community about the regulatory environment would make the outcomes of academic research more easily applicable in practice.

Within this framework, the first step has been to establish a number of contacts with relevant research institutions and projects. This has been done through direct contacts with those institutions and through the participation of ECO experts in a number of events since 2010 to establish a range of new contacts. We also created a web page at www.cept.org/ecc/topics/research-activity which charts a range of research projects which may be of relevance to the ECC's activities.

In 2011, the ECO initiated the next step of this activity by inviting relevant contacts from universities/projects to discuss with us areas of their work where closer cooperation might be of mutual benefit. With the guidance of the ECC, the ECO categorised all projects into three areas and identified a number of projects with which closer cooperation would be developed. This led for example to the active involvement of the ECO during the period 2010-2011 in the COST-TERRA project whose objective was to identify a comprehensive framework of radio spectrum access rules for Cognitive Radio and Software Defined Radio. We have also been part of the external advisory board of two EU FP7 projects, namely BeFEMTO (active in 2010-2012 to assess LTE-Advanced Femtocells as a key enabler for achieving new radio access enhancements) and ABSOLUTE (the project aims to define a flexible platform based on LTE-Advanced solutions for emergency communications).

After consultation with the ECC and its constituent bodies, we then decided from 2012 to focus on five prominent areas of research activity which in the short term could influence the ECC work programme (namely: Ultra Wide Band, Wireless Machine-to-Machine communications, cognitive radio, IMT-Advanced systems, smart metering/smart grids). Since then, we have contributed to this effort by increasing our participation in events organised by research projects. In this context, we have provided some presentations targeting academia and research projects such as, in 2014, the Pre-FIA FP7 workshop, the EMC Europe Symposium 2014, and the 56th ELMAR International Symposium (see pages 33 and 34).

This process has led to positive results illustrated by the increased and more direct involvement from academia and research projects into the activities of the ECC and many of its Project Teams in recent years.
This commitment will need to be maintained following the ECC's new undertaking within its strategic plan for the period 2015-2020 to strengthen further its collaboration with academia and research programmes.

Increasing the visibility of the ECC through presentations at events

During the year, ECO experts have continued to be active during key events in order to share information and increase awareness and understanding about the ECC's areas of expertise, its policies and regulations.

WORKSHOP ON LICENSED SHARED ACCESS
Rome, Italy, 14 February 2014

The Italian Ministry of Economic Development invited European experts to be informed about the latest developments related to the Licensed Shared Access (LSA) approach as a means to promote shared use of the spectrum.

Bruno Espinosa, as chairman of the Project Team FM52, reported on the activities surrounding the implementation of LSA in the 2.3-2.4 GHz band. The presentation was followed by a discussion involving the relevant stakeholders on the opportunities for LSA implementation in Italy.

CRITICAL COMMUNICATIONS EUROPE CONFERENCE
Amsterdam, the Netherlands, 10-12 March 2014

This conference belongs to a series of events which have been organised for 17 years to learn, debate and discuss the future of Critical Communications.

Alexander Gulyaev spoke at the conference about the activities within the ECC towards the identification of a European harmonised solution for Broadband Public Protection and Disaster Relief (PPDR) applications.

EUROPEAN COMMISSION FP7 WORKSHOP: PRE-FIA FUTURE INTERNET ASSEMBLY
Athens, Greece, 17 March 2014

A series of workshops was organised by a group of FP7 research projects co-located with the Future Internet Assembly co-organised and supported by the European Commission.

During a session on 'Radio Access and Spectrum innovations for 5G', Alexander Gulyaev presented remotely on behalf of CEPT, reporting on the European preparation work for the World Radiocommunication Conference 2015 concerning additional spectrum allocation for the mobile service.

SATELLITE NAVIGATION SUMMIT
Munich, Germany, 25-27 March 2014

This event is a conference with global impact featuring invited high-ranking worldwide speakers from industry, science and governments dealing with the directions of satellite navigation now and in the future.

Thomas Weber reported on the regulatory framework applicable to global navigation satellite system (GNSS) repeaters and pseudolites and about the findings from CEPT interference statistics related to GNSS repeaters and jammers.

EUROPEAN EMERGENCY NUMBER ASSOCIATION (EENA) ANNUAL CONFERENCE
Warsaw, Poland, 2-4 April 2014

Each year, the EENA Conference gathers European emergency services, public authorities and industry representatives in order to stimulate networking and sharing of best practices between the relevant stakeholders.

Freddie McBride, the ECO expert on numbering issues, provided an update on the ECC activities on the accuracy and reliability of Caller Location Information (CLI) in support of emergency services.

Freddie McBride speaking at the EENA Conference.

Stella Lyubchenko speaking at the EMC Europe Symposium.

EMC EUROPE SYMPOSIUM 2014
Gothenburg, Sweden, 1-4 September 2014

EMC Europe is the leading EMC Conference in Europe which this year was held in Gothenburg, Sweden. The ECO was invited to this event for the fifth consecutive year to contribute to a session dedicated to 'Models for System-Level EMC Analysis'.

Our expert, Stella Lyubchenko, made a presentation providing examples of studies performed within the ECC using our spectrum engineering analysis tool SEAMCAT as an example of a relevant modelling tool for system-level EMC analysis.

56TH ELMAR INTERNATIONAL SYMPOSIUM
Zadar, Croatia, 10-12 September 2014

ELMAR Symposium is a significant scientific conference in the field of navigation systems, telecommunications, wireless communications, electronics in marine, naval architecture, sea ecology, and other advanced research areas.

During its 56th edition, Thomas Weber participated in a session on new trends in spectrum engineering and provided a speech on ECC activities related to cognitive radio and approaches for spectrum sharing.

WORLD WIRELESS RESEARCH FORUM (WWRF) MEETING 33
Guilford, United Kingdom, 25 September

WWRF organises two major events each year combining inputs from industry and academic experts, the exchange of ideas and the evolution of the research agenda and technology roadmaps.

During its 33rd meeting, the ECO Director, Mark Thomas, presented 'More than bandwidth – spectrum harmonisation for wireless broadband in Europe'. This gave a summary of the ECC's structure, priorities, and its approach to facilitating wireless broadband services.

EC WORKSHOP ON WIRELESS RESOURCES FOR ADVANCED MANUFACTURING
Brussels, Belgium, 30 October 2014

The DG Growth of the European Commission organised a workshop addressing the availability of appropriate radio spectrum resources for advanced manufacturing.

In this context, Thomas Weber reported on the recent developments for Wireless Industrial Applications (WIA) within the ECC and updated the audience on the regulatory principles for applications under general authorisation.

THIRD JOINT EC/ERA WORKSHOP ON INTERFERENCES
Valenciennes, France, 25 November 2014

The European Commission (DG Move) and the European Railway Agency (ERA) organised this workshop to discuss the progress of the technical solutions to be used for the coordination between the public telecom operators and GSM-R operators.

Thomas Weber provided an update on the relevant activities within the Project Team FM54 on the identification of suitable mitigation techniques and the development of the mechanisms of an appropriate coordination process.

ERA WORKSHOP ON THE EVOLUTION OF THE RAILWAYS RADIO COMMUNICATION SYSTEM
Valenciennes, France, 26 November 2014

This event was organised by the the European Railway Agency (ERA) in the context of the ERA programme dealing with the evolution of the railways radio communication system and the identification of different scenarios for the provision of mobile communication services.

Thomas Weber presented the activities of the ECC Working Group Frequency Management (WG FM) which may be relevant in the context of the ERA programme.

HEERO FINAL CONFERENCE
Madrid, Spain, 27-28 November 2014

The HeERO projects (Harmonised eCall European pilot) address the pan-European in-vehicle emergency call service 'eCall' based on 112, the common European Emergency number. The final HeERO International Conference highlighted the final outcomes, impact and results of the HeERO 2 project.

Freddie McBride presented the views of the ECC Working Group Numbering and Networks (WG NaN) on numbering for eCall. The presentation considered the issues associated with providing numbering resources (both E.212 and E.164) for 230 million vehicles on European roads.

EC WORKSHOP ON COEXISTENCE CHALLENGES OF THE EVOLUTION IN THE USE OF THE UHF BAND
Brussels, Belgium, 12 December 2014

The European Commission (DG Growth and DG Connect) organised a workshop to discuss the lessons learnt from the standardisation efforts with respect to the digital dividend in the 800 MHz band and to identify the steps for further standardisation work for the co-existence of different applications in the 700 MHz band.

Bruno Espinosa, ECO Deputy Director, presented the results of the studies performed within the ECC in the UHF band, focussing on the recent activities on the technical conditions for the use of the 700 MHz band.

2.3 MANAGING OUR OPERATIONAL SERVICES

We are committed to delivering high quality support to CEPT and its committees across a wide range of operational and professional services.

Supporting the CEPT Presidency

In 2014, ECO support to the CEPT Presidency has mainly been a routine activity with the invoicing and collection of CEPT member financial contributions and the update of the part of the website which relates to the Presidency.

We organised an electronic meeting of the Presidency, which offered a good opportunity to the new CERP Chairman, Mr. Ljubisa Mitevski, to initiate cooperation with the two other CEPT co-Presidents and with the ECO Director.

We also provided assistance to the Com-ITU Chairman who signed, on behalf of CEPT, a collaboration agreement with the Regional Commonwealth in the Field of Communications (RCC) on 21 October 2014. This agreement, which gives further effect to the Memorandum of Understanding from 2002 between CEPT and the RCC, will strengthen collaboration between both organisations in areas of mutual interest and on ITU activities as a whole.

Mr. Marcin Krasuski (right), Chairman of CEPT's Com-ITU, and Mr. Nurudin Mukhitdinov (left), Director General of the RCC Executive Committee signing the collaboration agreement.

Supporting the Satellite Monitoring Memorandum of Understanding

Due to the highly specialised and costly nature of satellite monitoring facilities, a group of seven national authorities have established an agreement under the Satellite Memorandum of Understanding (Sat MoU) to have access to the monitoring earth station in Leeheim, Germany. The agreement facilitates satellite monitoring activities within CEPT, particularly to investigate interference to and from the satellites.

The signatories of the agreement are: France, Germany, Luxembourg, The Netherlands, Spain, Switzerland and the United Kingdom.

The ECO provides secretariat support to the management committee responsible for the Sat MoU and manages CEPT's Sat Mou account set up to cover the costs of using the Leeheim facilities.

In 2014, the ECO provided some assistance to the Sat MoU in its consideration and evaluation of a study on satellite geolocation which has been carried out to improve the precision of the geolocation results.

The ECO also acts as the interface between the Sat MoU and the ECC. In 2014, the ECO reported to the Sat MoU the status of the activities carried out within Project Team SE40 which may trigger additional satellite monitoring campaigns in the future.

Further information on the Sat MoU is available from our website at: http://www.cept.org/eco/groups/eco/sat-mou

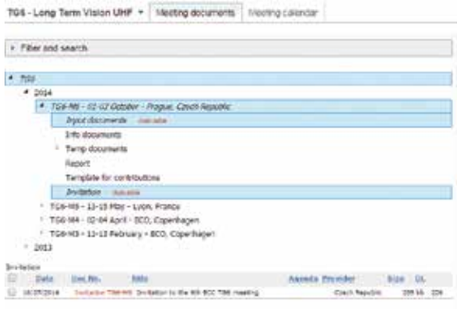
Managing CEPT's family of websites

The CEPT portal includes the five CEPT family websites (CEPT, ECC, ECO, CERP and Com-ITU). Since its relaunch in 2011, many additional features and improvements have been implemented into the websites to increase their usefulness and to respond to the needs of the users and of the groups which benefit from the website facilities.

Number of registered users to the systems: 3335
Number of visits for 2014: 1102 000
Average number of visit per day: 3100
Average visit length: 19 min.

Significant changes to the website have been made during the summer 2014 in order to optimise its performance and to rationalise the various developments and evolutions implemented following the major revamp in 2011. Most of the changes carried out as part of this process were related to the programming and did not affect the website's operational features as displayed to the user.

In addition, due to difficulties reported in the past in the meeting documents area (in particular during meetings with slow Internet connections), changes were required in this part of the website to enable better management of documents for groups with a large and complex folder structure. This led to necessary changes in the visual presentation, which were then optimised in response to initial feedback from users.



The meeting documents area is one of the most critical parts of the website. With the addition of approximately 7 500 documents uploaded in 2014, it hosts more than 31 000 working documents shared between more than 60 groups and it triggered around 1 600 000 downloads during the year.

Other key developments in 2014 have been the integration within the portal of tools supporting electronic exchanges (see next section).

Promoting electronic working arrangements

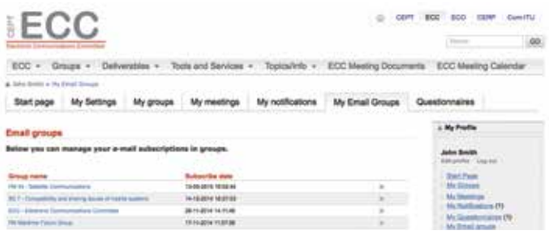
There is a general agreement within CEPT and its Committees that the efficiency of the working processes can be increased by making use of the available electronic systems. In this respect, we make available to our stakeholders four main tools and services dedicated to electronic working. In addition to the CEPT Forum and the web-meeting facilities which have been available since 2012, we have made good progress in 2014 with the integration within the CEPT portal of new email reflector facilities and the development of a permanent CEPT chat/messaging system:

- **CEPT Forum:** the forum features have been integrated into the CEPT portal since 2012 and have been further improved since then.

  In 2014, the CEPT Forum was used by 17 groups within the ECC and Com-ITU generating 625 posts within 48 different topics.
- **Web-meeting facilities:** fully operational since 2012, our web-meeting facilities are based on the use of the commercial 'GoToMeeting' platform (or the GoToWebinar version for larger audiences) combined with the meeting management features integrated into our portal. They are now part of CEPT's routine in terms of meeting management.

  In 2014, the ECO organised over 130 web-meetings ranging from small meetings of four to five experts discussing technical studies in preparation for a physical meeting to larger sessions of correspondence groups gathering around 25 participants.
- **Email reflectors:** a new email reflector feature, referred to as groupmail, was implemented in 2014. It is available as the main email reflector for each of the groups hosted within the CEPT portal and its websites. These reflectors offer the opportunity to users to manage their subscriptions, including a change in email address, through the website.

In addition, the traditional email facility provided by the ECO without connection to the website is still available on demand.



At the end of 2014, 36 groups hosted within the CEPT portal were using the new groupmail feature.

- **CEPT Chat/messaging system:** improvements have been made to the CEPT Chat/messaging system used at major conferences. This includes two main features: first of these is to enable 'private chat' between a limited number of delegates who wish to engage in confidential communications on this medium; the second is to provide an interface to the CEPT portal to enable preload membership of the system based on website group membership. This system is intended to be used and assessed during the major events (Conference Preparatory meeting and World Radiocommunications Conference) scheduled in 2015.

Managing our online databases

Besides the ECO Frequency Information System (EFIS), the ECO manages and updates two important online information systems on which many of our European stakeholders rely.

MANAGING THE ECO DOCUMENTATION DATABASE – ECODOCDB

Our Document Database (ECODocDB, http://www.ecodocdb.dk/) is an important online resource. It acts as a library for all ECC deliverables, namely ECC Decisions, ECC Recommendations, ECC Reports and CEPT Reports. It gives access to the European Commission Decisions related to the ECC activities and includes some helpful information such as related documents and, for ECC Decisions and some ECC Recommendations, the level of implementation across Europe. It is updated by the ECO each time a draft or revised ECC Deliverable is approved for publication by the ECC or one of its Working Groups. At the end of 2014, more than 960 deliverables were available on the Database.

In 2014, there have been around 520 000 visits to the ECODOCDB, representing about 1400 visits per day.

The overview of the most downloaded documents reflects the range of interests from people visiting the website such as: short range device applications (ERC Recommendation 70-03), frequency regulatory information (ERC Report 25 which contains the European common table of frequency allocations and applications (ECA)), cognitive radio issues (ECC Report 159) and studies related to broadband mobile applications (ECC Report 100, ECC Report 174).

In the context of the development and publication of ECC deliverables, the ECO is also responsible for the maintenance of a set of appropriate templates in order to ensure that our output documents display a consistent and professional appearance. In order to solve problems that arise where documents, having gone through a number of revisions with editorial changes made by different contributors, have their formatting inadvertently changed, we have developed 'locked' templates and corresponding guidance documents for ECC Reports and for the CEPT documents dedicated to the World Radiocommunication Conference (European common Proposals and CEPT briefs).

Locked templates for Decisions, Recommendations and CEPT Reports will be developed in the light of user experience with ECC Reports and CEPT Briefs.

MAINTAINING THE ECC WORK PROGRAMME DATABASE

The ECC Work Programme Database (ECC WP DB) is part of the suite of ECO software tools which support CEPT. The purpose of the WP DB is to provide the ECC and its constituent bodies with online facilities for maintaining and updating, with the assistance of the ECO team, their work programme on an ongoing basis. The Work Programme (WP) consists of a number of Work Items, allocated to the various groups within the ECC, stored in the Database with the possibility to filter them according to a set of parameters such as its reference name, status, associated dates and responsible group.

The database is available at http://eccwp.cept.org/ and the status of around 370 ECC Work Items was described in it in 2014.

Providing facilities for collaborative working

CEPT's work is based on collaboration between regulators and industry representatives coming from different countries across Europe. In addition to our tools for electronic exchanges and meetings (see page 38), we also provide facilities for physical meetings.

In May 2014, we moved from our previous premises located on Nansensgade 19 in central Copenhagen to new ones on Nyropsgade 37, also in central Copenhagen.

The internal space within the new premises has been completely refurbished to bring it to a configuration which meets the ECO's needs within a significantly smaller space. The need for appropriate meeting facilities was a major factor in the choice and design.

Our main meeting room has a capacity of approximately 60 seats and can be divided into two rooms of 40 and 20 seats respectively. We also have a second meeting room for approximately 20 seats. Our meeting rooms have internet access for delegates and projection facilities. In addition, the main room has video and audio webcasting features.

We hosted 36 meetings in 2014 bringing together in Copenhagen around 825 participants, mostly from around Europe for a total of 81 meeting days. These meetings ranged from small teams of four people to larger gatherings of more than 60 participants.

More than 60 participants attended the 4th ECC TG6 meeting on 2-4 April 2014 at the previous ECO premises.

On 21-22 May 2014, the ECO Council met for the first time in the new ECO premises at Nyropsgade 37, Copenhagen.

SECTION 3

GOVERNANCE AND FINANCIAL SUMMARY

STRUCTURE AND GOVERNANCE

The ECO is governed by the ECO Council, consisting of representatives of the Contracting Parties to the 'Convention for the establishment of the European Communications Office' which defines the terms of reference for the ECO and its funding arrangement.

Mr. Geir Jan Sundal (Norway) has been Chairman of the Council since his election in November 2011 and Ms. Marta Leandro of Portugal was appointed as the ECO's Vice-Chair at the November 2013 meeting of the ECO Council.

The Council has 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.

At its 11th meeting in December 2014, the ECO Council agreed to appoint Mr. Per Christensen as the new ECO Director from 1 April 2015 to succeed Mark Thomas whose contract as Director expires on 31 March 2015.

During this meeting, the ECO Council also adopted the Czech Republic and Lithuania as new Contracting Parties to the Convention. The Czech Republic accession to the Convention came into force with immediate effect. Lithuania will accede to the Convention after completion of the process, which is expected on 1 February 2015.

This means that, at the end of 2014, thirty-three countries were officially Contracting Parties to the ECO Convention and thirty-four countries[1] are contributors to the financing of the ECO.

In 2014, good progress has been made on the process of signature and ratification of the Convention amendment of 2011 by the Contracting Parties.

[1] Belgium is not one of the Contracting Parties to the ECO Convention but contributes to the financing of the ECO.

TOP: Marta Leandro (left), Council's Vice-Chair, and Geir Jan Sundal, Council's Chair.

RIGHT: The United Kingdom Council member, Mr Wesley Milton, signed the amended Convention in the presence of the ECO Director (right) and representatives of the Danish Foreign Ministry.

Financial summary

The ECO was approximately 96% financed by the following 33 countries in 2014[1]:

Austria, Belgium[2], Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Luxembourg, 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 Memorandum of Understanding) and income from investments of the ECO's net capital.

The following figures provide a financial summary for 2014.

	DKK	EUR
INCOME	**18,473,771**	**2,475,485**
EXPENDITURE		
Staff Costs (salaries, pension contributions, etc.)	11,603,746	1,554,902
Running Expenses (outsourcing, projects, professional fees, travel)	4,426,668	593,173
Office Facilities (rent, building related expenses)	2,245,903	300,951
Expenditure total	**18,276,317**	**2,449,026**
Operating balance for end of year	**197,454**	**26,459**

Based on exchange rate of DKK 1 = EUR 0.134

[1] Czech Republic, which joined the ECO Convention in December 2014, and Lithuania, which is expected to join in February 2015, will start contributing to the financing of the ECO in 2015.

[2] Belgium is not one of the Contracting Parties to the ECO Convention but contributes to the financing of the ECO.

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