





Commission for Communications Regulation ANNUAL REPORT FOR THE PERIOD July 1, 2017 – June 30, 2018

Presented to the Minister for Communications, Climate Action and Environment in accordance with Section 32 of the Communications Regulation Act, 2002.

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ABOUT COMREG



ComReg is the statutory body responsible for the regulation of electronic communications (telecommunications, radio communications and broadcasting networks), postal and premium rate services. ComReg is the national regulatory authority for these sectors, in accordance with EU and Irish Law. In addition, we manage the radio frequency spectrum and the national numbering resource, among other responsibilities.

COMMISSIONERS at 30 June 2018



Gerry Fahy Chairperson Retired August 2018

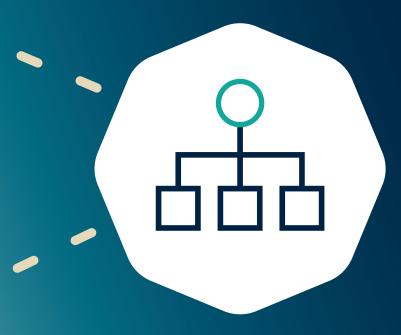


Jeremy Godfrey Commissioner



Kevin O'Brien Commissioner Resigned August 2018

ORGANISATIONAL STRUCTURE



The Commission for Communications Regulation (ComReg) was established on 1 December 2002 by the Communications Regulation Act 2002 and is led by a Commission of up to three Commissioners. At the end of this reporting period the Commission had three Commissioners: Gerry Fahy (Chairperson), Jeremy Godfrey, and Kevin O'Brien.

The Commission, with the Leadership
Team, is responsible for the strategic and
operational management of the organisation.
ComReg depends on the efforts of all of
our staff (including lawyers, economists,
engineers, accountants, business analysts and
administrative specialists) to deliver on our
mission and meet our regulatory objectives.

ComReg consists of four Divisions, supported by a General Counsel and a Senior Advisor -Economics, Policy & Research. The structure is based on cross-functional teams operating in a multi-disciplinary environment.

LEADERSHIP TEAM



John EvansSenior Advisor
Economics, Policy and Research



Caroline Dee-Brown
General Counsel



Joe HeaveyDirector
Corporate Services Division



Donal LeavyDirector
Wholesale Division



Barbara Delaney
Director, Retail and Consumer
Services Division



George MerriganDirector
Market Framework Division

FUNCTIONS



ComReg is responsible for promoting competition, protecting consumers and for encouraging innovation. We deal in complex issues of law, economics, accounting, regulation and technology.

Our objectives are set out in line with both primary and secondary legislation, and this legislative framework continues to evolve since the Communications (Regulation) Act of 2007. In 2007, ComReg's responsibilities and powers, as well as available enforcement measures, were augmented by the Communications Regulation (Amendment) Act 2007. In particular, ComReg was granted Competition Act powers in relation to electronic communications and services. The Communications Regulation (Premium Rate Services & Electronic Communications Infrastructure) Act 2010 transferred responsibility for the regulation of premium rate services to ComReg and ComReg commenced regulation of this area in July 2010. The Postal Act 2011 sets out ComReg's regulatory responsibilities in relation to postal matters.

Figure 1: ComReg Strategic Framework¹

COMREG STRATEGIC FRAMEWORK Vision **PRINCIPLES** Mission Role Setting the rules for effective competition THE TOOLS Creating the conditions **Protecting and** AT OUR informing consumers for investment **DISPOSAL** Ensuring compliance with regulatory obligations A deep Robust data understanding analytics Effective including of markets stakeholder including service quality engagement **HOW WE** and availability related markets **SUPPORT OUR ROLE** Maintaining an agile, skilled and motivated organisation **Integrity Impartiality Effectiveness** OUR **Excellence Transparency VALUES**

¹ ComReg Document 17/31 "Electronic Communications Strategy Statement 2017 – 2019" www.comreg.ie/publications

Under the Communications
Regulation Acts 2002 to 2017,
ComReg has a range of functions
and objectives in relation to
the provision of electronic
communications networks,
electronic communications
services and post.

These include:

- Ensuring compliance by operators with obligations
- Promoting competition
- Contributing to the development of the internal market
- Promoting the interests of users within the European Community
- Ensuring the efficient management and use of the radio frequency spectrum and numbers from the national numbering scheme
- Promoting the development of the postal sector and, in particular, the availability of a universal service
- Protecting the interests of end users of premium rate services

This Annual Report covers our key activities from 1 July 2017 to 30 June 2018.

COMMISSIONER'S REVIEW



During this period, Ireland's electronic communications sector continued to develop and transform in response to the everchanging needs of consumers and businesses. By the end of June 2018, one million premises throughout the country were availing of Next Generation Access or high-speed Broadband.

Average fixed broadband speeds continued to increase. Since June 2017, new EU-wide "roam like at home" regulations have come into law allowing consumers to use mobile phones abroad at same prices as at home. Total Roaming traffic increased by 27% in the year as a result of the new roaming regulations.

ComReg believes that enhanced connectivity is an essential part of the everyday lives of citizens. It is a key driver of social inclusion and economic success. As an economic regulator, our function is to ensure that communications markets operate in the interests of consumers and society. Through appropriate regulation, ComReg facilitates the development of a competitive electronic communications sector which attracts investment, fosters innovation and enables consumers to use communications services.

During this year, ComReg also took a number of important initiatives as a member of the Government's Mobile and Broadband Taskforce to improve the experience of mobile users. These included, providing information on handset sensitivity due to antenna performance and network coverage. This will allow consumers to make informed choices about the level of signal they can expect from different handsets.

ComReg tested the impact of building materials on mobile phone signals. ComReg also permitted the use of mobile phone repeaters as a solution to improve indoor mobile phone reception.



Broadband

By the end of June 2018 approximately 85.9% of all fixed broadband subscriptions were equal to or greater than 10Mbps up from 82.2% on 2017 and of all fixed broadband subscriptions 74.6% were equal to or greater than 30Mbps, up from 68.7% on the previous year.

During the year, estimated household broadband penetration stood at 87% compared to the EU average of 85%. By the end of June 2018, there were 1,703,040 broadband subscriptions in Ireland. VDSL accounted for 600,668 subscriptions, followed by 371,398 cable subscriptions, 325,683 DSL subscriptions, Fibre to the Premises (FTTP) broadband accounted for 60,754 subscriptions, Fixed Wireless Access (FWA) 49,832 and Satellite 4,761. The number of mobile broadband subscriptions was 289,944 at year end.



Mobile Market Developments

At the end of June 2018 there were over 6.1 million subscriptions to mobile communications services in Ireland, equating to a penetration rate of 126%. Over the entire year Machine-to-Machine (M2M) subscriptions increased by 25% rising from 746,803 to 930,806.

Text messaging continued to decline and fell by 10% over the year. This was due partly to the increasing use by consumers of instant messaging services. Average monthly voice call minutes per mobile subscriber in Ireland remained stable in June 2018 at 214 minutes per month, while average monthly traffic per mobile subscriber using voice and data services was 5.8GB in June 2018, compared to 4.1GB in June 2017.

During the year many consumers continued to avail of choice in the marketplace by switching to alternative networks as there were 400,138 mobile numbers ported between operators in the twelve months to June 2018, which equates to, on average, 33,345 mobile numbers ported every month.



Competition

ComReg has a mandate to promote competition and ensure the maximum benefit of choice, price and quality for consumers. We are also obliged to ensure that there is no distortion or restriction of competition in the electronic communications sector. During the year, ComReg continued its analysis of a number of wholesale markets including the market for High Quality Access, Wholesale Local Access & Wholesale Central Access and for Fixed and Mobile Voice Termination.



Spectrum

During the year ComReg continued to release radio spectrum to the market. ComReg held an award for the 26 GHz spectrum band during the year. This spectrum supports critical Point-to-Point radio links which are a backbone infrastructure for Ireland's mobile communications networks.



Consumers

For ComReg it is imperative that all consumers' rights are upheld by their service providers. If not, ComReg will take action where necessary. All consumers should have access to clear and adequate information that enables informed choices. This is a key strategic goal for ComReg. Redress of consumer complaints is of the utmost importance to ComReg. During the year ComReg received approximately 25,500 contacts from consumers. It is vital that consumers have access to a resolution process when they experience an issue with a service provider. ComReg introduced a new Complaints Handling Code of Practice during the year which enhances consumer rights.

Where necessary, ComReg will use the available regulations and its legal powers in order to conduct investigations and instigate legal cases through the Courts. ComReg has secured numerous consumer refunds.



International

ComReg is an active member of the Body of European Regulators of Electronic Communications (BEREC). In December 2017, I was appointed by the Board of Regulators of BEREC to the role of Vice-Chair of BEREC 2018. ComReg has participated in each of nine different Expert Working Groups (EWGs) set up by BEREC.

ComReg's participation in BEREC's Work
Programmes is a requirement of the Common
European Regulatory Framework for Electronic
Communications Networks and Services and
it also means that ComReg can shape the way
electronic communications and digital sectors
are regulated now and in the future.

Jeremy Godfrey

Commissioner

COMMUNICATIONS OVERVIEW



Number of operators

Under the authorisation process, operators notify ComReg of their intention to provide networks or services to third parties. By June 2018, 666 such notifications were registered of which 655 were fixed/wireless broadcasting and 11 were mobile.

Fixed Line Market Share

Based on operator data submitted via the Quarterly Report questionnaire, Other Authorised Operators (OAOs) accounted for 53% of the total fixed line market in terms of overall (retail and wholesale) revenue by June 2018, up from 51.5% in June 2017. Eircom Ltd (trading as eir). accounted for the remaining share of the market.

Fixed CPS, WLR and WLA

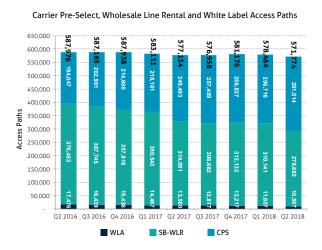
Indirect access to fixed line networks for call services can be provided through Carrier Pre-Selection (CPS), where the call services are provided by an operator using the incumbent operator's network, with the customer paying line rental to the incumbent.

Through Wholesale Line Rental (WLR) an operator can provide single billing to the consumer for both their fixed line rental and fixed call usage.

White Label Access-Voice Access (WLA-(Voice)) is a switchless voice service which allows an operator to purchase end-to-end call services without the need to have its own interconnection infrastructure.

By the end of June 2018, WLR accounted for 48.9% of all lines provided via indirect access, (down from 54.4% at the end of June 2017), WLA accounted for 49.2% (up from 43.2% in June 2017) and CPS accounted for 1.9% of lines (down from 2.4% in June 2017). In total there were 571,774 indirect access paths at the end of Q2 2018, down by 0.9% since June 2017. This shows a decrease in CPS as there has been less demand for this service.

Figure 2: Narrowband Indirect Access Paths



Fixed telecom access paths and fixed voice traffic

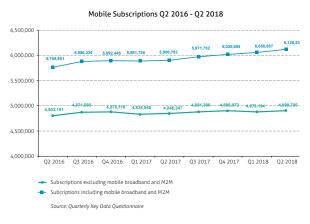
There were 1.35 million direct and indirect Public Switched Telephone Network (PSTN) and Integrated Switched Digital Networks (ISDN) access paths in the Irish market as of June 2018, a decline of 5.4% since June 2017. Indirect access using WLR or CPS accounts for 42.3% of all access paths in the fixed copper market. This reflects OAOs use of eir's wholesale infrastructure.

Voice traffic originating on fixed networks continued to decline. In Q2 2018, the average residential subscriber originated 92 minutes of fixed voice calls compared to 108 minutes in Q2 2017

Mobile communications services

At the end of June 2018 there were over 6.1 million subscriptions to mobile communications services (including mobile broadband and M2M) in Ireland, which equates to a penetration rate of 126%. In Q2 2017 total M2M subscriptions stood at 746,803 increasing to 930,806 in Q2 2018 representing a 24.6% annual growth.

Figure 3: Mobile Subscriptions



Due partly to the increasing use by consumers of instant messaging services, the volume of text messaging decreased by 9.7% in Q2 2018 compared to Q2 2017. In the three months to June 2018, the average Irish mobile subscriber sent an average of 75 messages per month, compared with an average of 84 per month in the quarter to June 2017.

Average monthly voice call minutes per mobile subscriber in Ireland remained stable in June 2018 at 214 minutes per month. Average monthly traffic per mobile subscriber using voice and data services was 5.8GB in June 2018 compared to 4.1GB in June 2017.

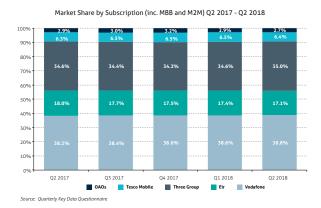
In Q2 2018 mobile Average Revenue Per User (ARPU) for prepaid mobile phone subscribers was €14.20 per month while mobile ARPU for post-paid mobile phone subscribers was €37.44 per month. Mobile ARPU for prepaid mobile broadband subscribers was €15.04 per month while mobile ARPU for post-paid mobile broadband subscribers was €19.71 per month.

There were 400,138 mobile numbers ported between operators in the twelve months to June 2018, which equates to, on average, 33,345 mobile numbers ported every month.

Vodafone retains the largest share of subscriptions (including mobile broadband and machine to machine subscriptions) and comparing Q2 2017 to Q2 2018, Vodafone slightly increased market share from 38.2% to 38.8%. At the end of Q2 2018, Three Group had 35% of subscribers up from 34.6% in Q2 2017.

Eircom Ltd's (trading as eir) mobile market share decreased by 0.9% since Q2 2017. Tesco Mobile's market share increased by 0.1% while other operators' market shares fell by 0.2% since Q2 2017.

Figure 4: Market Share – Number of Subscriptions (inc. mobile broadband and M2M)



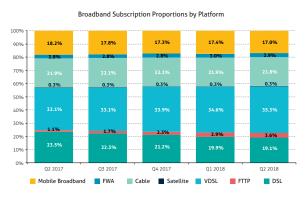
Broadband

By the end of June 2018, there were 1,703,040 broadband subscriptions. VDSL accounted for the bulk of these subscriptions at 600,668, followed by 371,398 cable subscriptions, 325,683 DSL Broadband subscriptions, Fibre to the Premises (FTTP) broadband accounted for 60,754 subscriptions, Fixed Wireless Access (FWA) at 49,832 and Satellite at 4,761. The number of mobile broadband subscriptions was 289,944 at the end of June 2018.

In Q2 2018, VDSL broadband subscriptions accounted for 35.3%, cable broadband 21.8%, DSL 19.1%, FWA 2.9%, FTTP 3.6% and satellite 0.3% of all broadband subscriptions. Mobile broadband accounted for 17% of all broadband

subscriptions. Since Q2 2017, the number of VDSL subscriptions have increased by 11%, in contrast to a fall in DSL, satellite and mobile broadband subscriptions.

Figure 5: Profile of Active Broadband Subscriptions by Type



Source: Quarterly Key Data Questionnaire

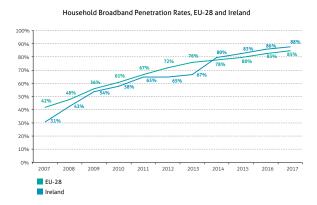
In addition to broadband subscriptions, there are an estimated 1,258 WiFi hotspots in Ireland providing nomadic broadband access nationwide, particularly to laptop and smartphone users. This figure increased by 9.6% comparing Q2 2017 to Q2 2018.

Figure 6: Broadband Subscriptions and Growth

Subscription Type	Q2 2018	Quarterly Growth Q1'17 – Q2'18	Year-on- Year Growth Q2'17 – Q2'18
DSL Broadband	325,683	-4.3%	-17.9%
VDSL Broadband	600,668	+1.5%	+10.8%
Cable Broadband	371,398	-0.5%	+0.5%
FTTP Broadband	60,754	+21.3%	+217.7%
Satellite Broadband	4,761	-2.1%	-6.5%
FWA Broadband	49,832	-1.6%	+7.0%
Total Fixed broadband	1,413,096	+0.2%	+2.5%
Mobile Broadband	289,944	-2.4%	-5.8%
Total Broadband	1,703,040	-0.3%	+1.0%

Figure 7 illustrates Ireland's position compared to the EU28 average in terms of Household Broadband (Fixed and Mobile) penetration. Ireland at (88%) was above the EU28 average (85%) in 2017.

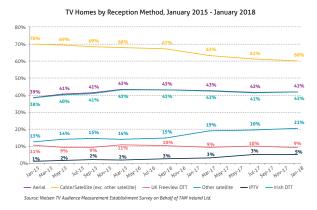
Figure 7: European household broadband penetration comparison, 2017



Broadcasting

By January 2018, of 1.58 million TV households in Ireland, 60% had a subscription cable or satellite service, 42% had an aerial service, 42% had Irish DTT service and 21% had a free to air satellite service.

Figure 8: Television Homes by Reception Method

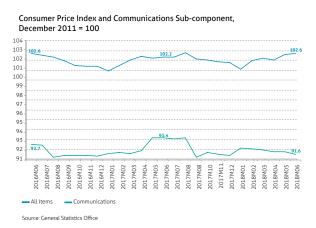


Price developments

In overall terms, figure 9 shows the change in the Consumer Price Index (CPI) and the communications sub-component. The CSO weights communications as 3.04% of the total CPI.

Using December 2011 as the base period, total CPI decreased by 0.4% in the year to June 2018 while communications costs increased by 1.8%.

Figure 9: Central Statistics Office Consumer Price Index



CONSUMERS

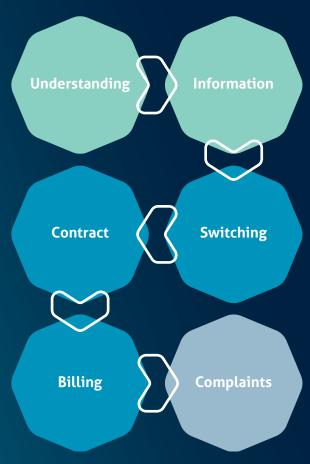


ComReg's overall strategic approach to consumers is to protect and inform consumers so that they can choose and use communications services with confidence.

During the period, ComReg carried out a number of actions to deliver its associated consumer goals.

Figure 10: Consumer Journey

THE CONSUMER JOURNEY



Information – ComReg Compare and Service Checker

ComReg works with industry to ensure that relevant, accurate information is available to consumers regarding current market offers, to assist them with their purchasing decisions.

ComReg offers a comparison tool, ComReg

Compare, at www.comreg.ie/compare, where consumers can compare communications service providers' market offerings by handset, average monthly cost, total cost including handset costs, allowances and speed, based on the usage information entered by consumers.

To assist consumers who have questions about PRS charges that have been applied to their bill or deducted from their phone credit, ComReg also offers an online facility, Service Checker, at http://servicechecker.comreg.ie you can check the contact details and other details for all premium rate services. Consumers can input the service name or the five digit number of the service they have been charged for and they are presented with details of the customer service helpline number and email.

Information - Consumer Rights

ComReg seeks to empower consumers by ensuring the availability of appropriate and transparent information while also offering an effective complaints handling process. ComReg seeks to understand evolving consumer needs by liaising with various stakeholders using a variety of mechanisms such as our Consumer Care Team; our Consumer Engagement programme (including on-line presence); the ComReg Consumer Advisory Panel; the ComReg Workshop on Electronic Communications for People with Disabilities and by carrying out relevant surveys and by gaining inputs from consumer organisations.

Consumers are informed through timely, relevant, clear and accessible information.

ComReg recognises the need for consumers to be appropriately informed in order to make choices in respect of electronic communications and to assist them in their dealings with their service provider, even more so as competition intensifies. In this respect, ComReg has continued to update its consumer section of **www.comreg.ie** with relevant information and news on choosing and using communications services.

Information - Consumer Engagement Programme

ComReg continued to expand its consumer engagement reach during the period with a number of targeted campaigns to inform consumers of their rights and the information that ComReg makes available. Such initiatives include updating the ComReg website with new consumer information, outreach to senior citizens, trade show presence and social media campaigns to inform consumers about ComReg's Compare and Service Checker facilities. In addition, the distribution of ComReg's consumer guides continued throughout the year and leaflets were made available in a network of GP surgeries, health centres and hospitals nationwide.

Figure 11: ComReg Consumer Engagement staff attending events throughout Ireland and ComReg's consumer guide on complaints. The events attended were the 50 Plus Expo in City Hall, Cork, ComReg Conference in Dublin Castle and the Active Retirement Ireland Trade & Tourism Show in the RDS, Dublin.



Protection of Vulnerable Users

During the period, ComReg undertook a consultation (ComReg Document 17/71) following a review of existing obligations on Service Providers to ensure that measures continue to be relevant and to ensure equivalence in access and choice for disabled end-users.

In addition, ComReg held two meetings of its Disability Workshop on Electronic Communications for People with Disabilities. The composition of attendees at each Workshop event is compiled to ensure that those in attendance (including service providers and bodies representing people with disabilities) can contribute both experience and best practice and ensure that attendees have knowledge and responsibility in respect of the topic in focus. In Q3 2017, ComReg's Workshop theme was "The new enhanced Text Relay Service". In Q1 2018, the main Workshop topic was "The content of Accessibility Statements" and an overview of the Remote Interpretation Service was also presented.

To Ensure Consumers are treated fairly by ECS and Premium Rate Services (PRS) providers.

ComReg understands the importance of having effective redress mechanisms in place as one way to instil confidence in consumers. With this in mind, ComReg consulted on the introduction of formal dispute resolution procedures. A decision is planned to be issued later in 2018.

Consumer Contacts to ComReg

ComReg continues to provide a quality complaints handling service to consumers. During the year, 85% of all calls to ComReg's Consumer Line were answered within 20 seconds. Consumers may contact ComReg's Consumer Line through the following channels – telephone, email, online complaints form, letter and web chat.

In addition, consumers have the option to send an SMS² (text) with the words "ComReg" or "AskComReg" to 51500 to receive a call back or SMS text back from one of our agents. A call back service is also available to those callers who are holding on the phone for more than 20 seconds.

Publication of Consumer Statistics

ComReg continues to publish quarterly statistics in respect of issues raised by consumers who contacted our Consumer Line. During the period July 2017 to June 2018 there were approximately 25,500 issues about which consumers contacted us. These issues are split between Electronic Communications Service (ECS) issues, Premium Rate Service (PRS) issues and all other issue types. Approximately 14.500 of the total issues raised were in relation to electronic communications issues, with approximately a further 9,000 relating to premium rate service issues and the balance were mainly issues not for ComReg. Of all issues raised with ComReg during the period, 22% were complaints which were escalated on behalf of the consumers to the relevant Service Providers for both ECS and PRS services.

The majority of ECS issues raised in ComReg's remit were in relation to Billing, Disputed Charges (including data), Contractual Matters such as contract termination requests and a varied number of contract related subcategories, and Service Issues (Loss of Service and Mobile Coverage).

The majority of PRS issues raised related to situations where consumers deny that they have engaged with the PRS or where the consumer disputes the PRS charge in question.

1,464 of the total issues were raised by business consumers and were mainly related to billing (including disputed charges), service issues (including loss of service and mobile coverage), contractual matters, switching and number portability.

Compliance and Enforcement

ComReg recognises it is important to ensure that a culture of compliance is engendered so that consumers' rights are upheld by their service provider. Effective compliance and enforcement is important in achieving this.

In respect of consumer rights, ComReg monitors compliance by PRS and ECS providers with relevant obligations including the PRS Code of Practice, the Universal Service Regulations³ and associated ComReg Decisions, The Roaming Regulations⁴, The Unfair Contract Terms Regulations⁵ and the Consumer Information and Cancellation Regulations⁶. ComReg has a cooperation agreement with the Competition and Consumer Protection Commission (CCPC).

ComReg Compliance Cases & Findings

In October 2017, ComReg reported that Vodafone Ireland Limited (Vodafone) paid ComReg a penalty of €250,000 after an investigation found that the manner in which Vodafone had signed up Pay As You Go (PAYG) customers to its "Red Roaming" package was in breach of Regulation 14(4) of the Universal Service Regulations⁷ and ComReg Decision

3 European Communities (Electronic Communications Networks and Services) Universal Service and User Rights' Regulations 2011

4 S.I. 228/2013 – Communications (Mobile Telephone Roaming) Regulations 2013 REGULATION (EU) No 531/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 June 2012 on roaming on public mobile communications networks within the Union. S. I. No 240/2017 Communications (Mobile Telephone Roaming) Regulations 2013 (Amendment) Regulations 2017

- S.I. 27/1995 European Communities (Unfair Terms) in Consumer Contracts), Regulations 1995
 S.I 336/2014 – European Communities (Unfair Terms in Consumer Contracts) (Amendment) Regulations 2014.
 S.I. No. 160/2013 - European Communities (Unfair Terms in Consumer Contracts) (Amendment) Regulations 2013.
- S.I. No. 484/2013 European Union (Consumer Information, Cancellation and Other Rights) Regulations 2013
 S.I No. 250/2014 European Union (Consumer Information, Cancellation and Other Rights)(Amendment) Regulations 2014
- 7 European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011

D13/12⁸ on Contract Change Notifications. Vodafone also confirmed that it credited over €2,500,000 to those customers who did not benefit financially from being opted into Red Roaming when they roamed. Vodafone also committed that (i) it will not use such automatic opt-ins to contract changes in future and will fully comply with its regulatory obligations under both the Universal Service Regulations and the requirements of ComReg Decision D13/12 on Contract Change Notifications; and (ii) it has placed information on its website and in its confirmation email to all new PAYG customers that Red Roaming is a default option for Roaming outside the EU.

On 9 October 2017, the Dublin District Court heard five cases taken by ComReg against Eircom Limited (trading as eir) in relation to nine counts of incorrect charging of customers for electronic communications services. The outcome of this case against eir was that: a) eir pleaded guilty to nine charges brought against it; b) Judge John Brennan imposed criminal convictions for each of the nine charges and ordered eir to pay a total of €11,000 in fines; c) eir stated that it had taken specific measures to prevent such issues arising in the future, including the appointment of a new "Head of Customer Advocacy", the publication of a Code of Practice which outlines eir's complaints process and the training and upskilling of relevant staff members. eir also said that it had implemented in June 2017 a new complaints escalations process and alerts system for customer follow-ups and call backs; d) eir expressed its regret at its breaches and committed to making a payment towards ComReg's costs.

On 1 December 2017, Vodafone Ireland Limited (Vodafone) was convicted of eight counts of incorrect charging of customers for electronic communications services before the Dublin

⁸ ComReg Document 12/129 (D13/12): "Contract Change Notifications – New Requirements" www.comreg.ie/publications

District Court. The outcome of this case against Vodafone was that: a) Vodafone pleaded guilty to eight charges brought against it; b) Judge John Brennan imposed criminal convictions for each of the eight charges and ordered Vodafone to pay a total of €11,500 in fines; c) Vodafone advised that it had carried out an extensive internal review to prevent such issues arising in the future, and was carrying out improvements in relation to the general care process for repeat callers and customer escalations. Vodafone stated that further remediation measures due to be implemented in Quarter 1 of 2018, include a review of the process for ensuring that any customer requests, including cancellation requests, are actioned. Vodafone also committed to improved communications by email for customers, additional reporting to identify outstanding actions and the implementation of a new customer IT system; d) Vodafone expressed its regret at its breaches and committed to making a payment towards ComReg's costs.

On 11 December 2017, Yourtel Limited (Yourtel) was convicted of 88 charges of incorrect charging of customers for electronic communications services before the Dublin District Court. The outcome of this case against Yourtel was that: a) Yourtel pleaded guilty to 88 charges brought against it; b) Judge Flann Brennan imposed criminal convictions for each of the 88 charges and ordered Yourtel to pay a total of €66,000 in fines; c) The evidence of the Yourtel company director was that Yourtel had made full refunds to all affected customers in the projected amount of €124,526. It was also acknowledged that Yourtel did not deal with these customers appropriately.

On 19 December 2017, ComReg reported that Three Ireland (Hutchison) Limited (Three) had made a payment of €575,000 to ComReg following investigations into the manner in which Three implemented contract changes in March and April 2017 and into conditions and procedures put in place by Three in respect of proposed contract changes that had the effect

of dis-incentivising customers from changing service provider. Three's payment was made following ComReg having formed the Opinion that: i) There was a failure by Three to properly advise its customers of the nature of the contract changes proposed; and to adequately facilitate their right to exit their contracts without penalty, after being notified of the proposed contractual changes (the Regulation 14 Window) pursuant to obligations imposed on Three by Regulations 14(4) and 14(6) of the Universal Service Regulations and ComReg Decision D13/12; ii) There was a failure by Three to ensure that its conditions and procedures for contract termination did not act as a disincentive to consumers changing service provider in breach of Regulation 25(6)(b) of the Universal Service Regulations. Three committed to (i) refund any customer that was charged an early termination fee or any other penalty as a result of withdrawal from their contract within the Regulation 14 Window; (ii) to re-notify certain customers of their contract changes and advise the customers of their right to withdraw without penalty if they did not wish to accept the changes; to contact all customers that it could identify that tried and were unable to contact Three on the 1800 number and to remedy the situation to the customers' satisfaction.

On 1 February 2018, ComReg brought two prosecutions against Yourtel Limited (Yourtel) alleging that Yourtel had failed to comply with statutory requests for information issued to it by ComReg under Section 13D(1) of the Communications Regulation Act 2002 (as amended) ("the Act"). The outcome of this case was that: a) Yourtel pleaded guilty to charges of failing to comply with the statutory requests for information; b) Judge Michael Coghlan convicted Yourtel on both counts and imposed fines of €3,000 in respect of each of the counts, totalling €6,000; c) Yourtel made a payment towards ComReg's costs; d) The evidence of Yourtel company director Marijan Vukusic was that Yourtel was making refunds to customers affected by overcharging and it was

acknowledged that Yourtel had not dealt with these customers appropriately.

On 8 March 2018, ComReg reported that it had issued Opinions of Non-Compliance in each case to Vodafone Ireland Limited (Vodafone), Virgin Media Ireland (Virgin Media), Eircom Limited (trading as eir) and Sky Ireland (Sky). The cases related to certain Contract Change Notifications ("CCNs"), in which these undertakings had failed to comply with Regulation 14(4) of the Universal Service Regulations⁹ (the Regulations) and ComReg Decision D13/12¹⁰ In light of commitments given by the undertakings, ComReg closed these investigations and is not taking further action in respect of them.

On 15 March 2018, ComReg notified Tesco Mobile Limited (Tesco Mobile) of a finding of non-compliance with its obligations under Articles 6a and 6e of Regulation (EU) 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union, as amended by Regulation (EU) 2015/2120 (the Roaming Regulations) and supplemented by the Commission Implementing Regulation (EU) 2016/2286. ComReg found that Tesco Mobile failed, in certain instances, to correctly calculate and apply roaming charges/surcharges to roaming data consumption. This related to the period from 15 June 2017 to 24 January 2018, during which Tesco Mobile overcharged Pay-As-You-Go (PAYG) and bill pay customers for data roaming services where the roaming customer had exceeded their roaming data allowance (calculated in accordance with Regulation (EU) 2016/2286), but remained within their overall domestic data allowance.

Tesco Mobile was given an opportunity by ComReg to state its views and to remedy the Non-Compliance within a reasonable period.

Tesco Mobile responded to ComReg on 9 April 2018. Tesco Mobile took immediate measures to remedy the Non-Compliance, to identify affected customers and to initiate refunds. Tesco Mobile was fully engaged and cooperative with ComReg throughout the investigation. ComReg formed the Opinion that Tesco Mobile was Non-Compliant with its obligations under Articles 6a and 6e of the Roaming Regulations. ComReg took account of Tesco Mobile's response and its remedial measures and, subject to the completion of all commitments received, will be taking no further action in respect of this matter.

On 26 April 2018, ComReg notified Meteor Mobile Communications Limited¹¹ (Meteor) of a finding of non-compliance with its obligations under the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011¹² (the Universal Service Regulations). The notification related to the manner in which tariffs and charges associated with out of bundle data usage were presented to customers by Meteor and notified Meteor of a finding that, in relation to contracts, it has failed to comply with Regulations 14(1) and 14(2)(d) of the Universal Service Regulations.

On 22 June 2018, ComReg notified Virgin Media Ireland Limited (Virgin Media) of a finding of non-compliance by Virgin Media with its obligations under the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (the Universal Service Regulations). The notification related to the manner in which tariffs associated with certain extra charges were presented and subsequently charged by Virgin Media to portions of its customers and related, in particular, to the transparency and accessibility of contractual provisions.

⁹ European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011

¹⁰ ComReg Document 12/129 (D13/12): "Contract Change Notifications – New Requirements" www.comreg.ie/publications

¹¹ Trading as "eir"

¹² European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011

ROAMING REGULATION



In accordance with its statutory function, ComReg continues its work in monitoring the implementation of the Roaming Regulation by Irish mobile companies.

Since 15th June 2017

Customers are now charged the domestic retail price for using their mobile phone when travelling – this is referred to as Roam Like At Home (RLAH). If a mobile customer has purchased bundled services (price plans that have specific call, text, and data allowances) any roaming usage is now deducted from that home bundle. If all of the bundle allowance is used up, then the "Domestic Price" charged is the normal price that they pay at home for out of bundle usage. Before June, roaming service providers were allowed to impose an additional charge above the domestic price (a surcharge) for retail roaming usage. With the introduction of RLAH, service providers cannot charge more than what would be levied if the customer was consuming those services in the home country i.e. the domestic price. However, there are exceptions. These include the ability to apply a fair usage policy for data, anti-abuse measures and sustainability provisions. In addition, there are transparency measures in place which will help roaming customers to manage their consumption and costs.

Data

For voice calls and texts, consumers can use the full allowances that they have at home. However, in some cases, service providers can apply a fair usage policy to data usage which limits the amount of data that you can use from your domestic bundle whilst roaming. These limits, if implemented by roaming service providers, are determined by the type of contract (post-pay or prepay) and the data allowance that you have.

There is a formula for assessing if a fair usage policy (FUP) applies to your data allowance and this is available on the ComReg website. Each consumer should be aware of any data limits applicable when roaming as there are different scenarios which involve different calculations to determine the data limits. ComReg advises consumers to contact their operator directly for confirmation on what allowances and/or FUPs may apply in advance of travelling.

Transparency

Consumers who are roaming continue to get a personalised SMS Message upon entry into another EEA country. This message has details such as price (ex VAT) of making and receiving calls, sending an SMS, and any usage policy and charges in excess of limits and surcharges, the free of charge phone number for more information and the number for emergency services.

Consumers who are roaming receive an alert when the financial limit of €50 (ex VAT) has been reached. The financial or volume limit on data roaming consumption of €50 (ex VAT) is per monthly billing period. Consumers are then asked to confirm if they want to continue using data. In addition, consumers have the right to request and receive, free of charge, more detailed information from their roaming service provider from anywhere in the EEA.

EMERGENCY CALL ANSWERING SERVICE



ComReg is statutorily responsible for monitoring the quality of service of the Emergency Call Answering Service (ECAS) provider and for reviewing the Call Handling Fee (CHF) that the ECAS provider may charge.

The service continued to perform to the quality specifications set by the Minister for Communications, Climate Action and Environment in the original 2009 contract with the service provider. In January 2017, ComReg determined, following the review of the costs incurred by the ECAS provider to maintain the maximum CHF of €3.24 per call for the period 12 February 2018 to 11 February 2019, or when the new Concession Agreement comes into effect, whichever is earlier. The consumer is not charged for calls to 999 or 112 as this cost is borne by the presenting telecommunications network.

On 13 December 2017, ComReg published an Information Notice¹³ entitled "Emergency Calls – Caller Location Information: Update on recent developments." The Notice mentioned the publication by ComReg of a Preliminary Consultation¹⁴ seeking the views of Undertakings and other stakeholders on matters relevant to the setting of criteria for accuracy and reliability of emergency caller location information and the responses thereto¹⁵ which were most informative and helpful.

On 18 February 2016, ComReg, the ECAS and the Department of Communications Climate Action and Environment (DCCAE) facilitated a number of meetings intended to; (i) explore the benefits of introducing Advanced Mobile Location ("AML") in Ireland; (ii) assess the

¹³ ComReg Document 17/107: "Emergency Calls – Caller Location Information: Update on recent developments."

www.comreg.ie/publications

¹⁴ ComReg Document 14/110 "Emergency Calls - Caller Location Information: Setting criteria for accuracy and reliability" www.comreg.ie/publications

¹⁵ ComReg Document 14/110s "Emergency Calls - Caller Location Information: Setting criteria for accuracy and reliability -Submissions to Preliminary Consultation Document No. 14/110" www.comreg.ie/publications

technical requirements of so doing; and (iii) ascertain the support amongst stakeholders for such an initiative.

Eir, Vodafone and Three attended; as did representatives of the Emergency Services (An Garda Síochána, the National Ambulance Service, the Fire Services and the Irish Coast Guard). The apparent benefits of the solution were convincing and a proposal by the members of the ComReg ECAS Forum to initiate a trial on Irish mobile networks was supported by all three mobile networks.

On 21 February 2017, after completion of extensive solution testing on all networks, DCCAE approved a limited pilot of the solution to determine its impact, if any, on existing emergency communication infrastructure, as well as the accuracy and effectiveness of the solution in an Irish context. Incremental expansion of the solution followed on a phased basis with DCCAE approval at each phase. On 10 August 2017, DCCAE approved full deployment of the solution across all three mobile networks.

On 19 October 2017, the solution was launched¹⁶ by Minister for Communications, Climate Action and Environment, Denis Naughten TD, and Minister for Rural and Community Development, Michael Ring TD.

Universal Service for Electronic Communications

A central aspect of our work on consumer protection is to ensure availability of a universal electronic communications service.

In July 2016, following a series of public consultations, Eircom Ltd. (trading as eir) was designated as the Universal Service Provider (USP), in accordance with the European Communities (Electronic Communications Networks and Services) (Universal Service and

Users' Rights) Regulations 2011, to provide Access at a Fixed Location for five years until 30 June 2021 (D05/16).¹⁷ D05/16 deferred a final decision on Quality of Service (QoS) pending further consideration.

In February 2017, ComReg introduced "service availability" targets which combine the two previous metrics of fault occurrence and fault repair. These targets are stated in terms of "maximum of working days outage per line" instead of as a "percentage" value (D03/17¹⁸) which are annual targets both national (maximum of 0.237 working days outage per line (99.935%)) and sub-national (maximum of 0.607 working days outage per line (99.834%).

¹⁶ https://www.dccae.gov.ie/en-ie/news-and-media/pressreleases/Pages/Ministers-Naughten-and-Ring-launch-newtechnology-that-will-reduce-delays-and-potentially-savelives-in-emergencies.aspx

¹⁷ ComReg Decision D05/16, Eircom Ltd. appealed to the High Court and on 8 March 2017, the proceedings were struck out with no order as to costs. www.comreg.ie/publications

¹⁸ ComReg Decision D03/17, Universal Service Requirements Provision of access at a fixed location (AFL) Quality of Service (QoS) www.comreg.ie/publications

UNIVERSAL SERVICES OBLIGATION



Universal Service Quality of Service Compliance

An Information Notice (ComReg Document 18/62) was published by ComReg showing Eircom Ltd (trading as eir) USO performance for each quarterly period of 2017 and the annual performance for 2017. ComReg also published an Information Notice (ComReg Document 18/71) showing eir USO performance for the first quarterly period of 2018.

Cost of the USO - USO Funding Applications 2010-2015

In 2011, ComReg issued a Decision (ComReg Document D04/11) about the principles and methodologies for establishing the net cost of providing the universal service. This decision provided the basis upon which the net cost of providing the universal service is calculated and will enable ComReg to determine if the net cost, if any, constitutes an unfair burden on the universal service provider.

ComReg commenced a process of consultation (in Q4 2017) on the assessment of eir's applications for funding for the periods 2010-2011, 2011-2012, 2012-2013, 2013-2014, and 2014-2015, which were resubmitted by eir between September 2014 and March 2017¹⁹.

ComReg has now published USO funding Consultations and Draft Decision documents in respect of eir's 2010/11 to 2014/15 funding applications for the provision of universal service, as set out below:

Table 1: USO funding consultations 2010-2015

USO Funding Consultation Year	Publication Date		
2010-2011	5 September 2017		
2011-2012	11 October 2017		
2012-2013	22 November 2017		
2013-2014	15 December 2017		
2014-2015	30 April 2018		

Once ComReg has analysed and considered the views of respondents in respect of eir's funding applications for the financial years 2010/11 to 2014/15, ComReg intends to individually publish its Response to Consultation and Decision documents in respect of each of these five applications.

¹⁹ ComReg Document 16/68: "Universal Service Obligation Funding Application" www.comreg.ie/publications

POSTAL REGULATION



ComReg's statutory functions are to ensure the provision of a universal postal service that meets the reasonable needs of postal service users and to monitor and ensure compliance by postal service providers with the obligations imposed on them.

ComReg's statutory objectives are to:

- promote the development of the postal sector and, in particular, the availability of a universal postal service within, to and from the State at an affordable price for the benefit of all users;
- promote the interests of postal service users;
- facilitate the development of competition and innovation in the market for postal service provision.

The Communications Regulation (Postal Services) Act 2011 designated An Post as the universal postal service provider (USP) until 2023, with the option for ComReg to consider a review in 2018. Specific functions of ComReg include monitoring compliance of the USP with directions issued by ComReg.

Postal Strategy Statement 2018 – 2020

ComReg set its postal strategy for the period 2018 – 2020 by setting three Strategic Intents:

- **1.** There is a universal postal service that meets the reasonable needs of postal service users
- 2. Postal service users can choose and use postal services with confidence
- Regulation facilitates the development of competition and innovation in the provision of postal services by using appropriate regulatory intervention within our remit.

In setting our postal strategy, ComReg identified four principal trends which are likely to shape the postal sector over the next five years. These are:

TRENDS

01 A continual decline in mail volumes.

A significant threat to letter volumes arising from electronic substitution.

Changing mix of mail and speed of delivery.

O4 Continued competition and growth in the packets and parcels sector.

Given these trends, we identified five principal challenges for the postal sector. These are:

CHALLENGES

The financial and liquidity situation facing An Post, given its statutory designation as the sole universal postal service provider.

Limited scope for further significant price increases.

Urgent need to reduce costs in line with decline in mail volumes.

Need to reduce losses (by negotiating better Terminal Dues agreements) on International Inbound mail.

Responding to the changing demand dynamics of the postal sector.

Quality of Service

One of the fundamental objectives of the European Postal Directives is to secure improvements in quality of service for universal postal service and ComReg is obliged by law to set a quality of service target for the USP for its provision of universal postal service.

ComReg has directed the USP to achieve a next-day delivery standard of 94% for single piece priority mail delivered within the State. ComReg monitors An Post's performance against that 94% standard, in accordance with CEN, the European Committee for Standardisation, and international measurement standards, and ComReg publishes annual performance reports on its website. ComReg first introduced independent monitoring of the quality of the universal postal service in 2003 and at that time just 71% of single piece priority mail was being delivered on the next working day. The annual performance report for the calendar year 2017 included the following key findings:

- Over the full calendar year An Post delivered 90% of single piece priority mail on the next working day following the day of posting, which is a decline of one percentage point when compared to the 2016 result and is 4% below the 94% standard;
- An Post delivered 98.9% of single piece priority mail within three working days following the day of posting, slightly below the 2016 result and the 99.5% required standard;

In addition to the annual performance against the regulatory standards as set out above, the report also noted the following key findings:

- In the period January 2017 to November 2017 (excluding December), An Post delivered 92% of single piece priority mail on the next working day which was equal to the 2016 result for this period;
- In December 2017 next-day delivery performance fell significantly to 73%, a notable deterioration, which was mainly related to the performance of mail posted and delivered in Dublin County.

- Performance for 'Dublin County to Anywhere' and 'Dublin County to Dublin County' declined across all of the different measurement periods in 2017 as follows:
 - For the full 2017 calendar year, Dublin performance declined by 3% to 89% and 90% respectively for the above mail flows, compared to 2016;
 - For December 2017, Dublin performance declined by 13% to 63% for the 'Dublin County to Anywhere' category and by 13% to 67% for the 'Dublin County to Dublin County' category, compared to December 2016;
 - During December 2017 'Dublin County to Dublin County' mail's performance at 67% was 16% below all other 'County to County' mail's performance which achieved an 83% rate for that period.

Postal service users disputes – independent dispute resolution

Section 43(3) of the 2011 Act gives ComReg, or an appointee of ComReg, a discretionary power to resolve postal service users' disputes which remain unresolved after due completion of all the procedures of a postal service provider's code of practice. During the year ComReg received eleven requests from postal service users for independent dispute resolution.

RADIO SPECTRUM MANAGEMENT



The radio spectrum is an increasingly valuable and useful resource for the nation, contributing to the improvement of the overall welfare of many sectors of society by supporting an extensive range of desirable, useful and essential services.

Use of the radio spectrum resource helps deliver economic growth and supports numerous jobs in our modern economy and is essential to the provision of mobile communications and wireless reception of broadcast services.

In addition, the radio spectrum is fundamental to the safe operation of air and maritime transport, the day-to-day operation of the Defence Forces and emergency services, as well as being vital to many important scientific applications. Therefore, as a finite natural resource it must be prudently managed to ensure the efficient and effective use of the resource and this task is one of ComReg's primary objectives.

During the year in review, several key spectrum management projects were completed or commenced as detailed below.

The award of the 3.6 GHz band

The 3.6 GHz band is an important spectrum band which is of interest to both wireless internet service providers (WISPs) and mobile networks operators (MNOs). It has a variety of potential uses, which include addressing mobile capacity constraints and being a core band for providing and improving fixed wireless broadband services particularly in rural areas.

Additionally, the band has been identified by Europe's Radio Spectrum Policy Group (RSPG)²⁰ as a candidate band for the introduction of new 5G services.²¹

In summer 2017, ComReg published its Information Notice setting out the final frequency plan and results of its 3.6 GHz Band Spectrum Award Process (ComReg Document 17/46). This award, in which 594 lots spread over nine regions (four rural and five cities) were offered by way of auction, resulted in the assignment of all 350 MHz of available spectrum rights. The award resulted in five winning bidders:

- Imagine Communications Ireland Ltd the largest existing WISP which held over 80% of the previous licences in the band;
- Airspan Spectrum Holdings Ltd a new entrant to the Irish market;
- Vodafone Ireland Ltd an existing mobile network operator;
- Three Ireland Hutchison Ltd an existing mobile network operator; and
- Meteor Mobile Communications Ltd an existing mobile network operator.

The release of the 3.6 GHz band increased the amount of harmonised spectrum for mobile, nomadic and fixed wireless broadband services in Ireland by 86% and places Ireland as a forerunner in Europe, having released 350 MHz of the band in full accordance with the 3.6 GHz Band European Commission harmonisation decision.

20 The Radio Spectrum Policy Group (RSPG) is a high-level advisory group that assists the European Commission in the development of radio spectrum policy. It adopts opinions, position papers and reports, as well as issuing statements, which are aimed at assisting and advising the Commission at strategic level on radio spectrum policy issues, coordination of policy approaches and harmonised conditions, where appropriate, with regard to the availability and efficient use of radio spectrum necessary for the establishment and functioning of the internal market.

Over the lifetime of the licences, winning bidders will pay in excess of €78 million, comprising €60.5m in upfront fees and circa €17.7m in spectrum usage fees to be paid over the 15 year duration of the licences.

Following the completion of the award process, in July 2017, ComReg issued 3.6 GHz Liberalised Use licences to the winning bidders, each with a licence commencement date of 1 August 2017.

Further, during this year, ComReg worked with relevant parties to ensure the orderly and timely transition by existing FWALA licensees in this band to enable services to be provided by the winning bidders in the award, in accordance with the transition rules of the award.

The award of the 26 GHz band

In June 2018, ComReg published an Information Notice (ComReg Document 18/53) setting out the results of the 26 GHz Band Spectrum Award. This resulted in the granting of 840 MHz of new spectrum rights of use in the 26 GHz band and a 25% increase in 26 GHz spectrum rights of use. The 26 GHz Band Spectrum Award consisted of a "sealed bid combinatorial auction" using a second price rule.

The three winning bidders were:

- Meteor Mobile Communications Ltd obtained five Lots of 2 × 28 MHz;
- Three Ireland Hutchison Ltd obtained five Lots of 2 × 28 MHz; and
- Vodafone Ireland Ltd obtained five Lots of 2 × 28 MHz.

All spectrum rights of use run for 10 years and will expire on 5 June 2028, by which time winning bidders will have paid approximately €5m, comprising €1.25m in upfront fees and €3.75m in spectrum usage fees which will be paid over the 10 year duration of the licences.

The newly awarded spectrum rights of use will support the requirement for Point-to-Point radio links, a critical piece of backbone infrastructure for Ireland's mobile communications networks.

²¹ RSPG Opinion "Strategic roadmap towards 5G for Europe" 9 November 2016 "http://rspg-spectrum.eu/wp-content/ uploads/2013/05/RPSG16-032-Opinion_5G.pdf"

Point-to-Point Licences in the 26 GHz band at present allow for over 3,000 Point-to-Point link sites.

Co-ordinated DTT spectrum plans in the UHF band below the 700 MHz band

Since completing in March 2017 the international coordination of Ireland's spectrum plans for Digital Terrestrial Television (DTT) in the 470 - 694 MHz band with the equivalent regulatory bodies in the UK and in France, ComReg with active participation and collaboration from the BAI and 2rn (on behalf of RTÉ), has continued to engage with the UK, France and the Western European Digital Dividend Implementation Platform (WEDDIP) to ensure the timely execution of the agreed DTT plans and facilitate the transition of current broadcasting services out of the 700 MHz band.

The 700 MHz Cost Recovery Mechanism

In 2016, the Department of Communications, Climate Action and Environment requested assistance from ComReg in assessing the efficiently incurred capital and operational costs likely to be incurred by 2rn (a subsidiary of RTÉ), in migrating its DTT network from the 700 MHz band. Those costs are ultimately borne by RTÉ and the State, though the Department of Communications, Climate Action and Environment (DCCAE), has compensated RTÉ for such costs. ComReg engaged Frontier Economics to conduct that assessment.

In December 2016, the 2016 Frontier Economics report (ComReg document 16/114a) estimated that the incremental costs likely to be incurred by 2rn as a result of 700 MHz migration, could amount to €8.6 million. The report also recommended that such compensation be paid in three phases: phase 1 in early 2017, phase 2 in late 2017, and phase 3 in 2020. In February 2017, the phase 1 payment of €5.16m was paid to RTÉ.

In December 2017, ComReg published the 2017 Frontier Economics report (ComReg Document 17/111a). This report assessed the costs already incurred by 2rn and the costs that it is likely to incur in phase 1 and 2, and recommends a phase 2 compensation payment to RTÉ of €2,815,880.

ComReg will continue to work with DCCAE, 2rn and Frontier Economics to monitor costs and verify expenditure to ensure that the schedule of the compensation phases are met.

Proposed award for spectrum for wireless broadband

In June 2018, ComReg issued a preliminary consultation (ComReg Document 18/60) consulting upon the spectrum bands to include in a proposed award of spectrum rights of use suitable for the provision of wireless broadband (both mobile and fixed broadband) services (WBB). In light of recent developments since the publication of ComReg Document 14/101 where this issue was previously discussed, ComReg is of the preliminary view that the following bands should be included in the proposed award: 700 MHz Duplex; Paired 2.1 GHz; 2.3 GHz; and 2.6 GHz.

Spectrum Leasing in the RSPP and 700 MHz bands

In October 2017, ComReg published its response to consultation and decision (ComReg Document 17/82) to put in place a framework for the exante review of proposed spectrum leases in the EU Radio Spectrum Policy Programme (RSPP) and 700 MHz radio spectrum bands. This followed the careful consideration of submissions received in response to ComReg Document 17/47, and other relevant information.

In summary, ComReg Document 17/82 sets out ComReg's view that it is appropriate and justified to extend the existing procedures for reviewing notified spectrum transfers, as established under S.I. No. 34 of 2014, to include spectrum leases.

Test & Trial Ireland

Ireland's geographic position on the western edge of Europe and its low population density provides a key natural advantage, namely, a relative abundance of unused spectrum. Test & Trial Ireland is a service which entrepreneurs, researchers and developers may use to test or trial wireless technologies in a wide variety of frequency bands, including parts of the mobile and broadcasting bands. During the year in review ComReg issued 24 Test & Trial licences. Further details are set out at Test & Trial Ireland www.testandtrial.ie.

Figure 12: www.testandtrial.ie



Licensing Operations

The possession and use of radio equipment in Ireland requires authorisation from ComReg. This authorisation may take the form of either a licence or a licence exemption. Licences may be issued in accordance with the following legislation:

- · Wireless Telegraphy Act 1926 (as amended);
- Broadcasting Authority Act 1960, as amended (in the case of the RTÉ Authority);
- Radio and Television Act, 1988 (in the case of the Broadcasting Authority of Ireland); or the
- Broadcasting (Amendment) Act 2007 for Digital Broadcasting.

As of 30 June 2018, the total number of live radio licences on our database was 18,570.

The total number of new licences issued in this reporting period was 3,674, a decrease of 8.6% on the previous year. This decrease arose as a result of:

- the closure of the 3.6 GHz FWALA licensing scheme in 2017 which resulted in a spike in applications prior to closure. Applications and amendment requests for FWALA licences declined from 110 in 2016/17 to just 14 in 2017/18;
- an almost 50% decrease in the number of broadcasting licences issued over the previous reporting period. In the 2016/17 reporting period 252 broadcasting licences were issued. This was as a consequence of the expiry of the Broadcasting Authority of Ireland's (BAI) long term licences and as a result new 10 year licences were issued by ComReg to the BAI. In the current reporting period 129 broadcasting licences were issued by ComReg;
- a 12% reduction in the number of point to point link licence applications.

Mobile User Experience

Mobile user experience is an increasingly topical issue in Ireland. The general public perception appears to be that despite the improvements in mobile networks with the rollout of improved 3G and new 4G mobile services, mobile user experience has deteriorated. The matter of mobile user experience can often give rise to confusion, accentuated by a relative dearth of research and reliable information. There are a number of factors (in particular, see figure 13) that will affect the quality of mobile service that a user will experience at any given location.

Figure 13: Main Factors affecting mobile user experience

The increased use of phones which have poor antenna performance.

Changing consumer habits (e.g. increased use of data, greater reliance on smartphones) and expectations.

The use of better building insulation materials; particularly the use of foil backed construction materials.

The integration of new services into existing mobile networks (e.g. 3G into 900 MHz, 4G services into 1800MHz)

The ability of the mobile phone operators to find suitable sites to obtain planning permission.

In its Radio Spectrum Management Statement 2016 – 2018 (ComReg Document 16/50 ²²), ComReg identified mobile user experience as an area of importance and stated that it would endeavour to provide clarity to the debate by producing reliable facts and data and making this information readily available in order to help inform and protect consumers. This coincides with the findings and recommendations of the Government's Mobile and Broadband Taskforce report²³. During the 2017 – 2018 period ComReg commenced work in the following areas:

- Mobile Handset Performance Testing;
- · Building Materials Testing;
- 22 ComReg Document 16/50: "Radio Spectrum Management 2016 2020" www.comreg.ie/publications
- 23 http://www.dccae.gov.ie/en-ie/communications/publications/ Pages/Report-of-the-Mobile-Phone-and-Broadband-Taskforce. aspx

- Developing a Coverage Checker website; and,
- Developing a consultation on the use of mobile phone repeaters.

In Feb 2018, ComReg published a technical report (ComReg Document 18/05) on the performance of mobile handsets for voice which suggests variation in performance of up to 14 dB between handsets. ComReg is currently conducting measurements on the performance of the same mobile handsets for data and intends to publish these measurements on completion.

In relation to Building Materials Testing, ComReg is testing the effects of some modern building materials on indoor mobile performance and will publish its findings in the form of a technical report in the next reporting period.

In order to address mobile consumer experience for indoor mobile reception, in December 2017 ComReg published a consultation (ComReg Document 17/103²⁴) on permitting the general use of Mobile Phone Repeaters by way of an exemption order. Following the consultation process, in June 2018, ComReg licence exempted the use of certain Mobile Phone Repeaters and published its response to consultation and final decision (ComReg Document 18/58²⁵). Another solution that ComReg has identified to address indoor mobile reception is to encourage Mobile Network Operators to roll out native Wi-Fi calling on their respective networks and eir is the first mobile network operator to have done so.

Spectrum Intelligence and Investigations

ComReg's Spectrum Intelligence and Investigations unit is responsible for ensuring compliance with wireless telegraphy legislation

²⁴ ComReg Document 17/103 "Mobile Phone Repeaters – Consultation" www.comreg.ie/publications

²⁵ ComReg Document 18/58 "Mobile Phone Repeaters – Response to Consultation and final decision www.comreg.ie/publications

and the Electromagnetic Compatibility (EMC)²⁶ and Radio Equipment (RE)²⁷ Directives in the State and enforcing same as required.

During the period 174 consumer devices were detained and inspected by ComReg through the course of its market surveillance activities in relation to the EMC and RE Directives and approximately 70% of those were found to be non-compliant²⁸.

As part of its market surveillance activities ComReg enjoys a very co-operative relationship with the Customs and Excise Authorities to help ensure that non-compliant electronic equipment does not enter the State. Such prohibited devices have been found to cause harmful interference to a range of services including mobile phone networks and aeronautical services.

In the period from July 2017 to June 2018
ComReg received 123 reports of harmful interference to radio services. More than half of all complaints received are reports of interference to mobile network operators. Interference involving fixed line services and non-radio devices also represent a significant proportion of the work in this area. Such cases are often interlinked with the market surveillance activities under the EMC Directive.

Programme of Measurement of Non-Ionising Radiation (NIR)

The Department of Communications, Climate Action and Environment is responsible for the health effects of NIR, while ComReg requires, as a condition of wireless transmission licences, that operators of transmitting stations must

26 The Electromagnetic Compatibility Directive 2014/30/EU as transposed into Irish law by S.I. No. 69 of 2017 – European Communities (Electromagnetic Compatibility) Regulations

ensure that their installations comply with the NIR emission limits specified in the latest guidelines published by the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

ComReg carries out annual audits of compliance by operators with licence conditions which includes the ICNIRP emission limits. Each annual audit involves surveying a sample number of sites and transmitter types (broadcast, mobile telephony, wireless broadband etc.) countrywide.

Results of all the site surveys conducted during this reporting period were summarised and published in four quarterly reports which are available on **www.comreg.ie**. Copies of the individual site survey reports were made available on the ComReg website as well as via **www.siteviewer.ie**²⁹.

ComReg is pleased to report that at all of the sites surveyed during this reporting period, measurements of NIR emissions were found to be significantly below the ICNIRP guideline limits.

Mobile Network Operator Licence Compliance – Drive Testing

ComReg undertakes a drive test regime that is designed to assess compliance with the coverage obligations set down in the 3G and Liberalised Use Licences. The route taken covers in excess of 5,000km taking in all primary and secondary roads in the State; this is the most rigorous schedule undertaken by any National Regulatory Authority (NRA) in the EU.

During the review period ComReg published two summary reports of its national drive tests and continues to make the raw data that underlies the drive tests available for download on its website **www.comreg.ie**. The results found that all mobile network operators are in compliance with their licence conditions.

²⁷ The Radio Equipment Directive 2014/53/EU as transposed into Irish law by S.I. No. 248 of 2017 – European Communities (Radio Equipment) Regulations 2017.

²⁸ It is important to note that this is not representative of the rate of non-compliance of products on the market, rather it is a function of the targeted approach to market surveillance adopted by the organisation

²⁹ Site viewer is an on-line facility provided by ComReg, which allows the public to view details of GSM, 3G and LTE mobile telephony base stations throughout Ireland

NUMBERING



Managing the National Numbering Scheme

ComReg's numbering unit performs ongoing operational and strategic management of the National Numbering Scheme, which comprises all geographic numbers, mobile numbers, nongeographic numbers, premium rate service numbers, short codes, and network codes.

Telephone numbers and codes are essential to the provision of electronic communications services. They enable effective routing of national and international communications and support the proper functioning of fixed and mobile billing and settlement regimes. They also provide information to the caller on the service called, the price of the call, and the location of the called party.

Numbers are managed in accordance with International Recommendations and subject to specific national and EU legislation. ComReg also sets conditions (i.e. rules) for operators' use of numbers and defines who is eligible to hold numbers. These conditions and eligibility criteria are designed to protect consumers and to provide operators with equal access to Irish numbering resources in order to promote competition. The numbering conditions are updated as required to take account of market developments, legislative changes and any other requirements. The most recent update was completed in June 2018³⁰, following a public consultation.

³⁰ ComReg Document 15/136R1 "Numbering Conditions of Use and Application Process" www.comreg.ie/publications

Review of Non-Geographic Numbers

ComReg is currently reviewing the functioning of five different types of non-geographic numbers (NGNs) - 1800, 1850, 1890, 0818 and 076. These NGNs are used to provide a wide range of telephone services to consumers, such as charity helplines, telephone banking and customer services. Although NGNs provide a useful platform for the delivery of services, ComReg has concerns about the retail tariffs for some NGNs and the level of transparency of NGN costs for consumers.

A review is being conducted with the assistance of external consultants, DotEcon and Behaviour & Attitudes (B&A). In August 2017, ComReg published the consultants' research and a consultation paper³¹ which set out ComReg's preliminary view that certain issues with the NGN platform, as currently structured, are resulting in consumer harm.

The research demonstrated that retail tariffs for NGN calls can be high, particularly for NGN calls made from mobile phones, and because most NGN calls are not included in consumers' "bundles" of call minutes. In addition, retail tariffs for NGN calls are not sufficiently transparent and consumers often do not know, or are unable to estimate, the likely cost of a call to an NGN. Finally, many consumers do not understand the differences between the five types of NGNs.

As a consequence, it appears that a significant number of consumers are deterred from calling NGNs, or else they call them reluctantly and only where necessary (i.e. where they have no other option). ComReg is of the view that this is to the detriment of consumers generally and, in particular, to those who may be financially and/or socially vulnerable. There also appears to be a negative impact on the many organisations which use NGNs to provide services.

ComReg has also provided further information as to how it proposes to address any harm identified at the wholesale level that may be affecting organisations' use of NGNs for providing services to consumers. This is of particular concern for 1800 Freephone, where ComReg's research has shown that many organisations consider the cost of its use prohibitive.

ComReg's Response to Consultation (ComReg Document 18/65³²) sets out ComReg's assessment of the submissions received to date, its current position, and how ComReg intends to advance its review of NGNs. ComReg remains of the preliminary view that the proposed regulatory measures are needed to address to the observed consumer harm and are justified and proportionate. These proposed measures include the introduction of new retail tariff condition for 1850, 18901 0818 and 076 NGNs and a reduction in the number of NGN types from five (1800, 1850, 1890, 0818 and 076) to two (1800 and 0818).

³¹ ComReg Document 17/70 "Review of Non-Geographic Numbers" www.comreg.ie/publications

Review of Mobile Numbering Resources

In 2017, ComReg conducted a review of mobile numbering resources. This was prompted by forecasts for exponential growth of Machine to Machine (M2M) connections on mobile networks and a clear trend for the 'extraterritorial' use of national numbers across the EU and internationally by M2M Service Providers. Key areas currently benefiting from M2M or Internet of Things (IoT) connectivity include automotive, ehealth services, smart metering/smart grids, smart homes, smart cities and agriculture. In particular, Analysys Mason forecasts there will be 719 million connected cars worldwide by 2025. The introduction of eCall automated emergency calling in all newly manufactured cars intended for sale in the EU from April 2018 is also a specific requirement that requires numbering resources.

As part of its review, ComReg held discussions with Irish and international mobile operators as well as specialist M2M service providers. The discussions informed ComReg's development of proposals for a long-term numbering scheme for all mobile services, which was published for consultation³³ in January 2018.

Although mobile networks are evolving to all-IP networks, respondents broadly agreed with ComReg that many M2M connections will continue to need numbers for a variety of technical and operational reasons. A detailed response from AT&T indicated that numbers will likely be required for at least the next 30 years.

Respondents also broadly agreed that while numbers need to be made available for new M2M services, this must not entail any number changes for existing Irish mobile users. Respondents indicated that mobile number conservation measures agreed with industry in 2016 are being implemented and will greatly assist in ensuring sufficient supply of mobile numbers for anticipated growth of mobile services.

Based on respondents' views on ComReg's forecasts of demand for M2M numbers, it is clear that the use of existing mobile number ranges for M2M services cannot cater for the anticipated growth. ComReg has therefore decided³⁴ to adopt its preferred proposals for M2M numbers with 10 subscriber digits, using the 088 prefix. This is a maximum number length of 15 digits allowed in international format (i.e. +353 88 + 10 digits) and is in line with a CEPT Recommendation to have M2M numbers as long as possible. Respondents broadly agreed with this proposal and ComReg also noted that several other Member States have similarly introduced 15 digit M2M ranges. This should remove pressure on the existing mobile ranges and create a sufficient supply of numbers to cater for projected growth in the M2M sector over the long term.

³³ ComReg Document 18/03 "Review of Mobile Numbering -Promoting Innovation and Facilitating New Services" www.comreg.ie/publications

³⁴ ComReg Document 18/46 "Review of Mobile Numbering -Response to Consultation & Decision" www.comreg.ie/publications

MARKET ANALYSIS



In Ireland the scope and nature of telecommunications regulation is determined by a process set out in European law known as market analysis. As part of the process ComReg must firstly define what markets are potentially within the scope of regulation having regard to a list of recommended markets published by the European Commission in 2014.

Having defined the relevant market, ComReg must assess whether any company or companies is individually or jointly dominant within that market. If it is concluded that a dominant operator does exist it must impose at least one remedy (or obligation) to ameliorate the likely effect of this dominance in terms of its impact on competition and consumers.

For example, ComReg may require a dominant operator to open up access to its network to competitors at the wholesale level, with such access subject to price controls. ComReg is required by European law to notify the European Commission of its draft decisions with respect to its market analysis.

In practice, most telecommunications regulation is targeted at the wholesale level; at the end of June 2018 only one retail market (with three sub-segments) was subject to regulation - the market for retail access to the public telephone network at a fixed location (line rental). However, regulation within these retail markets has been gradually reduced over time.

During the year, ComReg continued and/or commenced its analysis of a number of other wholesale markets including the wholesale markets for:

- 1. High Quality Access (HQA): essentially wholesale high speed symmetric broadband services used as inputs in the provision of downstream/retail broadband services to medium and large businesses, as well as being used by service providers to extend the boundaries of their networks. ComReg issued a further consultation³⁵ on its analysis of the wholesale HQA market in February 2018, with the review ongoing.
- 2. Wholesale Local Access (WLA) and Wholesale Central Access (WCA): being two wholesale markets which are used as inputs in the provision of downstream/retail broadband and telephony services (among others). Following on from a 2016 Consultation, in June 2018 ComReg notified the European Commission³⁶ of its draft decision with respect to its analysis of the WLA and WCA markets. Work is also continuing on price control and bundling remedies in the WLA and WCA markets, following on from previous consultations issued in April and June 2017.
- 3. Fixed Voice Call Termination (FVCT) and Mobile Voice Call Termination (MVCT):

³⁵ ComReg Document 18/08 "Market Review: Wholesale High Quality Access, Further Consultation" www.comreg.ie/publications

³⁶ European Commission Cases IE/2018/2089 and IE/2018/2089.

being two wholesale markets involving the completion of calls on the networks of called parties. Preparatory work on the FVCT and MVCT analyses is ongoing. ComReg issued a consultation on its analysis of the FVCT and MVCT markets in November 2017³⁷. This was followed by a separate, but related, consultation in March 2018³⁸ on price control obligations relating to the charges for FVCT and MVCT services. Work is ongoing with respect to these market analysis and pricing work streams.

ComReg has been engaged in the gathering of information from service providers using its statutory information gathering powers.

Market Commentary

As of June 2018, approximately 1.8m premises were passed by Eircom Ltd (trading as eir) NGA networks including FTTC (Fibre to the Cabinet) and FTTP (Fibre to the Premises) based technologies³⁹. In total, 635k subscribers were using these services. Of these 48.3% were supplied by eir Retail while 51.7% were supplied by other operators using eir's wholesale NGA product set.

Virgin Media also continued to be a significant player in the market, advertising download speeds in excess of 300Mbps. According to public filings⁴⁰ Virgin Media's network addressed 903,500 premises and had 371,100 broadband subscribers as at end June 2018.

SIRO, a joint venture between ESB and Vodafone, has also been rolling out FTTP to households and businesses in a number of selected towns across the country. As of May 2018, SIRO had passed 150,000 premises⁴¹.

- 37 ComReg Document 17/90r "Market Review Fixed Voice Call Termination and Mobile Voice Call Termination" www.comreg.ie/publications
- 38 ComReg Document 18/19 "Price Consultation Further Specification of Proposed Price Control Obligations for Fixed and Mobile Call Termination Rates " www.comreg.ie/publications
- 39 https://www.eir.ie/pressroom/eir-announce-3rd-quarterresults-to-31-March-2018/
- 40 https://www.libertyglobal.com/wp-content/ uploads/2018/08/VM-Fixed-Income-Q2-2018-Release.pdf
- 41 https://siro.ie/clonmel-roll-out/

Average fixed broadband speeds continued to increase. At end June 2018, approximately 86% of all fixed broadband subscriptions were equal to or greater than 10Mbps up from 82% in June 2017. While at the end of this review period 74.6% of all fixed broadband subscriptions were equal to or greater than 30Mbps, up from 68.7% in Q2 2017.

Total fixed retail broadband subscriptions increased from 1.38m in June 2017 to 1.41m in June 2018. Of these approximately 31.8% were provided by eir Retail, 26.3% by Virgin Media, 18.4% by Vodafone, 13.4% by Sky and 10.0% by remaining operators. The retail broadband services provided by Vodafone, Sky and operators (other than eir and Virgin Media) are enabled by such operators using wholesale products such as Bitstream and Virtual Unbundled Access (VUA) products.

Compliance

This section covers investigations into breaches of regulatory obligations by telecoms operators, incidents associated with misuse of Irish numbers and reports of significant network incidents.

When dealing with investigations into compliance with regulatory obligations the conclusion of the case may result in:

- a formal opinion of non-compliance being issued to an operator,
- an administrative payment by an operator,
- · court proceedings or
- the closure of a case where no issue is identified or closure following remediation by an operator where ComReg considers further action is not warranted.

During the period, ComReg's telecoms compliance activities included:

Regulatory compliance:

- 16 cases opened
- 33 cases closed
- 57 active cases

Misuse of Irish numbers:

- 86 cases opened
- · 96 cases closed

Network incident reports:

15 incidents reported

Associated with the regulatory compliance cases, ComReg carried out 18 active compliance investigations into the incumbent fixed line operator and 15 active compliance investigations into mobile operators.

In June 2017, following two extensive investigations, ComReg formed the opinion that eir had breached its Access, Transparency and Non-discrimination obligations in a number of regulated markets. ComReg applied to the High Court for declarations of non-compliance and for orders that eir pay five separate financial penalties in respect of these breaches⁴².

Eir subsequently commenced separate High Court proceedings against the Minister for Communications, Climate Action and Environment, Ireland and the Attorney General and later ComReg, in which eir challenged the validity of sections of the Access Regulations relating to ComReg's ability to seek High Court orders for financial penalties. ComReg's applications for declarations of non-compliance and financial penalties were stayed pending the hearing of eir's case against the State and ComReg which was due to commence on 14 June 2018.

Immediately prior to 14 June 2018, ComReg and eir held discussions on a possible agreed resolution of the litigation referred to above, the scope of which also included discussions on significantly enhanced regulatory governance arrangements in eir.⁴³

In these circumstances, ComReg, jointly with eir and the State, approached the High Court and requested that the hearing date be vacated, to allow time for further discussions to continue. The High Court consented to this request. Discussions between eir and ComReg on eir's regulatory governance arrangements are ongoing and separately ComReg continues to prepare a consultation on regulatory measures relating to the eir's regulatory governance.

Regulatory Governance

In 2016 ComReg engaged Advisors, Cartesian and KPMG, to carry out a review of the effectiveness of eir's governance arrangements. The overall objective was to establish whether eir's governance arrangements were sufficiently robust to the extent that they demonstrate and ensure ongoing compliance with regulatory obligations. The outcome of the review would assist ComReg in identifying whether any further actions were required by eir and/ or ComReg. The review was completed over two phases and the Advisors' reports were published in July 2017.

The contents of the Advisors reports raised serious concerns about the quality of eir's regulatory governance. Based on ComReg's review of the Advisors' reports it was apparent that eir's regulatory governance arrangements, including its Regulatory Governance Model (RGM), were not likely to enable eir to ensure compliance with its regulatory obligations.

In 2018 ComReg initiated a project to identify whether any regulatory measures would be appropriate, having regard to its objectives and functions, including those under the Access Regulations, in particular under Regulations 8 to 15. ComReg plans to consult on proposals in this regard in the second half of 2018.

⁴² ComReg Document 17/98 "ComReg Wholesale Compliance Cases 481 and 568" www.comreg.ie/publications

⁴³ ComReg Document 18/48. "Update on litigation in respect of Wholesale Compliance cases between ComReg and Eircom" www.comreg.ie/publications

ECONOMICS, POLICY AND RESEARCH



National Conference

ComReg hosted a national conference on the 24th of October in Dublin Castle. The event, entitled "Telecommunications - Society and Sector in Transition", focused on the changing role played by telecommunications in Ireland and the key innovations that are likely to take place in the coming years. The conference was opened by the Minister of State for Community Development, Natural Resources and Digital Development, Seán Kyne TD.

The conference was broken into two sessions. The first of these, "A Time of Transition – the Telecoms Landscape", was addressed by Erzsébet Fitori, Director General of the Fibre to the Home Council of Europe, Sébastien Soriano, Chair of ARCEP and Chair of BEREC, and Torlach Denihan, Director of the Telecommunications and Internet Federation (TIF) at IBEC.

The second session, "A Connected Future", was addressed by William Webb, CEO of Weightless SIG, the standards body developing a new global machine to machine technology. Mr. Webb discussed future mobile network rollout, data consumption and 5G. Karlin Lillington, Irish Times journalist and columnist, Martin Cave, regulatory economist and David Minton, Director of the Northern and Western Regional Assembly responded to Mr Webb's speech.

The conference was attended by 140 stakeholders from across industry and civil society groups.

Figure 14: Left-Right: ComReg Chairperson Gerry Fahy, Commissioner Jeremy Godfrey, Minister of State Seán Kyne TD and Commissioner Kevin O'Brien at ComReg Conference on the 24th of October 2017



BEREC Report on Post-Merger Market Developments

ComReg participated in a BEREC project investigating the price implications of recent mobile mergers in Ireland, Germany and Austria, and undertook analysis of the acquisition of Telefónica Ireland Ltd (O2) by Hutchison 3G UK Holdings Ltd⁴⁴. Across the three countries under investigation, the study found evidence that mobile tariffs would have been lower in the absence of the merger.

Mobile Consumer Experience Survey

The experiences of Irish mobile phone users were elicited through a market research survey carried out in the summer of 2017. In order to ensure that the perceptions of those in rural areas were captured, the survey sampled a high percentage of those living in less densely populated parts of the country. This survey was published as the Mobile Consumer Experience Survey (ComReg Document 17/100a)⁴⁵ and relates to the work of the Mobile Phone and Broadband Taskforce, led by the Department of Communications, Climate Action and Environment.

The key results arising from this study included the following:

- Three quarters of people use data on their mobile phones. However, the take-up of data services is lower in rural areas.
- Most consumers across the country indicated satisfaction with their current mobile service. However, 29% of respondents experience service issues for calls or SMS throughout their home. This number rises to 43% in the most rural areas. Specific issues include the quality of service deteriorating when indoors, a deterioration in the quality of reception

- during a call, the inability to make calls and calls being dropped.
- Consumers are generally slow to change operator. However, many of those who do switch report coverage improvements. This is particularly the case in rural areas.

The price of calls, texts and data is identified as the most important issue when choosing a mobile phone provider in urban areas. However, in the more rural areas, network coverage is the most important consideration.

Ireland Communicates Survey 2017

In the winter of 2017, ComReg carried out the Ireland Communicates Survey⁴⁶ and asked over 1,500 Irish consumers and 500 SMEs about their use and experiences of telecommunications in Ireland. The results below reflect the growing importance of telecommunications in everyday lives:

- There are significant differences in ICT usage across urban and rural areas. This is particularly evident for broadband; 73% of urban respondents have fixed broadband, compared to 58% of those from rural areas.
- Instant messaging apps have reduced the use of SMS services, but have not replaced them; 31% of those using these apps say that they have not reduced the number of text messages they send.
- Consumers expect their usage of "smart" technologies to increase over the coming few years.
- Most consumers are aware that EU roaming charges have ended, and consequently 78% are now more likely to roam in another EU country.
- While the vast majority of SMEs have an online presence (95%), less than half use this presence to trade online.

⁴⁴ This report is published as "BEREC Report on Post-Merger Market Developments - Price Effects of Mobile Mergers in Austria, Ireland and Germany", BoR (18) 119

⁴⁵ ComReg 17/100a "Mobile Consumer Experience Survey" www.comreg.ie/publications

⁴⁶ ComReg Document 18/23a "Consumer Survey" and ComReg Document 18/23b "SME Survey" www.comreg.ie/publications

CORPORATE SERVICES DIVISION



Governance

It is the objective of the Commission to ensure compliance, at all times, with best practice in Corporate Governance.

This financial period commenced on 1 July 2017 i.e. after the effective date of 1 September 2016 of the new 2016 Code of Practice for the Governance of State Bodies. Hence we have applied the new version of the Code of Practice for the Governance of State Bodies in relation to the 2018 Financial Statements.

It is ComReg's policy to comply with the Code of Practice for the Governance of State Bodies and reports on its compliance with the Code on an annual basis to the Minister for Communications, Climate Action and Environment.

ComReg has an extensive audit programme in place, overseen by the Audit Committee which met 4 times during the year. The internal audit function is outsourced. An independent trustee of the pension scheme is also in place, in keeping with best practice.

As a public body operating in a difficult environment, an ongoing challenge is to continue to add value while working within resource constraints. We continuously review and amend policies and procedures in relation to expenditure, procurement and risk management. ComReg is accountable to the Oireachtas through Oireachtas Committees.

The ongoing implementation of the procurement plan aims to achieve value for money, to provide a quality service to the public and arrange procurement in a compliant manner. During the current year we have arranged competitive tendering in respect of equipment and outsourced services.

We have followed European Procurement Directives for larger contracts including publishing tenders in respect of Multi-Supplier Framework Agreement for Legal Services and other Professional Services. We have used the Office of Government Procurement Framework Agreements where feasible.

We aim to pay all valid invoices within 15 days and we publish on our website the number and value of payments made quarterly. We continue to improve work processing cycle times, aided by the co-operation of all staff and the new technological initiatives developed internally to improve processing. In the year to 30 June 2018 84% of payments has been made within the requisite time period.

Human Resources and Operational Excellence

We are privileged to have a skilled workforce dedicated to fulfilling ComReg's remit. The quality of our people is a key part of the organisation's ability to achieve our role in promoting competition, protecting customers and encouraging innovation. ComReg endeavours to provide an environment where people are given the supports to empower them to do their best work thereby enabling the organisation to make an impactful contribution to society.

Attracting candidates with the niche skills required can be difficult in the current jobs market. In an effort to ensure we reach a diverse range of contenders, we expanded the recruitment section of our website to give a stronger sense of ComReg's culture. We did this by including staff testimonials, together with our bespoke competency framework, and a question and answer document. Our hiring managers were trained and supported in using the framework in the recruitment process. We realise that recruitment is only the first step in the employment relationship and that a positive on-boarding and induction must follow.

With this in mind, we designed a structured onboarding process and refreshed our induction programme with the objective of helping the new starter to acclimatise and contribute quickly.

Attrition during the year resulted in loss of intellectual capital, requiring an investment of substantial time to upskill new hires to a level where they match the contribution of the previous incumbent. As a high proportion of our roles require specialised skills – Engineers, Economists, Accountants, Lawyers and Analysts – it can be challenging to quickly fill our vacancies with the talent required. This year we made some changes to our organisational structure to better equip us in responding to our expanding remit.

We completed a review of the performance management process, and following collaboration, introduced a new Performance and Development Dialogue (PDD). The PDD links the Competency Framework to performance and thereby expands the focus to include both what is achieved and how it is achieved. The emphasis is on setting goals linked to strategy and business plans and having frequent, scheduled conversations between reviewer and reviewee.

We continue to strengthen our foundations by updating internal communication and policies. Our Code of Conduct was revised in line with the Code of Practice for the Governance of State Bodies. We ran briefing sessions on the content of the new code to ensure that all staff are aware of their obligations. During the communication sessions, we re-emphasise our values of Integrity, Impartiality, Transparency, Excellence and Effectiveness and continue to use every opportunity to ensure the behaviours associated with these values are woven into all our interactions and decisions. We are committed to ensuring that all colleagues in our diverse workforce are treated fairly and with respect and are aware of what is not acceptable behaviour.

We are a knowledge based organisation committed to equipping the people who work here with the skills to keep abreast of the dynamic telecoms environment. We invest in enabling people to develop their technical and professional skills through on the job training, peer to peer learning, internal courses and formal education. Last year, our calendar of organisational programmes included management development, professional, technical and regulatory programmes as well as lunchtime sessions designed to encourage collaboration and information sharing.

In keeping with our ethos of lifelong learning, we continue to sponsor education and ComReg staff have achieved excellent results as they augment their knowledge and ability. Our mentoring programme continues to provide opportunities to share insights, expertise and knowledge at all levels throughout the organisation.

Our new office in One Dockland Central facilitates this cross-flow of ideas. The office space is open plan with a variety of meeting spaces and common areas to encourage innovation and collaboration. We have an active wellness agenda, the objective of which is to emphasise the importance of taking care of physical and mental health.

The achievements of ComReg are built on the quality, commitment and professional standards of the people who work here. We look forward to continuing to build on this through the future introduction of new and refreshed initiatives.

ComReg has responsibilities in relation to sustainability issues. To meet these responsibilities, ComReg has undertaken a number of green initiatives such as promoting the use of public transport by staff under the tax-saver scheme, encouraging staff access to the cycle-to-work scheme, using recycling bins and energy efficient measures including the installation of sensory-activated lights in offices and other locations, and timers on water heaters.

ComReg will continue to put in place necessary measures, where possible, in order to reduce our Carbon Footprint.

ComReg is also required to comply with sections 25, 26, 27 and 28 of the Disability Act 2005. Under the Act, ComReg ensures that the public areas of our building are accessible to people with disabilities and that our public services are accessible to people with disabilities. ComReg has appointed an access officer who can be contacted at access@comreg.ie

Communications and Engagement

In keeping with ComReg's strategy, a key goal for ComReg is interacting proactively with our many stakeholders. ComReg has a wide array of stakeholders ranging from consumers and their representative groups, to authorised operators, industry representative groups as well as domestic and international government bodies and departments, among others. We believe that open engagement with all stakeholders assists ComReg in its work.

During the year under review we issued 208 publications and we conducted Regulatory Impact Assessments (RIAs) where appropriate, to ensure excessive regulatory burdens were mitigated.

Information Technology

In line with current eGovernment policy, ComReg continues to enhance its Information Technology services. ComReg continued to develop its web services and its bespoke systems to improve processes both internally and in relation to licensing and consumer engagement. During this period there has also been continual improvements in terms of ComReg's security environment to mitigate against the increase in cyber security threats and to improve our operational managed IT services.

INTERNATIONAL AFFAIRS



Body of European Regulators for Electronic Communications (BEREC)

ComReg is an active member of BEREC⁴⁷, whose membership includes each of the national regulatory authorities (NRAs) from 28 Member States of the European Union and the 4 European Free Trade Association ("EFTA") states (Iceland, Liechtenstein, Norway, and Switzerland).

In December 2017, ComReg Commissioner, Jeremy Godfrey, was appointed by the Board of Regulators of BEREC (BOR) to the role of Vice-Chair of BEREC 2018, and Incoming-Chair of BEREC 2019. Mr. Godfrey's appointment⁴⁸ commenced on 1 January 2018 and paved the way for BEREC, to take measures in the period aimed at strengthening the role of BEREC as an enabler of the EU's Digital Single Market strategy. This has been an ongoing objective for BEREC in recent years, as proved by the adoption of its Guidelines on Net Neutrality in 2016 and the work of BEREC to help make Roam-Like-At-Home become a reality in Europe. For its part, and in the present period given ComReg's new stewardship role in BEREC, ComReg has taken leadership roles on the following tasks:

⁴⁷ Established pursuant to Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the BEREC Office.

⁴⁸ In addition to being appointed to the role of Vice-chair 2018 and Incoming-Chair 2019, the Vice-chair 2018 assumes the capacity as the appointing authority for BEREC Office Staff. In the period 1 January 2018 to 30 June, the Vice-Chair adopted 24 decisions relating directly to operational and human resources matters at the BEREC Office.

- managing processes to create, consult with stakeholders, and deliver BEREC's Annual Work Programme for 2019, noting the significant influence of the European Commission proposals for a European Electronic Communications Code (the "Code") on this work; and
- creating content and an agenda for the 6th BEREC Stakeholder Forum to be held in Brussels on 17 October 2018, an event where BEREC will showcase to its Stakeholders its progress towards finalising and adopting the Work Programme 2019.

In parallel to the above, ComReg has continued to participate in delivering the current Work Programme in force (adopted in December 2017), which consisted of circa 30 individual projects (running from January to December 2018). For example in the period, ComReg has participated in each of nine different Expert Working Groups (EWGs) set up by BEREC to achieve its stated commitments in the Work Programme. In addition, ComReg continued to provide national experts to Co-chair the Benchmarking, End Users, and the ad hoc Communications EWGs as well as commencing relevant activities for when, in its capacity as Incoming-Chair 2019, ComReg will also Co-chair the BEREC Contact Network (the preparatory meeting held by BEREC in advance of its Plenary meetings) during that year.

ComReg's participation in BEREC's Work
Programmes is not only a requirement of the
Common European Regulatory Framework
for Electronic Communications Networks and
Services⁴⁹ but also is a means to shape the way
electronic communications and digital sectors
are regulated now and in the future.

49 The Common Regulatory Framework for Electronic Communications Networks and Services is set out in the Framework, Access, Authorisation and Universal Service Directives, as amended, as transposed into Irish law by the corresponding Statutory Instruments of 2011 – No.333 Framework, No. 334 Authorisation, No. 335 Access and No. 337 Universal Service and End Users' Rights Regulations see here https://www.dccae.gov.ie/en-ie/communications/legislation/Pages/default.aspx

In addition to its annual Work Programme, BEREC provides Opinions and other technical advice to the European legislative institutions (the European Commission, the Council and the Parliament) on an ad hoc basis. Furthermore, to protect the interests of European citizens and to promote competition generally, BEREC co-operates with other advisory bodies, such as the Radio Spectrum Policy Group ("RSPG")⁵⁰ and European Union Agency for Network and Information Security ("ENISA")⁵¹.

BEREC Plenary Meetings

The BOR meets four times per year and in this period a number of key documents were adopted and approved for publication, covering topics including, among others:

- Safeguarding an open internet (including commencing a public tender for a quality of service measurement tool which could enable end users to measure/validate the performance of internet services contracted by them);
- Enhancing connectivity in Europe (including publishing a draft Common Position on monitoring mobile coverage in Europe); and
- Improving dialogue with stakeholders (including developing and launching an online tool hosted at the BEREC website to manage consultation submissions received on BEREC's draft Annual Work Programme 2019).

Consistency in Regulation across Europe

In order to achieve a greater consistency in regulatory processes, the European Commission has oversight powers in respect of measures which NRAs may take regarding the competitive state of markets at national level (referred to as "Article 7 cases" after the provisions of Article 7 and 7a of the Framework Directive (Directive 2002/21/EC, as amended)).

⁵⁰ Radio Spectrum Policy Group; http://rspg-spectrum.eu/

⁵¹ European Network and Information Security Agency; http://www.enisa.europa.eu/

When the Commission expresses serious doubts about an NRA's analysis of the market and remedies to address competitive failures, it opens a so-called "Phase II investigation" and must take the utmost account of BEREC Opinions before exercising its powers. In such instances, BEREC has a procedure to establish an EWG responsible for drafting an Opinion.

ComReg provided a national expert to the permanent pool of rapporteurs who are available to BEREC to participate in such EWGs. Across the period 6 cases were opened (3 of which were discontinued before a BEREC Opinion was approved, following the withdrawals of the relevant notification by the NRA concerned. In particular, ComReg was Rapporteur and/or assisted drafting BEREC Opinions on the following cases:

- Case DE/2017/1997 Germany (Market for wholesale call termination on individual public telephone networks provided at a fixed location)(market 1)
- Case SK/2017/2010 Slovakia (Market for wholesale voice call termination on individual mobile markets)(market 2)
- Case AT/2017/2020 Austria (wholesale markets for broadcasting transmission services) (market 18 of the 2007 Recommendation)

All BEREC Opinions adopted by the Board of Regulators are published on the BEREC website.

The Independent Regulators Group (the IRG)

ComReg is also an active participant in the Independent Regulators Group (IRG), which was established in 1997 by a group of European NRAs, to assist in sharing experiences and points of view among its members on important issues relating to the regulation and development of the European telecommunications market.

The IRG works in close cooperation with BEREC (Body of European Regulators for Electronic Communications) and all members of the IRG are also members or observers in BEREC.

In the period ComReg created 4 questionnaires, analysed 70 submissions received on its questionnaires and circulated them to IRG Members, and issued 22 individual responses to questionnaires created by other IRG Members. Allied to its work in BEREC, ComReg's ongoing participation in IRG is an important activity, as it helps to promote information sharing and peer learning between NRAs which can help improve harmonisation of regulation across Europe.

The Communications Committee (CoCom)

CoCom was established in 2002 under the Framework Directive (Directive 2002/21/EC, as amended) as an advisory committee to the European Commission. CoCom is composed of Member State representatives and its main role is to provide opinions on draft measures that the Commission intends to adopt. Along with representatives of the Department of Communications, Climate Action and Environment, ComReg participates as part of the Irish delegation.

FINANCIAL STATEMENTS



COMMISSION MEMBERS AND OTHER INFORMATION

FOR THE YEAR ENDED 30 JUNE 2018

Commission

As at 30 June 2018 the Commission comprised of 3 Commissioners

- Gerry Fahy Chairperson
- Jeremy Godfrey Commissioner
- Kevin O'Brien Commissioner

Offices

1 Dockland Central Guild Street Dublin 1

Auditors

Comptroller & Auditor General 3A Mayor Street Upper Dublin 1

Bankers

Bank of Ireland 6 – 7 O'Connell Street Lower Dublin 1

GOVERNANCE STATEMENT AND COMMISSION MEMBERS' REPORT

FOR THE YEAR ENDED 30 JUNE 2018

Governance

The Commission for Communications Regulation (ComReg) was established on 1 December 2002. The functions of the Commission are specified in the Communications Regulation Act, 2002, and the Communications Regulation (Amendment) Act, 2007. These functions relate to the regulation and licensing of the electronic communications industry (including radio and broadcasting transmission), the regulation of postal services, the regulation of premium rate services and the regulation of the .ie domain name. The Commission is funded wholly by income received from the electronic communications, postal and premium rate services industries.

Section 11 of the 2002 Act states that, subject to the 2002 Act, the Commission shall be independent in the exercise of its functions. Section 14 of this Act states that the Commission shall consist of at least 1 and not more than 3 Commissioners and subject to this Act, the Commission may regulate its own procedure. The Commission is responsible for ensuring good governance and performs this task by setting strategic objectives and targets and taking strategic decisions on all key business issues. The regular day-to-day management, control and direction of ComReg are the responsibility of the Commission and the Leadership Team. The Leadership team must follow the broad strategic direction set by the Commission, and must ensure that all Commission members have a clear understanding of the key activities and decisions related to the entity, and of any significant risks likely to arise.

Commission Responsibilities

The work and responsibilities of the Commission were originally set out in the 2002 Act. Our objectives are set out in line with both primary and secondary legislation, and this legislative framework continues to evolve since the 2002 Act and the Communications (Regulation) Act of 2007. In 2007, ComReg's responsibilities and powers, as well as available enforcement measures, were augmented by the Communications Regulation (Amendment) Act 2007.

Section 21 of the 2002 Act provides that 'the exercise of functions of the Commission may be carried out by or through any member of staff or authorised officer of the Commission as the Commission shall deem proper'. The Commission has delegated certain functions but there are other matters specifically reserved for Commission decision. Items considered by the Commission include

- reports from the Audit Committee / working groups
- financial reports / management accounts
- performance reports, and
- reserved matters.

Section 32 of the Communications Regulation Act, 2002, requires the Commission to keep in such form as may be approved by the Minister for Communications, Climate Action and Environment, with the consent of the Minister for Public Expenditure and Reform, all proper and usual accounts of moneys received or expended by it, including an income and expenditure account and a balance sheet, distinguishing between:

- **a.** its functions relating to electronic communications,
- b. its functions relating to postal matters and
- **c.** its functions relating to premium rate services.

In preparing financial statements, the Commission is required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Commission will continue in operation.
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;

The Commission is responsible for keeping adequate accounting records which disclose, with reasonable accuracy at any time, the financial position of the Commission and which enable the Commission to ensure that financial statements comply with the requirements of Section 32 of the Communications Regulation Act. The maintenance and integrity of the corporate and financial information on the Commission's website is the responsibility of the Commission.

The Commission is responsible for approving the annual action plan and budget. An evaluation of the performance of the Commission by reference to the annual plan and budget was carried out in July 2018.

The Commission is responsible for safeguarding its assets and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Commission considers that its financial statements give a true and fair view of the financial performance and the financial position of the Commission at 30 June 2018.

Commission Structure

Section 14 of the Communications Regulation Act, 2002 states that the Commission shall consist of at least 1 and not more than 3 Commissioners. Section 15 of the Act states that a Commissioner shall be appointed on a full-time basis for a period of not less than 3 years and not more than 5 years. The Act also provides that where there is more than one Commissioner, the Minister shall appoint one of them to be the chairperson of the Commission.

Under Section 17 of the Communications
Regulation Act, 2002 the Commission shall,
where there is not more than one Commissioner
appointed under Section 15, designate a
member of its staff as a deputy member of
the Commission ("deputy commissioner") who
shall assume and carry out with the authority
of the Commission all of the functions of the
Commission in the absence of the Commissioner.

As at 30 June 2018 The Commission comprised three Commissioners all of whom were appointed by the Minister for Communications, Climate Action and Environment. The table below details the members of the Commission and their appointment, or re-appointment dates (Commission members cannot serve more than 2 terms of office as a Commissioner). The Commission meets regularly to discuss regulatory and operational issues.

Commission Member	Date Appointed or Re-appointed)
Gerry Fahy – Chairperson*	2 September 2013
Jeremy Godfrey	2 September 2013
Kevin O'Brien	1 November 2015

*Chairperson from 1 March 2017 to 31 August 2018

Gerry Fahy and Kevin O'Brien left in August 2018. The Department of Communications, Climate Action and Environment, announced in November 2018 the appointment of Mr. Garrett Blaney and Mr. Robert Mourik as Commissioners following an open competition run by the Public Appointments Service.

Audit and Risk Committee

The Commission has established an Audit and Risk Committee (ARC). The members of the ARC are appointed by the Commission and consist of not more than five people:

- two Commissioners (Note: The Chairperson is the Accounting Officer and hence is not appointed to the Audit and Risk Committee);
- three independent external members.

The ARC is chaired by one of the external members.

The role of the ARC is to support the Commission in relation to its responsibilities for issues of risk, control and governance and associated assurance. The ARC is independent from the financial management of the organisation. In particular the ARC ensures that the internal controls systems including audit activities are monitored actively and independently. The ARC reports formally in writing to the Commission annually.

Commissioners Jeremy Godfrey and Kevin O'Brien were members of the ARC in the year ended 30 June 2018. The external members of the Audit and Risk Committee are: Martin Higgins (Chairperson), Patricia Byron and Marie Collins. There were 4 meetings of the ARC in the year ended 30 June 2018.

Schedule of Attendance, Fees and Expenses

A schedule of attendance at the Audit Committee meetings for 2018 is set out below including the fees received by each member. There were no expenses paid in 2018.

Audit Committee Members

Name	Role	Number of Meetings Attended	Fees 2018 €
Martin Higgins - Chairperson	External Member	4	8,000
Patricia Byron	External Member	2	2,400
Marie Collins	External Member	4	4,800
Jeremy Godfrey	Commissioner	2	N/a
Kevin O'Brien	Commissioner	4	N/a

Key Personnel Changes

Commissioners Gerry Fahy and Kevin O'Brien left in August 2018. In accordance with the 2002 Communications Regulation Act the Minister appointed two new Commissioners.

Disclosures required by Code of Practice for the Governance of State Bodies (2016)

The Commission is responsible for ensuring that ComReg has complied with the requirements of the Code of Practice for the Governance of State Bodies ("the Code"), as published by the Department of Public Expenditure and Reform in August 2016. The following disclosures are required by the Code.

Employee Short-Term Benefits Breakdown

Employees' short-term benefits in excess of €60,000 are categorised into the following bands:

	30 June 2018 Number	30 June 2017 Number
60 - 70	8	8
70 - 80	17	18
80 - 90	13	8
90 - 100	3	12
100 - 110	14	4
110 - 120	4	6
120 - 130	7	3
130 - 140	1	0
140 - 150	2	3
150 - 160	0	0
160 - 170	1	0
170 - 180	0	1
180 - 190	1	0
190 - 200	0	0
200 - 210	1	2
210 - 220	1	0

Note: For the purpose of this disclosure, short-term employee benefits in relation to services rendered during the reporting period include salary, performance related pay and benefit-in-kind in respect of medical insurance payments made on behalf of the employee, but exclude employer's PRSI.

Technical Advice Costs

Technical Advice costs include the cost of external advice to management and includes outsourced 'business-as-usual' functions.

	2018 €′000	2017 €′000
Professional & Technical Advice	6,824	7,485
Contact Management	502	682
Market Research	222	198
Quality of Service Monitoring	532	505
Staff Training and Professional Development	409	343
	8,489	9,213

Legal Costs

The table below provides a breakdown of amounts recognised as expenditure in the reporting period in relation to legal costs.

	2018 €′000	2017 €′000
Legal Advice	911	1,215
Legal Costs relating to Legal Proceedings	917	1,022
	1,828	2,237

Legal expenses are stated net of costs recovered from third parties.

Travel and Subsistence Expenditure

Travel and subsistence expenditure is categorised as follows:

	2018 €′000	2017 €′000
Domestic Travel	29	25
International Travel	227	195
	256	220

Hospitality Expenditure

The Income and Expenditure Account includes the following hospitality expenditure:

	2018 €′000	2017 €′000
Staff Hospitality Costs	15	12
Contribution to Sports and Social Club	5	5
	20	17

ComReg does not engage in Client Hospitality. The above amounts do not include expenditure on refreshments/hospitality associated with business operations such as conference hosting, events and meetings.

Statement of Compliance

The Commission is committed to maintaining the highest standards of corporate governance. The Code of Practice for the Governance of State Bodies (2009) published by the Department of Public Expenditure and Reform is the foundation on which our corporate governance policies are based. The Code of Practice for the Governance of State Bodies (2016) was effective in relation to financial reporting periods beginning on or after 1st September 2016 and it was adopted in these Financial Statements.

Section 33 of the Communications Regulation Act, 2002, requires the Commission to adopt, with the approval of the Minister for Communications, Climate Action and Environment and the Minister for Public Expenditure and Reform, a code of financial management and to arrange for its publication following such approval. In addition the Commission is required to review periodically its code of financial management and revise and republish the code as appropriate. There is also a requirement on the Commission to comment in the annual report on adherence to the code.

Our code of financial management (which is based on the Code of Practice for the Governance of State Bodies (2009) published by the Department of Public Expenditure and Reform) has been approved by the Minister for Communications, Climate Action and Environment and the Minister for Public Expenditure and Reform. The code is published on our website, and it is our intention to update the Code to reflect the requirements of the 2016 Code. It is the policy of the Commission to ensure compliance with the Code.

On behalf of the Commission

Jeremy Godfrey Commissioner

STATEMENT ON INTERNAL CONTROL

FOR THE YEAR ENDED 30 JUNE 2018

Responsibility for Internal Control

On behalf of ComReg I acknowledge the Commission's responsibility for ensuring that an effective system of internal control is maintained and operated. This responsibility takes account of the requirements of the Code of Practice for the Governance of State Bodies (2016).

Purpose of the System of Internal Control

The system of internal control is designed to manage risk to a tolerable level rather than to eliminate it. The system can therefore only provide reasonable and not absolute assurance that assets are safeguarded, transactions authorised and properly recorded and that material errors or irregularities are either prevented or detected in a timely way.

The system of internal control, which accords with guidance issued by the Department of Public Expenditure and Reform has been in place in ComReg for the year ended 30 June 2018 and up to the date of approval of the financial statements.

Capacity to Handle Risk

ComReg has an Audit and Risk Committee (ARC) comprising two members of the Commission and three external members, with financial and audit expertise, one of whom is the Chair. The ARC met four times in the year ended 30 June 2018.

ComReg has also established an outsourced internal audit function which is adequately resourced and conducts a programme of work agreed with the ARC.

The Commission has developed a risk management policy which sets out its risk appetite, the risk management processes in place and details the roles and responsibilities of staff in relation to risk. The policy has been issued to all staff who are expected to work within ComReg's risk management policies, to alert management on emerging risks and control weaknesses and assume responsibility for risks and controls within their own area of work.

Risk and Control Framework

ComReg has implemented a risk management system which identifies and reports key risks and the management actions being taken to address and, to the extent possible mitigate those risks.

A risk register is in place which identifies the key risks facing ComReg and these have been identified, evaluated and graded according to their significance. The register is reviewed and updated by the Commission on a quarterly basis. The outcome of these assessments is used to plan and allocate resources to ensure risks are managed to an acceptable level.

The risk register details the controls and actions needed to mitigate risks and responsibility for operation of controls assigned to specific staff. I confirm that a control environment containing the following elements is in place:

- procedures for all key business processes have been documented,
- financial responsibilities have been assigned at management level with corresponding accountability,
- there is an appropriate budgeting system with an annual budget which is kept under review by senior management,
- there are systems aimed at ensuring the security of the information and communication technology systems, and
- there are systems in place to safeguard the assets.

Ongoing Monitoring and Review

Formal procedures have been established for monitoring control processes and control deficiencies are communicated to those responsible for taking corrective action and to management and the Commission, where relevant, in a timely way. I confirm that the following ongoing monitoring systems are in place:

- key risks and related controls have been identified and processes have been put in place to monitor the operation of those key controls and report any identified deficiencies,
- reporting arrangements have been established at all levels where responsibility for financial management has been assigned, and
- there are regular reviews by senior management of periodic and annual performance and financial reports which indicate performance against budgets/ forecasts.

Procurement

ComReg has developed a Corporate
Procurement Plan which was approved by the
Commission. In addition it has put procedures
and policies in place to ensure compliance
with current procurement rules and guidelines.
The nature of ComReg activities mean that
in a certain small number of instances it may
not be possible or appropriate to comply
with the appropriate procurement rules and
guidelines. The Commission has put in place an
appropriate governance policy to follow in such
circumstances.

During 2018 expenditure of €403,000 (2017: €491,000) was incurred in respect of 2 (2017: 2) contracts for IT services where our operational needs deemed it necessary to roll over the 2 existing contracts pending conclusion of a competitive tender process. A new contract (following a competitive tender process was put in place in March 2018) for the majority of the

spend related to these two contracts. There was also a contract for professional advice where it was also deemed appropriate to roll over the existing contract pending conclusion (scheduled for late 2018) of a competitive tender process. The spend on this contract was €156,000 in 2018 (2017: €197,000).

There was one contract for a value of €235,000 for specialist consultancy advice where due to the urgent and unforeseen circumstance it was deemed appropriate not to go to tender. We are satisfied that no alternative supplier would have been in a position to meet our requirements. There were also two contracts, one for €90,000 and one for €58,000 which involved the purchase of specialist software for which there was only one supplier.

Review of Effectiveness

I confirm that ComReg has procedures to monitor the effectiveness of its risk management and control procedures. ComReg's monitoring and review of the effectiveness of the system of internal financial control is informed by the work of the internal and external auditors, the Audit and Risk Committee which oversees their work, and the senior management within ComReg responsible for the development and maintenance of the internal financial control framework.

I confirm that the Commission conducted an annual review of the effectiveness of the internal controls for the year ended 30 June 2018.

Internal Control Issues

No weaknesses in internal control were identified in relation to 2018 that require disclosure in the financial statements.

On behalf of the Commission

Jeremy Godfrey Commissioner



Ard Reachtaire Cuntas agus Ciste Comptroller and Auditor General

Report for presentation to the Houses of the Oireachtas

Commission for Communications Regulation

Opinion on financial statements

I have audited the financial statements of the Commission for Communications Regulation for the year ending 30 June 2018 as required under the provisions of section 32 of the Communications Regulation Act 2002. The financial statements comprise

- the statement of income and expenditure and appropriation account
- · the statement of comprehensive income
- the statement of financial position
- · the statement of cash flows and
- the related notes, including a summary of significant accounting policies.

In my opinion, the financial statements give a true and fair view of the assets, liabilities and financial position of the Commission at 30 June 2018 and of its income and expenditure for that year in accordance with Financial Reporting Standard (FRS) 102 — The Financial Reporting Standard applicable in the UK and the Republic of Ireland.

Basis of opinion

I conducted my audit of the financial statements in accordance with the International Standards on Auditing (ISAs) as promulgated by the International Organisation of Supreme Audit Institutions. My responsibilities under those standards are described in the appendix to this report. I am independent of the Commission and I have fulfilled my other ethical responsibilities in accordance with the standards.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Report on information other than the financial statements, and on other matters

The Commission has presented certain other information together with the financial statements. This comprises the annual report, the governance statement and Commission members' report, and the statement on internal control. My responsibilities to report in relation to such information, and on certain other matters upon which I report by exception, are described in the appendix to this report.

I have nothing to report in that regard.

Seam Mc Cartly.

Seamus McCarthy

Comptroller and Auditor General

29 March 2019

Appendix to the report

Responsibilities of the Commission

As detailed in the governance statement and Commission members' report, the Commission is responsible for

- the preparation of financial statements in the form prescribed under section 32 of the Communications Regulation Act 2002
- ensuring that the financial statements give a true and fair view in accordance with FRS102
- · ensuring the regularity of transactions
- assessing whether the use of the going concern basis of accounting is appropriate, and
- such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Responsibilities of the Comptroller and Auditor General

I am required under section 32 of the Communications Regulation Act 2002 to audit the financial statements of the Commission and to report thereon to the Houses of the Oireachtas.

My objective in carrying out the audit is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement due to fraud or error. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with the ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with the ISAs, I exercise professional judgment and maintain professional scepticism throughout the audit. In doing so,

- I identify and assess the risks of material misstatement of
 the financial statements whether due to fraud or error;
 design and perform audit procedures responsive to those
 risks; and obtain audit evidence that is sufficient and
 appropriate to provide a basis for my opinion. The risk of
 not detecting a material misstatement resulting from fraud
 is higher than for one resulting from error, as fraud may
 involve collusion, forgery, intentional omissions,
 misrepresentations, or the override of internal control.
- I obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal controls.
- I evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures.
- I conclude on the appropriateness of the use of the going concern basis of accounting and, based on the audit evidence obtained, on whether a material uncertainty

exists related to events or conditions that may cast significant doubt on the Commission's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my report. However, future events or conditions may cause the Commission to cease to continue as a going concern.

 I evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

Information other than the financial statements

My opinion on the financial statements does not cover the other information presented with those statements, and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, I am required under the ISAs to read the other information presented and, in doing so, consider whether the other information is materially inconsistent with the financial statements or with knowledge obtained during the audit, or if it otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact.

Reporting on other matters

My audit is conducted by reference to the special considerations which attach to State bodies in relation to their management and operation. I report if there are material matters relating to the manner in which public business has been conducted.

I seek to obtain evidence about the regularity of financial transactions in the course of audit. I report if there is any material instance where public money has not been applied for the purposes intended or where transactions did not conform to the authorities governing them.

I also report by exception if, in my opinion,

- I have not received all the information and explanations I required for my audit, or
- the accounting records were not sufficient to permit the financial statements to be readily and properly audited, or
- the financial statements are not in agreement with the accounting records.

Statement of Income and Expenditure and Appropriation Account for the year ended 30 June 2018

						Year to 30 June	Year to 30 June
		2018	2018	2018	2018	2018	2017
	Notes	Comm	Electronic nunications	Post	Premium Rate Services		
		Levy €′000	Other €′000	Levy €′000	Levy €′000	Total €'000	Total €'000
Income							
Levy		6,946		1,900	509	9,355	9,456
Licensing Fees	2		44,217			44,217	45,413
Spectrum Income	2		32,150			32,150	76,050
Other Income	2		858			858	4,917
Gross Income		6,946	77,225	1,900	509	86,580	135,836
Transfer (to) Capital Reserve	12		585			585	(5,771)
Net Income		6,946	77,810	1,900	509	87,165	130,065
Expenditure							
Staff Costs	3	6,588	3,807	589	277	11,261	10,380
Retirement Benefit Costs	17(b)	2,202	1,246	156	73	3,677	2,803
Technical Advice	4	4,204	2,950	1,082	253	8,489	9,213
Legal Expenses	5	1,062	725	25	16	1,828	2,237
Advertising		77				77	36
Administrative Expenses	6	1,044	1,075	91	70	2,280	2,275
Auditors' Remuneration		9	6	1	1	17	21
Premises and Related Expenses		1,260	980	99	99	2,438	2,552
Depreciation	7	1,448	996	113	113	2,670	1,719
Loss on Disposal of Assets						-	74
Subscriptions to International Organisations	15	691				691	768
		18,585	11,785	2,156	902	33,428	32,078
Surplus / (Deficit) before Appropriations		(11,639)	66,025	(256)	(393)	53,737	97,987
Less: Appropriations							
Payable to Central Fund	13					(54,969)	(99,368)
Pension Reserve adjustment	13					1,232	1,381
Surplus after Appropriations						0	0

The Statement of Cash Flows and Notes 1 to 22 form part of these financial statements.

On behalf of the Commission

Jeremy Godfrey Commissioner

Statement of Comprehensive Income for the year ended 30 June 2018

		Year to 30 June	Year to 30 June
		2018	2017
	Notes	Total	Total
Surplus after Appropriations		0	0
Actual return less expected return on scheme assets	17(f)	2,311	1,661
Experience gains on retirement benefit obligations	17(f)	533	823
Changes in assumptions underlying the present value of Retirement benefit obligations		1,181	2,559
Transfers in for prior service	17(g)	-	-
Total actuarial gain in the year		4,025	5,043

Movement in Retirement Benefit Reserve			
Balance at 1 July		(10,098)	(13,760)
Total Recognised Gains in the year		4,025	5,043
Pension Reserve adjustment	13	(1,232)	(1,381)
Balance at 30 June		(7,305)	(10,098)

The Retirement Benefit Pension Reserve represents the difference between the cumulative cost of retirement benefits less amounts paid out to date.

The Statement of Cash Flows and Notes 1 to 22 form part of these financial statements.

On behalf of the Commission

Jeremy Godfrey Commissioner

Statement of Financial Position as at 30 June 2018

		30 June	30 June
		2018	2017
	Notes	€′000	€′000
Fixed Assets			
Property, Plant & Equipment	7	8,666	9,251
Current Assets			
Receivables	8	4,450	9,657
Short-Term Investments	9	78,500	125,587
Cash and Cash Equivalents		8,898	11,114
		91,848	146,358
Current Liabilities (Amounts falling due within one year)			
Payables	11	(91,848)	(146,358)
Net Current Assets		0	0
Total Assets less Current Liabilities		8,666	9,251
Total Net Assets excluding Retirement Benefits (Liability)		8,666	9,251
Retirement Benefits			
Deferred Funding Asset for Pensions	17(i)	1,540	-
Net Defined Benefit (Liability)	17(ci)	(8,845)	(10,098)
Total Net Assets / (Liabilities) including Retirement Benefits (Liability)		1,361	(847)
Representing			
Capital Reserves	12	8,666	9,251
Retirement Benefit Reserve		(7,305)	(10,098)
		1,361	(847)

The Statement of Cash Flows and Notes 1 to 22 form part of these financial statements.

On behalf of the Commission

Jeremy Godfrey Commissioner

Statement of Cash Flows for the year ended 30 June 2018

		Year to 30 June	Year to 30 June
		2018	2017
	Notes	€′000	€′000
Net Cash Flows from Operating Activities			
Excess Income over Expenditure (before Appropriations)		53,737	97,987
Difference between pension charge and contributions		1,232	1,381
Depreciation	7	2,670	1,719
Loss on Disposal of Assets		-	74
Bank interest	2	-	(41)
Capital reserve transfer	12	(585)	5,771
Decrease in Receivables		5,207	43
(Decrease)/ Increase in Payables (excluding Central Fund)		(10,431)	9,633
Net Cash Inflow from Operating Activities		51,830	116,567
Cash Flows from Investing Activities			
Payments to acquire Property, Plant & Equipment	7	(2,085)	(7,568)
Cash Flows from Financing Activities			
Bank and Other Interest received	2	-	41
Receipt from sale of Asset		-	4
Payment to Central Fund		(99,048)	(160,339)
Net (Decrease) Cash and Cash Equivalents		(49,303)	(51,295)

Notes to the Financial Statements for the year ended 30 June 2018

1. Accounting Policies

The basis of accounting and significant accounting policies adopted by the Commission are set out below. They have all been applied consistently throughout the year and for the preceding year

a) General Information

The Commission was set up under the Communications Regulation Act, 2002 and has offices at One Dockland Central, Guild Street, Dublin 1.

The functions of the Commission are specified in the Communications Regulation Act, 2002, and the Communications Regulation (Amendment) Act, 2007. These functions relate to the regulation and licensing of the electronic communications industry (including radio and broadcasting transmission), the regulation of postal services, the regulation of premium rate services and the regulation of the .ie domain name.

The Commission is a Public Benefit Entity (PBE).

b) Statement of Compliance

The financial statements of the Commission for the year ended 30 June 2018 have been prepared in accordance with FRS102, the financial reporting standard applicable in the UK and Ireland issued by the Financial Reporting Council (FRC), as promulgated by Chartered Accountants Ireland.

The Code of Practice for the Governance of State Bodies (2016) was effective in relation to financial reporting periods beginning on or after 1st September 2016 and it has been adopted in these Financial Statements.

c) Basis of Preparation

The financial statements have been prepared under the historical cost convention, except for certain assets and liabilities that are measured at fair values as explained in the accounting policies below. The financial statements are in the form approved by the Minister for Communications, Climate Action and Environment with the consent of the Minister for Public Expenditure and Reform under the Communications Regulation Act 2002. The following accounting policies have been applied consistently in dealing with items which are considered material in relation to the Commission's financial statements.

1.1 Income Recognition

The Commission receives income from a number of sources

- Levies on certain providers to fund the costs of regulation. The relevant levies are as follows:
 - Electronic Communication levy The Levy is imposed on providers of electronic communications services. The levy
 payment due from an individual service provider for any particular year is calculated based on their annual turnover
 during the financial year ending in the levy year and is payable in four instalments. Income is recognised on a
 receivable basis.
 - ii. Postal Levy The Levy is imposed on postal service providers providing postal services within the scope of the universal postal service. Income is recognised on a receivable basis.
- iii. Premium Rate Services (PRS) are goods and services that you can buy by using your landline, mobile phone, the Internet, interactive digital TV or fax. The PRS Levy is paid equally by PRS services providers and network operators. The levy is invoiced one month in arrears and income is recognised on a receivable basis.
- Licencing Fees The main area this covers is the Radio Communication licensing.
- Spectrum Income Income represents fee income paid to the Commission for the right to use radio spectrum. This income is brought to account in the period when it falls due. In circumstances where the commencement of the related licences is delayed, ComReg makes a provision for the amount potentially repayable based on its estimate of the length of the delay. This is not recognised as income and is included as a creditor (See Note 11). The amount of the provision is reassessed at the end of each accounting period.
- Other income Other income includes bank and NTMA interest on deposits and amounts payable to the Commission on foot of compliance and enforcement activities.

1.2 Appropriation of Operating Surplus

The surplus generated in the year net of the pension reserve adjustment is payable to the Exchequer. Amounts are paid over to the Central Fund by direction of the Minister for Communications, Climate Action and Environment (See Note 13).

1.3 Fixed Assets and Depreciation

Property plant and equipment are stated at cost less accumulated depreciation, adjusted for any provision for impairment. Depreciation is provided on all property, plant and equipment at rates estimated to write off the cost less the estimated residual value of each asset on a straight line basis over their estimated useful lives, as follows:

Technical equipment -15% per annum
Computer equipment -33 1/3% per annum
Fixtures & fittings -9% per annum
Office Furniture & office equipment -15% per annum
Motor vehicles -20% per annum

Residual value represents the estimated amount which would currently be obtained from disposal of an asset, after deducting estimated costs of disposal, if the asset were already of an age and in the condition expected at the end of its useful life. The Commission adopts a minimum capitalisation threshold of €1,000.

If there is objective evidence of impairment of the value of an asset, an impairment loss is recognised in the Statement of Income and Expenditure in the year.

1.4 Receivables

Receivables are recognised at fair value, less a provision for doubtful debts. The provision for doubtful debts is a specific provision, and is established when there is objective evidence that the Commission will not be able to collect all amounts owed to it. All movements in the provision for doubtful debts are recognised in the Statement of Income and Expenditure.

1.5 Capital Reserve

The capital reserve represents the unamortised amount of income used to purchase fixed assets.

1.6 Foreign Currencies

Transactions denominated in foreign currencies relating to revenues and costs are translated into euro translated at the rates of exchange ruling on the dates on which the transactions occurred.

Monetary assets and liabilities denominated in foreign currencies are translated into euro at the rates of exchange ruling at the Statement of Financial Position date.

1.7 Short Term Benefits

Short term benefits such as holiday pay are recognised as an expense in the year, and benefits that are accrued at year-end are included in the Payables figure in the Statement of Financial Position.

1.8 Retirement Benefits

The Commission is staffed by Commissioners and directly recruited employees. A defined benefit pension scheme is in place for Commissioners and employees of the Commission. The scheme is funded by contributions from Commissioners, employees and the Commission, which are transferred to a separate trustee administered fund. The Commission also operates the Single Public Services Pension Scheme ("Single Scheme"), which is a defined benefit scheme for pensionable public servants appointed on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER). In addition, the Commission is liable to pay an employer contribution to DPER in accordance with DPER Circular 28/2016.

To the extent that a material liability arises, the liability in respect of the Single Scheme members is matched by a deferred funding asset on the basis of the provisions of Section 44 of the Public Service Pensions (Single Scheme and other Provisions) Act 2012. The Commission has accounted for its costs and liabilities under the single public services pension scheme from 2018 onwards. The costs and liabilities under the single public services pension scheme are not accounted for in the 2017 figures as the Commission was of the view that the figure was not material.

The Commission has adopted FRS 102 which has impacted on the calculation of Retirement Benefits. Pension scheme assets are measured at fair value. Pension scheme liabilities are measured on an actuarial basis using the projected units method. An excess of scheme liabilities over scheme assets is presented on the Statement of Financial Position as a liability.

The pension charge in the Statement of Income and Expenditure comprises the current service cost plus the difference between the expected return on defined benefit scheme assets and the interest cost of scheme liabilities.

Actuarial gains and losses arising from changes in actuarial assumptions and from experienced surpluses and deficits are recognised in the Statement of Comprehensive Income for the year in which they occur.

The financial statements reflect, at fair value, the assets and liabilities arising from the Commission's defined benefit pension obligations and any related funding, and recognises the cost of providing pension benefits in the accounting period in which they are earned by employees. Retirement benefit scheme liabilities are measured on an actuarial basis using the projected unit credit method.

1.9 Taxation

The Commission is not liable for Corporation Tax. Income raised by the Commission is not subject to VAT. Provision is made for taxation on deposit interest received.

1.10 Allocation of Costs

The Commission is required under Section 32 of the Communications Regulation Act, 2002, to distinguish between its functions relating to electronic communications, its functions relating to postal matters and its functions relating to the premium rate services. Revenues and expenses directly related to each function are identified separately in the accounts. Shared overhead costs are allocated to each function in proportion to the staff numbers engaged in each function.

1.11 Critical Accounting Judgements and EstimatesThe preparation of the financial statements requires management to make judgements, estimates and assumptions that affect the amounts reported for assets and liabilities as at the Statement of Financial Position date and the amounts reported for revenues and expenses during the year. However, the nature of estimation means that actual outcomes could differ from those estimates and may be material. The following judgements have had the most significant effect on amounts recognised in the financial statements.

a. Depreciation and Residual Values

The Commission have reviewed the asset lives and associated residual values of all fixed asset classes, and in particular, the useful economic life and residual values of fixtures and fittings, and have concluded that asset lives and residual values are appropriate.

b. Retirement Benefit obligation

The assumptions underlying the actuarial valuations for which the amounts recognised in the financial statements are determined (including discount rates, rates of increase in future compensation levels and mortality rates) are updated annually based on current economic conditions, and for any relevant changes to the terms and conditions of the retirement benefit and post-retirement plans.

The assumptions can be affected by:

- i. the discount rate, changes in the rate of return on high-quality corporate bonds
- ii. future compensation levels, future labour market conditions.

			Year to 30 June	Year to 30 June
			2018	2017
		Notes	€′000	€′000
2.	Non Levy Income			
	Electronic Communications Licensing Fee			
	2G & 3G Radio Licensing Fees		7,936	7,936
	Liberalised Use Licensing Fees		22,478	23,068
	Other Radio Licensing Fees		13,803	14,409
			44,217	45,413
	Electronic Communications Spectrum Income			
	3G Spectrum Income		30,900	27,900
	3.6GHz Spectrum Income	11		48,150
	26GHz Spectrum Income		1,250	0
			32,150	76,050

3G Spectrum Income of €30.9m (2017: €27.9m) was earned in 2018 in respect of 3G licences issued in 2002 and 2007.

A 3.6GHz Multi Band Spectrum Auction was conducted during 2016/17. The auction result was announced in May 2017. Final upfront fees received (contingent on any licence fee refunds due) amounted to €61.6m. Of the €61.6m, €48.1m was recognised as income in 2017. The Commission set aside in 2017 amounts totalling €13.5 in refunds (see Note 11) due to delayed commencement of Lots of the new 3.6 GHz Band Liberalised Use licences. All refunds payable by the Commission will be calculated in accordance with the methodology outlined in the Information Memorandum (Commission Document 16/71).

In addition annual 3.6GHz Spectrum Usage fees (before indexation) for these licences will amount to a total of €17.7m over the life of the licences.

A 26GHz Multi Band Spectrum Auction was conducted during 2018 and the auction result was announced in June 2018. Final upfront fees received amounted to €1.25m and was recognised as Income in 2018.

Other Income		
Bank Interest	-	41
Sundry*	858	4,876
	858	4,917

* Sundry Non Levy Income in 2018 includes:

(a) A payment of €250,000 in July 2017 by Vodafone Ireland Limited ("Vodafone") after an investigation found that the manner in which Vodafone had signed up Pay As You Go ("PAYG") customers to its "Red Roaming" package was in breach of Regulation 14(4) of the Universal Service Regulations and ComReg Decision D13/12 on Contract Change Notifications.

(b) A payment of €575,000 in October 2017 by Three Ireland (Hutchison) Limited ("Three") to ComReg following investigations into the manner in which Three implemented contract changes in March and April 2017, and into conditions and procedures put in place by Three in respect of proposed contract changes that had the effect of disincentivising customers from changing service provider.

* Sundry Non Levy Income in 2017 includes:

- (a) A payment of €255,000 in September 2016 by Virgin arising from its failure to provide 26,046 of its customers with a contract in a durable form. This is in contravention of the Consumer Information Regulations 2013.
- (b) A payment of €3,094,000 in December 2016 by Eircom arising from its failure to achieve certain performance targets in relation to Eircom's quality of service performance with respect to aspects of its Universal Service Obligation for the period 2014/2015.
- (c) A payment of €1,525,000 in April 2017 by Eircom arising from its failure to achieve certain performance targets in relation to Eircom's quality of service performance with respect to aspects of its Universal Service Obligation for the period 2015/2016.

Sundry Income also includes various amounts payable to the Commission on foot of compliance and enforcement activities conducted in the period. Where such activities were concluded by legal settlement, they may be subject to a confidentiality clause.

					Year to 30 June	Year to 30 June
					2018	2017
	Comi	Electronic munications	Post	PRS		
	Levy €'000	Other €′000	Levy €′000	Levy €′000	Total €′000	Total €'000
3. Staff Costs						
Employee Short-term benefits	6,010	3,473	537	253	10,273	9,470
Employer's contribution to social welfare	578	334	52	24	988	910
	6,588	3,807	589	277	11,261	10,380
The average number of staff employed by the Commission during the year, analysed by category, was as follows:	64	44	5	5	118	115
Employee Short term benefits						
Basic Pay					9,360	8,635
Performance related pay#					898	820
Allowances					15	15
					10,273	9,470

#The Commission operates a performance related remuneration scheme (which was originally established by the Office of the Director of Telecommunications Regulation). The scheme is based on individual performance and the Commission approves all payments made under the scheme. Of the total Employee Short-term benefits cost, €898,000 (or 9%) of the total represents payments to staff in accordance with the provisions of the performance related remuneration scheme and the terms of their contracts of employment (2017: €820,000 (8%)).

the terms of their contracts of employment (2017: €820,000 (8%)). Employee Short-term benefits in 2017 include a termination payment of €13,000 in relation to an employee related settlement.

Key Management Personnel

Key Management Personnel in ComReg consists of the members of the Commission. Details of the remuneration of the members of the Commission (excluding the value of retirement benefits earned in the period) are shown below. They are members of the Single Public Service Pension Scheme or the model public service pension scheme and their entitlements in that regard do not extend beyond the terms of the model public service pension scheme.

	Salary	Other Remuneration	Total
	€'000	€′000	€′000
Gerry Fahy* – Chairperson	168	2	170
Jeremy Godfrey – Commissioner	153	2	155
Kevin O' Brien – Commissioner	151	-	151
*Chairperson from 1 March 2017 to 31 Augus	st 2018		

		30 June	30 June
		2018	2017
		€′000	€′000
4.	Technical Advice		
	Professional./Technical Advice and other Advice/Services	8,080	8,870
	Staff Training and Professional Development	409	343
		8,489	9,213
5.	Legal Expenses	1,828	2,237
	Legal expenses are stated net of costs recovered from third parties		
6.	Administrative Expenses		
	Equipment and IT Maintenance	770	725
	Subscriptions to Databases/Research Reports	330	374
	Travel and Subsistence	256	220
	Conferences/Meetings	187	239
	Postal and Telecommunications	105	124
	Stationery	35	65
	Publishing and Promotion	102	107
	Recruitment	63	57
	Light, Heat and Cleaning	121	73
	Insurance	48	39
	Other Administrative Costs	263	252
		2,280	2,275
	Other Administrative Costs for 2017 included the sum of \in 40,000 deposit paid for the fit out of a Country The supplier went into receivership and the deposit is irrecoverable.	commercial vel	hicle.

7.	Property, Plant and Equipment					
		Technical Equipment	Computer Equipment	Fixtures, Fittings & Office Equipment	Motor Vehicles	Total
		€′000	€′000	€′000	€′000	€′000
	Cost					
	At 30 June 2017	2,678	6,574	4,308	179	13,739
	Additions	259	1,685	51	90	2,085
	Disposals	-	-	-	-	-
	At 30 June 2018	2,937	8,259	4,359	269	15,824
	Accumulated Depreciation					
	At 30 June 2017	1,189	3,080	173	46	4,488
	Disposals	-	-	-	-	-
	Charge for period	384	1,825	424	37	2,670
	At 30 June 2018	1,573	4,905	597	83	7,158
	Net Book Value					
	30 June 2018	1,364	3,354	3,762	186	8,666
	30 June 2017	1,489	3,494	4,135	133	9,251
	Computer Equipment Additions in 2018 includes €1.3	32m of IT Deve	elopment Cost	:s (2017: €1.44	·Om).	

		30 June	30 June
		2018	2017
		€'000	€′000
8.	Receivables		
	Due within one year:		
	Electronic Communications administration levy	354	49
	Radio Licence Income	2,906	7,849
	Accrued Income	41	445
	Pre-payments & Recoverable expenses	1,149	1,314
		4,450	9,657
9.	Short Term Investments		
	Short Term Investments	78,500	125,587
	Short Term Investments comprise Exchequer Notes purchased from the National Treasury Manager The Commission places excess cash holdings in short term investments. These cash holdings mair generated by the Commission which are payable to the Exchequer (as disclosed in Note 11) and m in relation to commitments made by third parties to the Commission and potential refunds in responsement of certain licences (also disclosed in Note 11).	nly represent s nonies held in t	urpluses rust
10.	Reconciliation of Net Increase in Cash and Cash Equivalents to Movement in Net Funds		
	(Decrease) in Cash and Cash Equivalents in the period	(2,216)	(85,175)
	Increase / (Decrease) in Short Term Investments	(47,087)	33,880
	Change in Cash and Cash Equivalents	(49,303)	(51,295)
	Opening Cash and Cash Equivalents	136,701	187,996
	Closing Cash and Cash Equivalents	87,398	136,701
11.	Payables		
	Amounts falling due within one year		
	Amounts falling due within one year Trade Creditors	1,502	3,598
	· ·	1,502 9,207	,
	Trade Creditors		14,329
	Trade Creditors Other Creditors	9,207	14,329 35
	Trade Creditors Other Creditors Value-added tax	9,207 170	14,329 35 1,081
	Trade Creditors Other Creditors Value-added tax Accruals	9,207 170 1,767	14,329 35 1,081 29,723
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below)	9,207 170 1,767 24,646	14,329 35 1,081 29,723
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll	9,207 170 1,767 24,646 1,086	14,329 35 1,081 29,723 984
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll DPER SPSPS Employer Contributions	9,207 170 1,767 24,646 1,086 941	14,329 35 1,081 29,723 984 96,608
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll DPER SPSPS Employer Contributions	9,207 170 1,767 24,646 1,086 941 52,529 91,848 ncement of 3.6 Short Term Inve	14,329 35 1,081 29,723 984 - 96,608 146,358 GHz Band
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll DPER SPSPS Employer Contributions Payable to Central Fund (see Note 13) Other Creditors includes potential refunds of €9.1m (2017: €13.5m) in respect of delayed commentations to the commission's year end Stance. The 2017 figure also includes Cash Deposits in the sum of €0.6m held in trust relating to	9,207 170 1,767 24,646 1,086 941 52,529 91,848 ncement of 3.6 Short Term Inve	14,329 35 1,081 29,723 984 - 96,608 146,358 GHz Band
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll DPER SPSPS Employer Contributions Payable to Central Fund (see Note 13) Other Creditors includes potential refunds of €9.1m (2017: €13.5m) in respect of delayed commentational commentations. The corresponding amounts are included in the Commission's year end Stalance. The 2017 figure also includes Cash Deposits in the sum of €0.6m held in trust relating to made to the Commission concerning its regulatory functions.	9,207 170 1,767 24,646 1,086 941 52,529 91,848 ncement of 3.6 Short Term Inve	14,329 35 1,081 29,723 984 - 96,608 146,358 GHz Band estments
	Trade Creditors Other Creditors Value-added tax Accruals Deferred income (see analysis below) Payroll DPER SPSPS Employer Contributions Payable to Central Fund (see Note 13) Other Creditors includes potential refunds of €9.1m (2017: €13.5m) in respect of delayed commentations includes Use licences. The corresponding amounts are included in the Commission's year end Stalance. The 2017 figure also includes Cash Deposits in the sum of €0.6m held in trust relating to made to the Commission concerning its regulatory functions. Analysis of Deferred Income	9,207 170 1,767 24,646 1,086 941 52,529 91,848 ncement of 3.6 short Term Invecentain commi	stments

		30 June	30 June
		2018	2017
		€′000	€′000
12.	Capital Reserves		
	Opening Balance	9,251	3,480
	Transfer (to) / from Income and Expenditure Account:		
	Additions to fixed assets	2,085	7,568
	Amortisation in line with fixed asset depreciation	(2,670)	(1,719)
	Amount released on disposal of Fixed Assets		(78)
	Net Amount from Income and Expenditure Account	(585)	5,771
	Closing Balance	8,666	9,251

13. Appropriation of Surplus

Section 30 of the Communications Regulation Act 2002 provides that the Minister may, with the consent of the Minister for Public Expenditure and Reform direct the Commission to pay sums to the Exchequer. The amount to be paid over is decided by the Minister after consultation with the Commission. The Commission is awaiting direction from the Department in relation to the final determination of the amount payable to the Central Fund for the year ending 30 June 2018.

The amount owed to the Exchequer is determined by reference to the surplus recorded by the Commission in the period, adjusted for a number of items as set out below.

	Gross Amount Due	Pension Adjustment(b)	Net Amount Due
	€′000	€′000	€'000
Balance due to Exchequer at 30 June 2017	99,368	(2,760)	96,608
Surplus for 2018	53,737		53,737
Paid in 2018	(99,048)		(99,048)
Pension reserve adjustment (a)	1,232		1,232
Pension fund payment clawback (b)	(320)	320	-
Balance at 30 June 2018	54,969	(2,440)	52,529
The comparative figures in respect of the amount owed to the Exched	uer as at 30 June 20)17 are shown belo	DW.
Balance due to Exchequer at 30 June 2016	161,299	(3,720)	157,579
Surplus for 2017	97,987		97,987
Paid in 2017	(160,339)		(160,339)
Pension reserve adjustment (a)	1,381		1,381
Pension fund payment clawback (b)	(960)	960	-
Balance at 30 June 2017	99,368	(2,760)	96,608

⁽a) The pension reserve adjustment represents the difference between the pension amount charged to the Income and Expenditure Account in 2018 of €3,677,000 (2017: €2,803,000) and the employer contributions in the period of €2,445,000 (2017: €1,422,000).

⁽b) The Commission made a total contribution of €5m to its pension fund (€2.5m in 2008 and €2.5m in 2009, a total of €5m). The amount owed to the Exchequer is shown net of this contribution which is being recovered at €320,000 per annum as payments to the Exchequer are made. In 2018 one year of payments was made resulting in a clawback of €320,000 (2017: €960,000 which equated to three years of payments).

14. Premises and Accommodation

The Commission moved to new lease premises located at One Dockland Central, Guild Street, Dublin 1 on 6 June 2017. The premises are rented at a cost of €1.6m (excluding VAT) per annum.

The total of future minimum operating lease payments (excluding VAT) under non-cancellable operating leases in respect of premises occupied by the Commission are as follows:

	30 June	30 June
	2018	2017
	€′000	€′000
Payable:		
Within one year	1,649	1,636
Between one and five years	6,596	6,580
More than five years	8,157	6,700
	16,402	14,916

15. Membership of International Telecommunications Organisations

Certain payments to International Telecommunications Organisations are met by the Department of Communications, Climate Action and Environment (DCCAE) out of the proceeds of the Electronic Communication Administrative Levy. The charge to the Income and Expenditure Account includes €691,000 (2017: €768,000) for that purpose. Such charges are invoiced to DCCAE who are subsequently reimbursed by ComReg.

16. Commissioners, Staff and Advisors/Consultants – Disclosure of Interests

The Commissioners and staff complied with the requirements of Section 25 (Disclosure of Interests) of the Communications Regulation Act, 2002. There were no transactions in the year in relation to the Commission's activities in which the Commissioners or any advisor or consultant had any interest.

17. Retirement Benefits

a. Description of Scheme

The Commission is a national regulatory authority established under the Communications Regulation Act, 2002. Sections 26 and 27 of the Act provide that the Commission shall make schemes for granting of superannuation benefits to and in respect of Commissioners and staff members, subject to Ministerial approval.

A funded defined-benefit scheme is being operated for the employees of the Commission. The benefits are defined by reference to the current 'model' public sector scheme regulations. Employer contribution rates are set having regard to actuarial advice and periodic review on the funding rate required for the scheme. The scheme provides a retirement benefit (one eightieth per year of service), a gratuity or lump sum (three eightieths per year of service) and spouse's and children's retirement benefits. Normal retirement age is a member's 65th birthday. Retirement benefits in payment (and deferment) normally increase in line with general public sector salary inflation.

The Commission also operates the Single Public Service Pension Scheme ("Single Scheme") for those staff who joined the Single Scheme on or after 1 January 2013. Single Scheme members' contributions are paid over to the Department of Public Expenditure and Reform (DPER). In addition, the Commission is liable to pay an employer contribution to DPER in accordance with DPER Circular 28/2016. The Commission has accounted for its costs and liabilities under the single public services pension scheme (since 1 July 2017) on an incurred basis. Employer contributions due to DPER since 2013 have been accrued for in the 2018 figures.

For the purposes of reporting in accordance with Financial Reporting Standard 102 – (FRS 102), an update of the actuarial review (in respect of the funded defined benefit scheme) was completed as at 30 June 2018.

17.	Retirement Benefits (Continued)		
		30 June	30 June
		2018	2017
		€'000	€′000
b.	Retirement Benefit Costs Made up of:		
	Defined Benefit Scheme		
	Current service cost	2,886	2,903
	Interest cost	1,368	1,111
	Expected return on Scheme Assets	(1,146)	(860)
	Less: Employees' Contributions	(372)	(351)
		2,736	2,803
	Single Public Service Pension Scheme (SPSPS)		
	Employer Contribution	941	-
	Current Service Cost*	499	-
	Interest Cost	27	-
	Adjustment to deferred Exchequer Pension funding	(526)	-
		941	-
	Total Retirement Benefit Costs	3,677	2,803
	${}^\star \text{Employee contributions of } \in \text{117,000 remitted to DPER, have been included in the calculation of the contributions} \\$	the current se	rvice cost.
ci.	Net Retirement Benefit Liability (Defined Benefit Scheme) Made up of:		
	Fair value of Scheme Assets	51,695	47,350
	Present Value of Retirement benefit obligations	(59,000)	(57,448)
	Net (Liability)	(7,305)	(10,098)
	Note: The Balance Sheet Liability in respect of Single Scheme Retirement Benefits in 2018 comprises Asset in respect of the Single Scheme of €1.54m to match the Single Scheme Liability of €1.54m to respect of the Single Scheme.	ises a Deferrec giving a nil Net	I Funding Liability in
cii.	Present Value of Retirement Benefit Obligations at beginning of year (Defined Benefit Scheme)	57,448	57,101
	Current Service Cost	2,886	2,903
	Interest Cost	1,368	1,111
	Actuarial (Gain)	(1,714)	(3,382)
	Benefits Paid	(932)	(246)
	Premiums Paid	(56)	(39)
	Present Value of Retirement Benefit Obligations at end of year (Defined Benefit Scheme)	59,000	57,448

17.	Retirement Benefits (Continued)		
		30 June	30 June
		2018	2017
		€'000	€'000
ciii.	Change in Scheme Assets (Defined Benefit Scheme)		
	Fair Value of Scheme Assets at beginning of year	47,350	43,341
	Expected return on Scheme Assets	1,146	860
	Actuarial Gain	2,311	1,661
	Employer Contributions	1,504	1,422
	Members' Contributions	372	351
	Benefits Paid	(932)	(246)
	Premiums Paid	(56)	(39)
	Fair Value of Scheme Assets at end of year	51,695	47,350
	The current practice of increasing retirement benefits in line with public sector salary inflation is t measuring the defined retirement benefit obligation.	aken into acco	ount in
civ.	Retirement Benefits Liability (SPSPS)		
	Present Value as at 1 July 2017	1,105	-
	Current Service Cost	499	-
	Interest Cost	27	-
	Actuarial (Gain)	(74)	-
	Benefits Paid	17	-
	Present Value as at 30 June 2018	1,540	-
d.	Scheme Asset Composition (Defined Benefit Scheme)		
	The scheme assets at the year end were composed of:		
	Equities	26,544	25,258
	Bonds	21,059	18,110
	Property	623	594
	Cash and Other liquid assets	3,469	3,388
	·	51,695	47,350
	The scheme assets at the year end expressed in % terms comprised		
	Equities	51.3%	53.3%
	Bonds	40.7%	38.3%
	Property	1.2%	1.2%
	Cash and Other assets*	6.8%	7.2%
		100.0%	100.0%
	*consists of alternative strategies and enhanced yield funds		
	Weighted average assumptions used to determine benefit obligations (Defined Benefit Scheme)		
	Discount Rate	2.40%	2.40%
	Rate of compensation increase	3.40%	3.30%
	Weighted average assumptions used to determine pension expense (Defined Benefit Scheme)		
	Discount Rate	2.40%	1.95%
	Expected long-term return on scheme assets	2.40%	1.95%

17.	Retirement Benefits (Continued)								
				30 June	30 June				
				2018	2017				
				€′000	€′000				
e.	Principal Actuarial, Financial								
	The financial assumptions us								
	Discount rate				2.40%				
	Salary increases				3.30%				
	Pension increases Inflation increases				2.80%				
					1.80%				
	The Demographic assumptions used were as follows								
		2018	2017						
	Mortality Pre-Retirement & Post-Retirement	S2PMA with CMI 2016 (1.5%) improvements for all members	S2PMA with CMI 20 for all members	2013 (1.5%) improvements					
	Retirements	It is assumed that all members who joined prior to 1 April 2004 retire at age 60 and all other members retire at 65	It is assumed that all members who joined prior to 1 April 2004 retire at age 60 and all other members retire at 65 No allowance No allowance It is assumed that 90% of members are married. A male is assumed to be 3 years older than his spouse						
	Ill Health Retirement	No allowance							
	Early Retirement	No allowance							
	Withdrawals	No allowance							
	Percentage married	It is assumed that 90% of members are married.							
	Age Difference between spouses	A male is assumed to be 3 years older than his spouse							
	rtality and they	allow for							
	determined (including discour annually based on current ecc benefit and post-retirement p The assumptions can be affec a. the discount rate, changes i								

17.	Retirement Benefits (Continued)								
		30 June							
		2018	2017	2016	2015	2014			
		€′000	€'000	€'000	€′000	€′000			
f.	History of defined benefit obligations, assets and experience gains and losses								
	Defined benefit obligations	59,000	57,448	57,101	45,053	43,480			
	Fair value of Scheme Assets	(51,695)	(47,350)	(43,341)	(40,979)	(35,758)			
	Deficit / (Surplus) for funded Scheme	(7,305)	(10,098)	(13,760)	4,074	7,722			
	Experience Adjustment on Scheme Assets	2,311	1,661	(93)	1,821	2,675			
	percentage of scheme assets	4.5%	3.5%	0.2%	4.4%	7.5%			
	Experience gains / (losses) on Scheme Liabilities								
	amount	533	823	1,226	1,828	(1,549)			
	percentage of Scheme Liabilities	0.9%	1.4%	2.1%	4.1%	(3.6%)			

g. Prior Pensionable Service

The liabilities of the pension scheme relate to retirement benefits arising from service with the Commission and service with other public bodies prior to joining the Commission where such service is known to the Commission. The Commission is entitled to seek to recover the cost of funding the prior service from other public bodies under the terms of its membership of the Public Service Transfer Network.

For service transferred by members prior to 30 June 2018, the total value of such payments received in the year to 30 June 2018 was Nil (2017: Nil).

Payments in respect of transferred in service (when received) are shown as a separate item in the Statement of Comprehensive Income.

h. Funding of retirements benefits

A triennial actuarial valuation of the scheme was carried out as at 1 January 2016 and the recommended contribution rate was subsequently agreed. The next triennial actuarial valuation is due to be carried out as at 1 January 2019.

i. Deferred Funding Asset for Pensions (Single Public Service Pension Scheme)

In compliance with the Public Service Pensions (Single Scheme and Other Provisions) Act 2012, the Commission as the "Relevant Authority" has calculated the retirement benefit applicable to the Single Public Service Pension Scheme at the 30 June 2018.

The deferred funding asset for pensions relates to the creation of an asset equal to the defined benefit liability of this scheme. The liability in respect of the Single Scheme members is matched by a deferred funding asset on the basis of the provisions of Section 44 of the Public Service Pensions (Single Scheme and other Provisions) Act 2012.

18. Contingent Liabilities

Legal costs incurred to date have been fully provided for in these financial statements. However, the Commission is involved in a number of legal cases, the outcome of which is uncertain. Potential future costs in relation to these cases have not been provided for due to the uncertainty around the outcome and the potential costs that may be incurred.

19. Related Party Transactions

As part of the ordinary course of business, the Commission has had transactions with other government departments and other state bodies. Key Management Remuneration is disclosed in Note 3.

20. Pension Related Deduction

An amount of €630,000 (2017: €568,000) deducted from salaries in respect of the Pension Related Deduction was paid to the Department of Communications, Climate Action and Environment in the year ended 30 June 2018.

21. Post Balance Sheet Events

There were no events after the year end which could have a material impact on any information in these financial statements.

22. Approval Of Financial Statements

These financial statements were approved by Jeremy Godfrey, Commissioner, for the Commission, on the 25th March 2019.

Commission for Communications Regulation

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