

Ireland

	Ireland				EU
	DESI 2017 value	DESI 2018 value	DESI 2019 value rank		DESI 2019 value
1a1 Fixed broadband coverage % households	96%	97%	98%	13	97%
	2016	2017	2018		2018
1a2 Fixed broadband take-up % households	69%	74%	73%	17	77%
	2016	2017	2018		2018
1b1 4G coverage % households (average of operators)	92%	92%	96%	16	94%
	2016	2017	2018		2018
1b2 Mobile broadband take-up Subscriptions per 100 people	94	101	102	9	96
	2016	2017	2018		2018
1b3 5G readiness Assigned spectrum as a % of total harmonised 5G spectrum	NA	NA	30%	6	11%
			2018		2018
1c1 Fast broadband (NGA) coverage % households	82%	93%	96%	5	83%
	2016	2017	2018		2018
1c2 Fast broadband take-up % households	41%	51%	54%	10	41%
	2016	2017	2018		2018
1d1 Ultrafast broadband coverage % households	NA	53%	56%	21	60%
		2017	2018		2018
1d2 Ultrafast broadband take-up % households	14%	18%	20%	15	20%
	2016	2017	2018		2017
1e1 Broadband price index Score (0 to 100)	72	72	75	24	87
	2016	2017	2018		2017

1. Progress towards a gigabit society

Ireland outperforms the EU with regard to most connectivity indicators. It ranks 5th on fast broadband coverage with 96 % (compared to an 83 % EU average) and 10th on fast broadband take-up with 54 % (compared to a 41 % EU average). However, it lags behind on ultrafast broadband coverage (ranks 21st with 56 %, compared to a 60 % EU average). Ireland's geography and population distribution are significant factors discouraging market players from widely expanding their networks. This means that Ireland will have to rely on state intervention if it is to reach the target of 100 Mbps coverage for all households in the intervention area.

Next Generation Access (NGA) coverage further increased over the last year in Ireland (to 96 % of households, well above the EU average of 83 %). At the same time, fixed broadband coverage improved slightly to 98 %, slightly above the EU average (97 %). Ultrafast coverage reached 56 % and remains below the EU average of 60 %. Fibre-to-the-premises (FTTP) coverage lags even further behind (at 13 % in Ireland compared to a 30 % EU average).

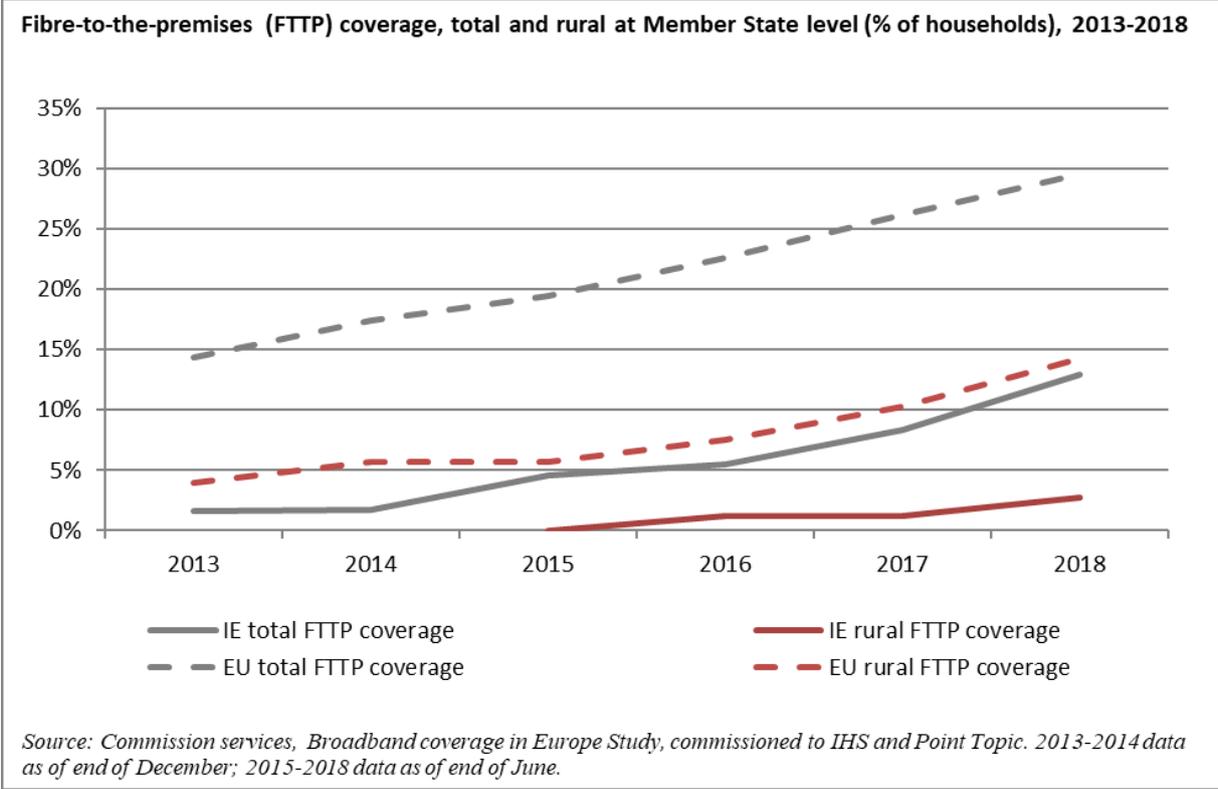
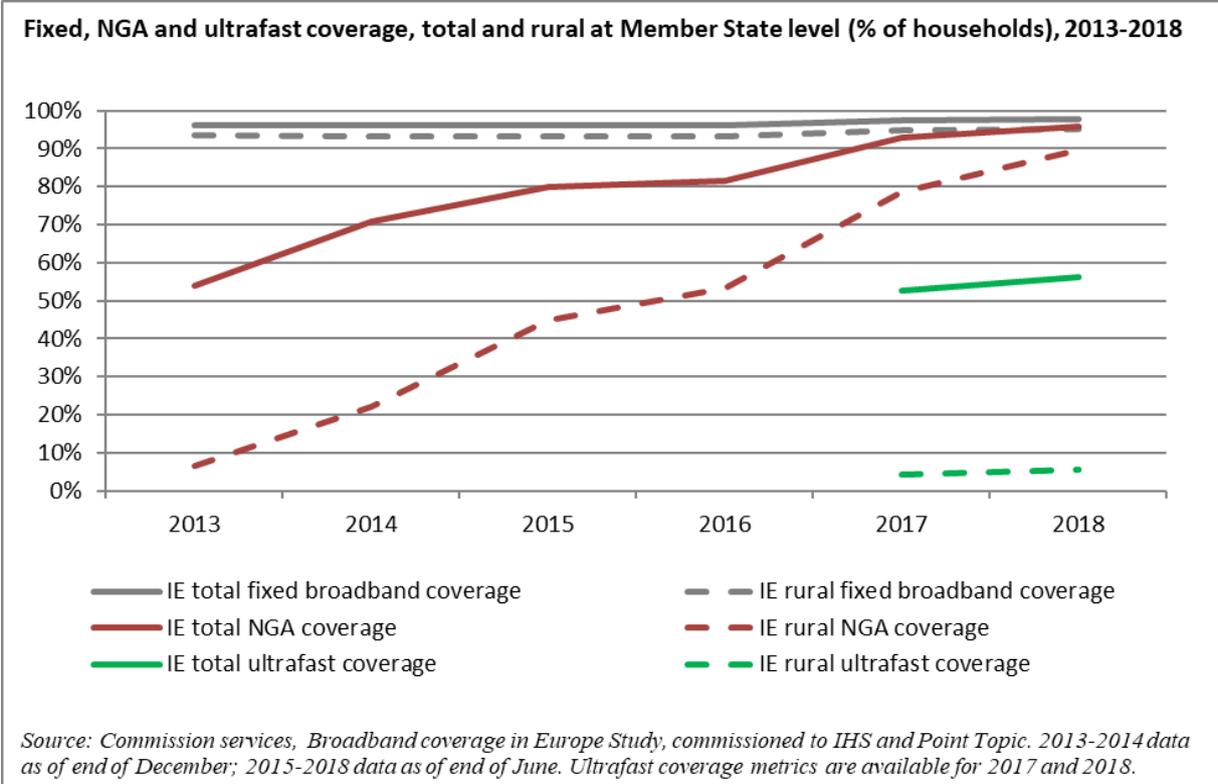
The deployment of gigabit networks in Ireland relies on both public and private investment.

Eir, the incumbent operator, is in the process of rolling out an FTTP network to ultimately cover 330,000 premises by June 2019, having covered 307,000 premises as of Q4 2018.¹ It has already rolled out an extensive Fiber-to-the-cabinet (FTTC) VDSL network to approximately 1.6 m. premises offering speeds of up to 100 Mbps. Eir has also announced plans to upgrade the FTTC network to FTTH over the next 5 years.

Virgin Media's CATV (DOCSIS 3.0) and FTTP network covers approximately 890,500 premises, offering speeds of up to 360 Mbps.

¹https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2018_2019/quarter2/eir_Q2_FY19_results_presentation.pdf

Finally, SIRO, a joint venture between the ESB (the state-owned electricity distribution network operator) and Vodafone, who offers wholesale only services, is rolling out an FTTP network aiming to pass 500,000 premises in 50 towns. The FTTP network offers speeds of approximately 1 Gbps. So far, SIRO has connected approximately 200,000 premises in 30 towns and has not yet rolled out to the largest population centres.



In this context, the main challenge for Ireland is to cover the more sparsely populated remote areas, where the digital divide remains significant.

The Irish national broadband plan (NBP) aims to ensure high-speed broadband access to all premises in Ireland, via a combination of commercial investment and State aid intervention. The Department of Communications, Climate Action and Environment (DCCAE) is responsible for the strategy.

The market has generally reacted well to this strategy, invoking the benefits it can bring to the sector and the overall economy. National authorities suggest that the NBP has been a catalyst in encouraging investment by the telecoms sector. According to the DCCAE, commercial operators in the Irish market have invested over €2.75 billion in upgrading and modernising their networks over the past 5 years, with further investments planned.

The area where commercial investors have neither invested nor plan to deploy a next generation access network comprises 540 000 premises located on around 96 % of Ireland's landmass and has been designated as the intervention area. DCCAE is responsible for the procurement process to appoint a company who will build, maintain and operate over a 25-year term a State funded network, and offer wholesale only services on an open access basis. The subsidised network is required to offer a minimum of 30 Mbps download and 6 Mbps upload speeds. The remaining bidding consortium is proposing a predominantly fibre-to-the-home (FTTH) network solution offering a future proof network. This will be capable of delivering upload and download speeds significantly in excess of the minimum requirements and in line with the 2025 targets set out by the European Commission.

The government has allocated an initial €275 million to the Capital Plan² for the initial years of network build-out, and this is also eligible for €75 million under the European Regional Development Fund (ERDF) programme for 2016-2020. Substantial additional funds will be required in the course of the 25-year project period.

The procurement process to appoint a contractor for the State intervention network was launched in December 2015. The project has faced substantial challenges, especially as a result of a reduction in the intervention area to exclude commercial investment planned by eir and the decision of two of the three bidders (SIRO and eir) to withdraw from the procurement process in 2017 and 2018 respectively.

The process continues with one bidding consortium, led by Granahan McCourt. In September 2018, this bidding consortium submitted its final tender in the procurement process, which entered its final stage. This is the final stage of the procurement process before contract award. On 7 May 2019, the Irish Government announced the approval of the appointment of a preferred bidder to the National Broadband Plan. According to this announcement, the contract will be awarded, following confirmation of State Aid Approval by the European Commission.

In addition, a Mobile Phone and Broadband Taskforce (established in 2016), aims to identify solutions to broadband and mobile coverage problems, particularly in rural areas, and to investigate possible ways for improving services, before resorting to State intervention. Since its establishment, it has addressed over 60 targeted actions to facilitate the deployment of infrastructure and the improvement of services.

In parallel, Irish authorities have implemented a number of demand-side initiatives that aim to drive digital adoption in business and facilitate the integration of digital technology in education. The Trading Online Voucher Scheme offers small businesses a financial incentive of up to €2 500 to develop their online trading capacity, including with training, mentoring and networking support. The School Digital Champion Programme seeks to promote digital adoption and encourage the productive

² Building on Recovery: Infrastructure and Capital Investment 2016-2021 (29 September 2016)

use of technology by students and provides them with a platform to drive digital adoption outside the walls of the classroom, by connecting with local businesses and the wider community.

Ireland is preparing a *Connectivity Strategy*, which will identify key relevant infrastructural and regulation challenges and opportunities. It will align with Ireland's new National Digital Strategy, which is currently under development, led by the Department of the Taoiseach (the Irish Prime Minister). The draft Strategy will be submitted for Ministerial consideration in 2019, with a view to stakeholder consultation and publication thereafter.

5G ready service and technology neutral licences in the 3.4 - 3.8 GHz band were issued to five licensees, including the three Irish MNOs, on 1 August 2017. ComReg observes that this band continues to be used for the delivery of fixed wireless access (FWA) services, and that a number of the new licensees are making preparations to roll out FWA services. On 15 March 2019, DCCAE also published Ireland's National Roadmap on the use of the 700MHz Frequency Band³, which sets out the process and timelines for the award of the 700 MHz band.

On 21 November 2018, Vodafone Ireland launched the first live 5G site for commercial trials in Ireland. Three expects to begin roll out of 5G later in 2019,⁴ while Eir has commenced work on upgrading to 5G over the next two years.⁵ ComReg's Test and Trial Ireland⁶ facilitates tests or trials for all wireless services including 5G.

2. Market developments

In early 2018, the French telecommunications group Iliad completed the acquisition of a controlling stake in Ireland's incumbent operator eir. This is the only significant change in Ireland's electronic communications market during 2018.

Network sharing agreements and joint ventures that include other (non-telecom) network operators are in place. Eir and Three have entered into a 'mosaic' network sharing agreement. According to Three's press release of 29 August 2014, this agreement involves sharing 2 000 sites, including site equipment, power supply, towers and transmission. The maintenance of this sharing agreement was one of the commitments Three made to the European Commission in exchange for approval of its acquisition of Telefónica (O2) in 2014.

Examples of mobile site sharing include the sharing of all Office of Public Works (OPW)⁷ sites, managed by Shared Access⁸, and site shares operated by Cignal⁹ (formerly Coillte Telecoms).

2.1. Fixed markets

DSL continues to be predominant in Ireland, with a market share of 65 %. According to NRA data, at the end of Q2 2018 there were approximately 39 000 unbundled local loop (ULL) lines, (decreasing), 144 000 bitstream DSL lines, 127 bitstream VDSL lines and 199 000 virtual unbundled local access (VULA) lines. Cable subscriptions follow but have been slightly losing ground (26 % in July 2018, down from 26.5 % a year ago). The share of FTTH remains low at 4.2 % and well below the EU average of 16 %, despite the remarkable recent increase (up from 1.4 % a year ago).

³ https://dcaae.gov.ie/en-ie/communications/publications/Pages/Ireland_%E2%80%99s-National-Roadmap-on-the-Use-of-the-700MHz-Frequency-Band.aspx, published on 15 March 2019.

⁴ <https://www.siliconrepublic.com/companies/three-ireland-5g-network-roll-out-2019>

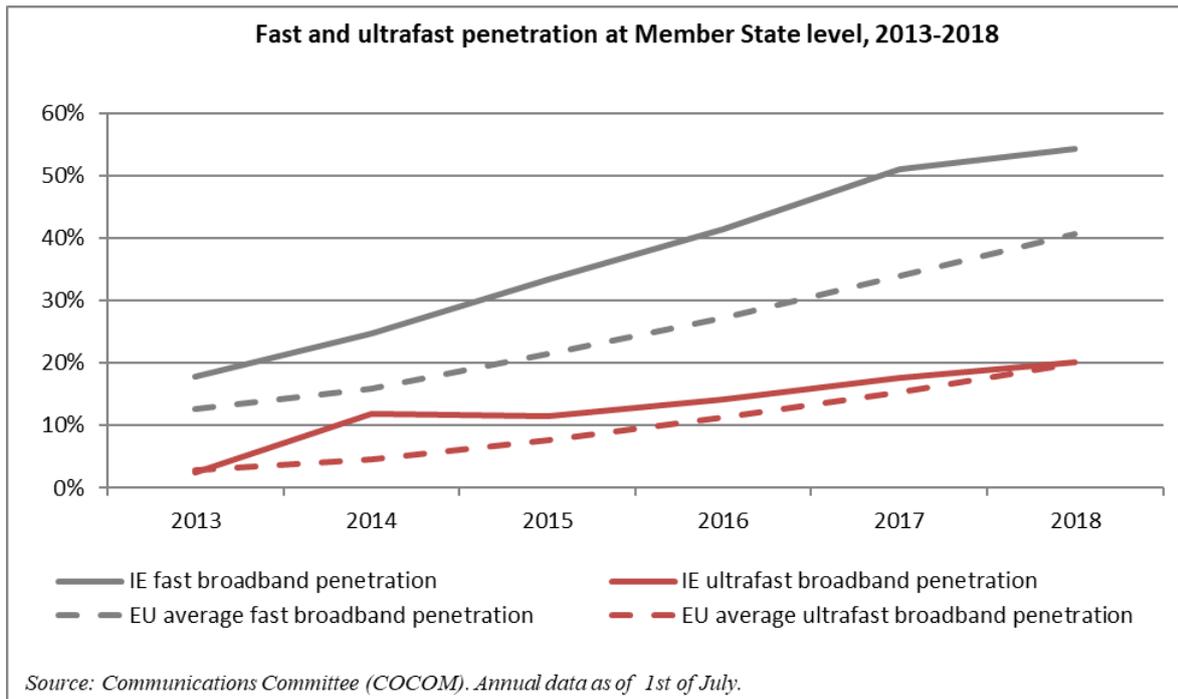
⁵ <https://www.eir.ie/support/latest-updates/we-are-upgrading-our-mobile-network-to-become-5g-ready/>

⁶ www.testandtrial.ie

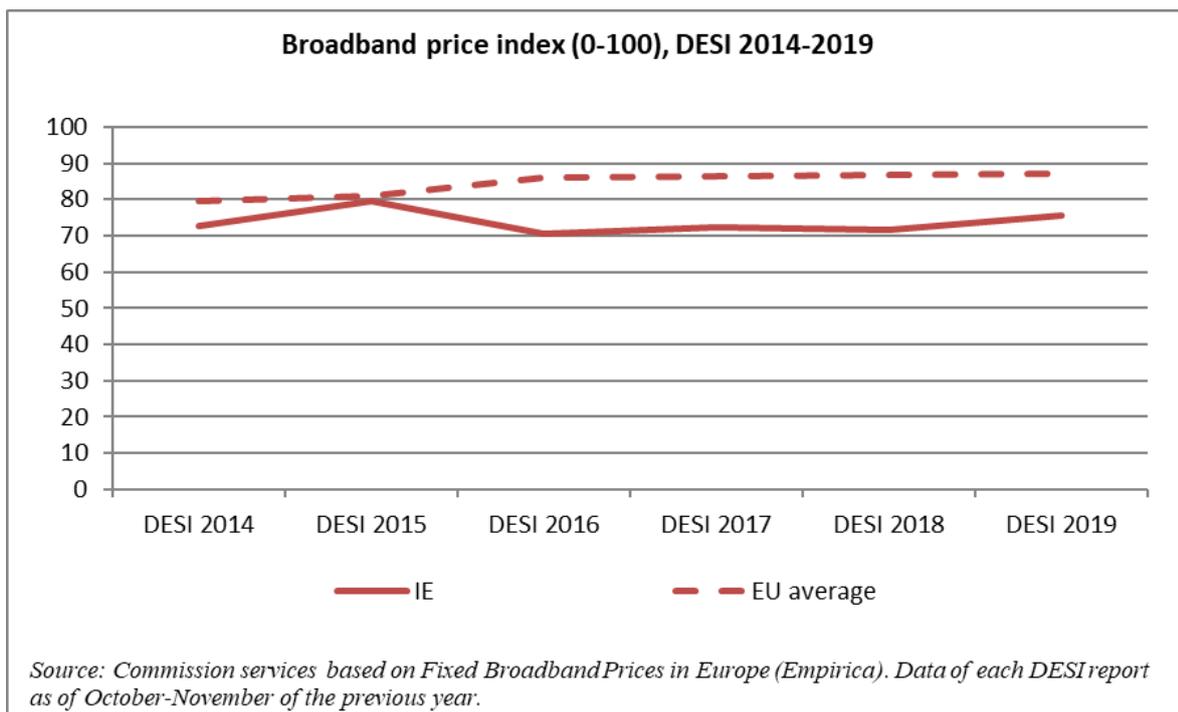
⁷ <http://www.opw.ie/en/>

⁸ <https://www.sharedaccess.com/about/>

⁹ <http://cignal.ie/>



The market share of the incumbent in total fixed broadband further decreased to 31.8 %, compared to a 39.7 % EU average.

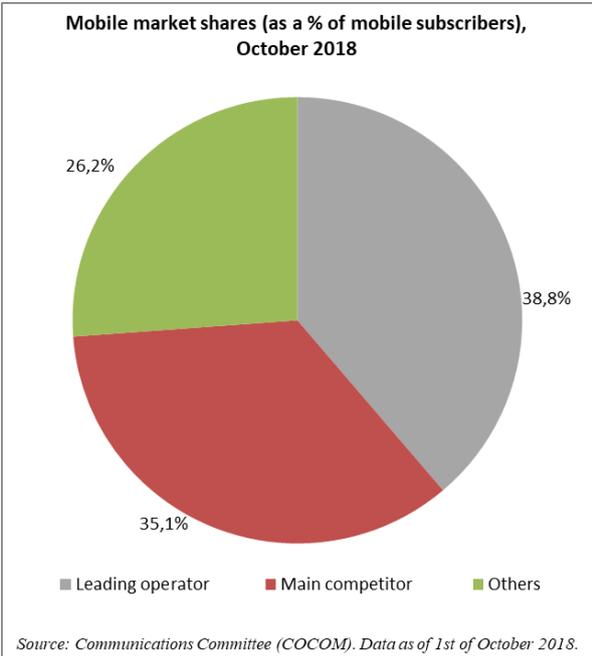


Fixed broadband prices¹⁰ in Ireland are substantially higher than the EU average for all speeds and types of product. In fact, for the 12-30 and 30-100 Mbps baskets, prices in Ireland are among the four highest in the EU, while for single and double-play products (internet and TV) they are the highest.

¹⁰ Source: Study for fixed broadband prices in Europe 2018 (Empirica, project SMART 2016/0044) - forthcoming. Comparisons are for the least expensive price (PPP) per basket. Each basket is defined based on the speed bracket (up to 10 Mbps, 10-30 Mbps, 30-100 Mbps, 100-200 Mbps) and the service components (internet, '2-play' with internet+telephone or internet+TV, and '3-play' with internet+telephony+TV).

The difference between Irish prices the EU average is substantially lower in the higher-end basket (100-200 Mbps). This is also reflected in the broadband price index¹¹.

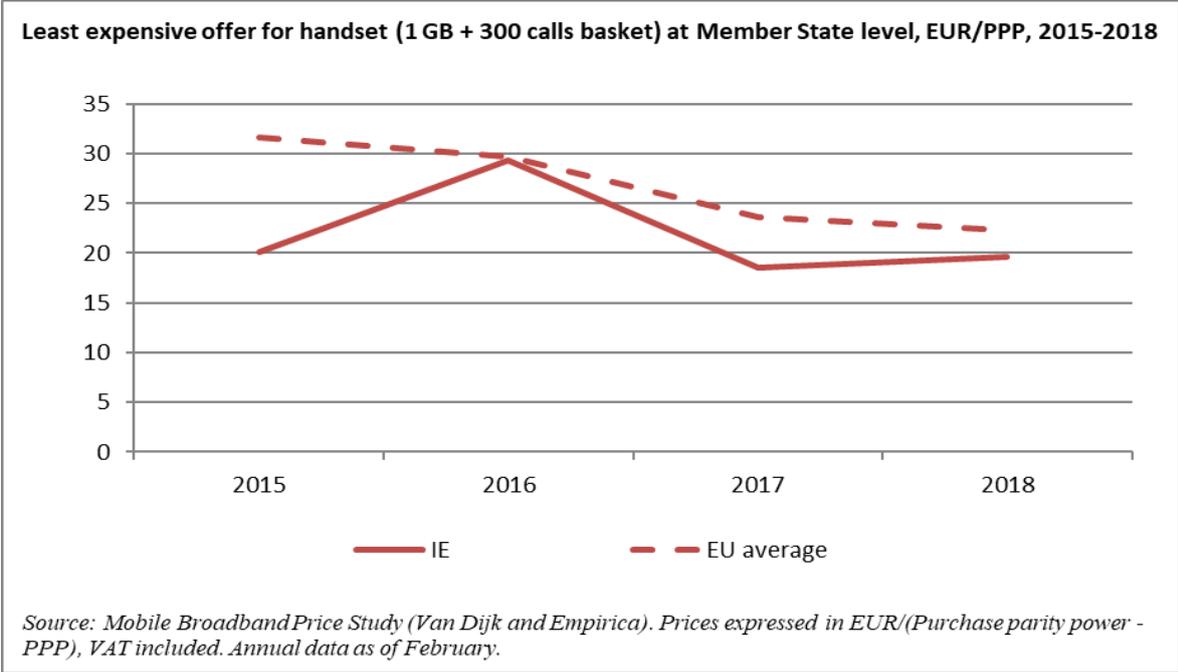
2.2. Mobile markets



At the end of 2018, the Commission for Communications Regulation (ComReg) reported over 6.2 million mobile subscriptions, including mobile broadband and machine-to-machine subscriptions, in Ireland. Excluding mobile broadband and machine to machine, mobile voice subscriptions totalled just under 5 million for a penetration of 101.7 %.

Vodafone remained the largest mobile operator with 38.8 % (including mobile broadband and M2M), followed by Three with 35.1 %.

In 2018, iD Mobile, one of the two MVNOs who had entered the market in 2015 (following the takeover of O2 Ireland by Three), exited the market.



Prices for mobile broadband also tend to be higher than the EU average. For data-only packages, the difference is higher at lower allowances (twice as much for up to 512 MB) but is substantially reduced at higher allowances (up to 11 % more expensive for 5GB and 10 GB while 29 % cheaper for 20 GB).

¹¹ The fixed broadband price index weighs the cheapest retail offers from: standalone, double play (BB + TV, BB + fixed telephony) and triple play (BB+TV+fixed telephony) and three speeds categories - 12-30 Mbps, 30-100 Mbps and +100 Mbps. This indicator presents values from 0 to 100 (which should not be read as prices) and the higher the values, the better the country performs in terms of affordability of prices relative to purchasing power.

There is a similar trend for data and voice packages.

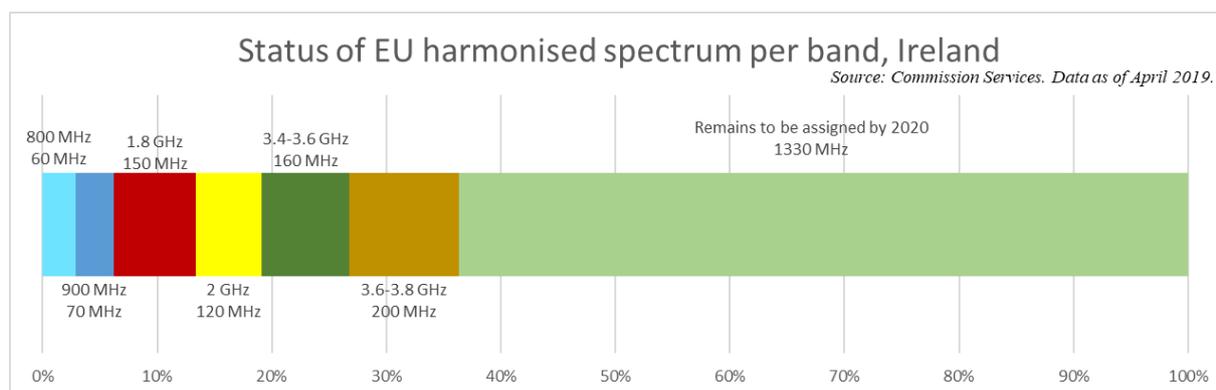
3. Regulatory developments

3.1. Spectrum

Ireland has assigned 760 MHz, which accounts for 36 % of the spectrum harmonised at EU level for wireless broadband¹². The spectrum that remains to be assigned is mainly in the 700 MHz, the 1.5 and 2.6 GHz bands. ComReg has commenced the process to consider assigning all or some of these bands¹³.

Ireland has carried out the necessary cross-border coordination work with the UK regarding the 700 MHz band. The two countries have identified 4 September 2019 as the start date for the coordinated migration of terrestrial broadcasting services out of this spectrum band in both jurisdictions. In Ireland, a simulcast period is planned until 4 March 2020, when all terrestrial broadcast transmissions in the 700 MHz band will be required to cease.

In 2018, ComReg completed the award of spectrum rights of use to meet the requirement for point-to-point radio links, a critical piece of backbone infrastructure for Ireland’s mobile communications networks (the “26 GHz Band Spectrum Award 2018”). 15 of 19 Lots of 2 × 28 MHz were awarded, resulting in 840 MHz of new spectrum rights of use¹⁴.



In June 2018, ComReg’s preliminary consultation on the next Multi-Band Spectrum Award (MBSA)¹⁵ proposed to include the paired 2.1 GHz band in the MBSA alongside the 700 MHz duplex, the 2.3 GHz and the 2.6 GHz bands in the next award process, but postponing the assignment of the 26 GHz band for a subsequent process. It also proposed the potential use of ‘an early liberalisation option’ to allow some or all the existing licensees in the paired 2.1 GHz band the option to convert their respective existing rights of use into new “liberalised” rights of use via the proposed award. Ireland’s National Roadmap on the Use of the 700MHz Frequency Band, sets out the process and timelines for the Multi-Band Spectrum Award.

Some market players noted the continuing delay in the liberalisation of the 2.1 GHz band, which is complicated by the different expiry dates. They complain about delays in the award of spectrum and

¹² The 5G spectrum readiness indicator is based on the amount of spectrum already assigned and available for use for 5G by 2020 within the so-called 5G pioneer bands in each EU Member State. For the 3.4-3.8 band this means that only licences aligned with the technical conditions annexed to Commission Decision (EU)2019/235, are considered 5G-ready. On the contrary, the percentage of harmonised spectrum takes into account all assignments in all harmonised bands for electronic communications services (including 5G pioneer bands), even if this does not meet the conditions of the 5G readiness indicator.

¹³ ComReg Document 18/60 (June 2018) – Proposed multi band spectrum award - preliminary consultation on which bands to award.

¹⁴ ComReg Document 18/53.

¹⁵ ComReg Document 18/60.

have requested that at least the auction of the 700 MHz be expedited. They also complain about the prolonged use of the 3.6 GHz band by legacy users, which prevents them from making use of the band. According to ComReg, transition licenses allow legacy users to continue using the band to provide broadband services¹⁶.

3.2. Regulated access

In Ireland, all markets included in the 2014 Recommendation on Relevant Markets are subject to regulation, along with a few legacy markets, i.e. the retail market for access to the public telephone network at a fixed location for residential and non-residential customers (market 1 of the 2007 Recommendation on relevant markets) and the market for call origination on fixed networks (market 2 from the 2007 Recommendation), as well as the broadcasting transmission market (market 18 from the 2003 Recommendation).

Since October 2017, the Commission has addressed a letter of formal notice (LFN) to Ireland, concerning delays in the analysis of the market for wholesale local access at a fixed location, the market for wholesale central access provided at a fixed location for mass-market products and the market for wholesale high-quality access provided at a fixed location (markets 3a, 3b and 4, respectively, of the 2014 Recommendation on relevant markets¹⁷). During Q4 2018, ComReg adopted decisions on the analysis of markets 3a and 3b, designating eir as having significant market power (SMP) on the national WLA market, and the Regional WCA market. ComReg published the full market analysis decision (including remedies)¹⁸, in parallel with two additional decisions on price control and on price control on bundles¹⁹. In response to the associated notified draft measures, the Commission issued comments on: (i) including alternative operators' FTTH network infrastructure in the market definition, (ii) the need for appropriate and consistent price control of wholesale products, and (iii) the need for updated current generation access prices. Furthermore, as regards the then proposed regulatory remedies for wholesale local access provided at a fixed location and wholesale central access provided at a fixed location for mass-market products in Ireland, the Commission commented on the need to urgently review the retail access market. On the other hand, the analysis of Market 4 is still pending. On 30 November 2018, the Irish authorities formally informed the Commission that the notification of Market 4 was to be expected in Q2 2019 instead of Q3 2018 as initially planned, however this has since moved to Q3 2019 owing to the need to consider further information. ComReg held a second public consultation²⁰ in February 2018 and a workshop with stakeholders in September 2018, to discuss the practical application of certain proposed obligations²¹. It has strengthened the market analysis team with experts, including from other departments, and is optimistic about reaching the above (updated) deadline without requiring a third consultation.

ComReg notified the draft final measures for the markets for wholesale call termination on individual public telephone networks provided at a fixed location as well as for wholesale voice call termination on individual mobile networks (Markets 1 and 2 of the 2014 Recommendation on relevant markets

¹⁶ Legacy users may use to this effect either Transition Unprotected Licences or Transition Protected Licences as appropriate, as detailed in the 3.6 GHz award Information Memorandum, ComReg Document 16/71, published in August 2016 and setting out the rules of the award. These transition rules serve to minimise the impact on consumers while ensuring that rural consumers in particular continue to receive a broadband service while alternative commercial services are being rolled out by new licensees.

¹⁷ Commission Recommendation 2014/710/EU of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services Text with EEA relevance, OJ L 295, 11.10.2014, p. 79–84.

¹⁸ ComReg Document 18/94.

¹⁹ ComReg Documents 18/95 and 18/96 respectively.

²⁰ ComReg Document 18/08.

²¹ ComReg Document 18/54 and ComReg Document 18/98.

respectively) in Q2 2019²². Fixed termination rates (FTRs) and mobile termination rates (MTRs) in Ireland are set based on the BU Pure LRIC Model²³. In March 2018, ComReg published a Pricing Consultation Paper that detailed updated BU Pure LRIC models for both FTRs and MTRs. In 2018, the MTR in Ireland was 0.79 euro cent/minute, the same for all operators (compared to a 0.85 euro cent/minute weighted EU average). The regulated FTR cap was set at 0.072 euro cent/minute in 2018.

ComReg is also commencing the other two delayed reviews, i.e. markets 1 and 2 of the 2007 Recommendation (to be reviewed on a joint basis), and market 18 of the 2003 Recommendation.

The Broadband Cost Reduction Directive 2014/61/EU (BB CRD)²⁴ is transposed as the Broadband Cost Reduction Regulations in Ireland. However, transposition of Article 8 of the BB CRD is still pending. ComReg is designated as the Dispute Settlement Body (DSB) and responsible for providing a Single Information Point (SIP).

So far, there have not been any disputes raised in this framework. ComReg has been engaged with the Commission for Regulation of Utilities ('CRU') (Gas, Water & Energy). The two agencies are in the process of concluding a Memorandum of Understanding. This will make it possible to share information between agencies, which will help ComReg to carry out its tasks in its role as the DSB.

The SIP is publicly available via the ComReg website with no access conditions²⁵. It provides links to the online resources of gas, electricity, telecoms, radio, transport (including railways, roads, ports and airports) infrastructure providers, as well as of local authorities, city councils and others. Where ComReg receives notification of planned works, these are stored electronically and are available on request.

4. End-user matters

According to the 2018 Consumer Markets Scoreboard, of the 25 services markets assessed by consumers in Ireland 'fixed telephone services', 'mobile telephone services' and 'internet provision', rank quite low (15th, 18th and 23rd respectively) and below the "services" average. They are also below the respective EU averages (by 2.1, 3.6 and 6.9 points respectively)²⁶.

According to information provided by ComReg, during the period from 1 January 2018 to 9 November 2018 a total of 24 276 issues were raised via its Consumer Line. 3 921 of these were complaints and the rest queries. Most complaints concerned premium rate services, billing (including disputed charges), service issues (such as loss of service and quality of service) and contractual matters (such as contract termination requests and terms and conditions).

²² Both markets 1 and 2 were notified in March 2019.

²³ ComReg Decision D12/12 "Mobile and Fixed Voice Call Termination Rates in Ireland" and ComReg Decision D02/16 "Mobile Termination Rates: Response to Consultation 14/29 and Supplementary Consultation 15/19 and Decision Document"

²⁴ Directive 2014/61/EU of the European Parliament and of the Council of 15 May 2014 on measures to reduce the cost of deploying high-speed electronic communications networks (OJ L 155, 23.5.2014, p. 1).

²⁵ <https://www.comreg.ie/industry/electronic-communications/single-information-point-bcrr/single-information-point-sip/>

²⁶ The market performance index (MPI) is a composite indicator ranging from 0 to 100 which measures how well a given market performs according to consumers. See Eurobarometer Consumer Markets Scoreboard 2018, p 12 and p 100, available at https://ec.europa.eu/info/sites/info/files/consumer-markets-scoreboard-2018_en.pdf.

a. Net neutrality

As also reported in the 2018 report, Ireland has still not set out rules on the penalties referred to in Article 6 of Regulation (EU) 2015/2120²⁷. Consequently, there is no provision for criminal sanctions, no provision to seek penalty orders from the civil courts and no provision that allows ComReg to impose a penalty for infringements of the Regulation. In the absence of enforcement powers, ComReg has still not commenced any formal assessment of practices that might infringe the Regulation.

b. Roaming

Following the introduction of ‘roam like at home’²⁸ (RLAH), the consumption of roaming services by Irish subscribers has shown a sharp increase for voice and an explosive increase for data. Specifically, in Q4 2017 it was 1.5 times more for voice and 3.6 times more for data, compared to Q4 2016. Similarly, in Q1 2018 it was 1.6 times more for voice and 3.6 times more for data, compared to Q1 2017²⁹.

ComReg is the competent authority for enforcing the Roaming Regulation. In May 2018, it formed the opinion that Tesco Mobile was non-compliant with its obligations under Articles 6a and 6e of the Roaming Regulation because it failed to correctly calculate and apply roaming charges/ surcharges to roaming data consumption in the period from 15 June 2017 to 24 January 2018. Tesco Mobile responded to ComReg and took immediate measures to remedy the non-compliance; it identified the affected customers and initiated refunds. In view of Tesco Mobile’s response and remedial measures, no other action was taken by ComReg.

c. Emergency communications - 112

Emergency calls in Ireland can be placed using either 112 or 999. They are routed to a single Public Safety Answering Point (PSAP), which is provided by BT Ireland under a contract with DCCAE.

For mobile network calls, the cell ID associated with the call is transferred to the PSAP. Network operators provide the PSAP with sufficient information to allow them to look up the cell ID and identify the geographic location of the caller. For handsets, Ireland uses AML (advanced mobile location), deployed on all three mobile networks. The implementation of AML by Apple in iOS in Q1 2018 has resulted in greater coverage for the AML solution. In addition, eCall³⁰ was implemented in Ireland in Q1 2018 and is supported on all main networks.

People with hearing disabilities can rely on three methods to contact the PSAP in an emergency situation. The principal means of access to the emergency call answering service for persons with disabilities is the 112 short message service (SMS). This service (introduced in January 2012) allows deaf, hard of hearing and speech-impaired people to send an SMS text message to the PSAP. The message is relayed to the Emergency Services by a PSAP operator. In addition, there is a silent call option, with set procedures in place for dealing with silent calls received by the PSAP, to process calls from persons who may not be in a position to communicate verbally. Finally, the Irish text relay service (ITRS) enables contacting the PSAP with the use of a minicom device (text telephones for

²⁷ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users’ rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union (OJ L 310, 26.11.2015, p. 1).

²⁸ 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 (OJ L 172, 30.6.2012, p. 10), as amended by Regulation (EU) 2015/2120 and Regulation (EU) 2017/920.

²⁹ Figures compare Q4/2017 and Q1/2018 with Q4/2016 and Q1/2017 retail roaming volumes according to the BEREC International Roaming Benchmark Report, October 2017-March 2018, of 4 October 2018

³⁰ See https://ec.europa.eu/transport/themes/its/road/action_plan/ecall_en.

users with hearing impairments). ITRS agents relay the calls to the PSAP and translate text into voice and voice into text. The service is available 24 hours a day.

The Commission is currently looking into the functioning of emergency communications and the 112 number in Ireland, with particular regard to caller location.

a. Universal service

Eir is the designated universal service provider until 31 December 2020. During 2018, ComReg issued separate consultation documents on the scope of the following universal service obligations: public pay telephones, provision of a directory of subscribers, and quality of service related to the universal service obligation of access at a fixed location. In early 2019, ComReg issued two final decisions on USO. Decision D01/19 (25/2/2019) observes a continuous need for a public payphone USO and maintains the status-quo, designating eir as the USP for the public payphone USO, for the period 25/2/2019-31/12/2020. Decision D02/19 (13/3/2019), re-imposes the previous national and sub-national connection targets and service availability targets.

ComReg received funding applications from eir in relation to its universal service obligations for all financial years from 2010 to 2016. It assessed the direct net cost, intangible benefits and unfair burden, issued individual consultation documents for financial years 2010-2015 and is in the process of reaching decisions on each of these years.

5. Institutional issues

The market continues to express concerns that ComReg lacks sufficient resources, which leads to considerable delays in several policy areas, including market reviews. The NRA is making substantial efforts to expedite work, for example by strengthening the market analysis team with experts from other departments, as well as seeking to improve the efficiency of its data collection processes in collaboration with stakeholders. In late 2018, DCCAIE concluded talks on ComReg's staffing levels with the Department of Public Expenditure and Reform (DPER), securing a substantial increase in resources for the Regulator.

One issue persistently raised by some stakeholders concerns the enforcement and sanction powers ComReg has to regulate the sector. These powers include *inter alia* the power to handle criminal offences (with fines up to € 500,000) and civil enforcement powers (by applying to the High Court for an order of compliance and an order to pay a financial penalty). The Irish Government's position is that the suite of enforcement tools available to ComReg fully meets the requirements of the EU Regulatory framework of 2009. Notwithstanding that, DCCAIE is actively reviewing ComReg's general enforcement powers to ensure that it is able to meet current and future challenges in delivering on its statutory and regulatory remit, including penalties set at a suitably high level to provide an effective deterrent. This work is being carried out with close engagement with the Regulator, and within prescribed constitutional limits.

Following an application by ComReg to the High Court on 16 June 2017 for declarations of non-compliance and orders directing that eir pay financial penalties to ComReg, eir challenged the legal basis of ComReg's enforcement powers. In late 2018, eir and ComReg reached a settlement, which included *inter alia* the withdrawal of eir's challenge to the legislation and the introduction of a new Regulatory Governance Model for eir.

ComReg is in the process of completing a review of non-geographic numbers (NGN), which had started in 2017. In a further consultation published in July 2018³¹, ComReg confirmed its preliminary

³¹ ComReg Document 18/65. See also www.comreg.ie/ngnreview.

view that the current NGN platform does not protect or promote the interests of consumers. ComReg concluded that there is a need to take measures at both the retail and wholesale level. In December 2018, ComReg published its Response to Consultation 18/65 and final Decision³², where it maintained its preliminary view and proposed measures.

Following a review of numbering for machine-to-machine (M2M) services and for mobile services in general, ComReg introduced a new dedicated M2M number range in mid-2018, explicitly permitting extraterritorial use. The review, prompted mainly by the strong growth in IoT/M2M services, led to ComReg decision 18/46³³, which made the 088 number range available for dedicated use by M2M services. These are 15-digit numbers in international dialing format (i.e. +353 88 and 10 digits). ComReg considers that this measure should ensure the availability of sufficient resources to meet expected demand with no impact on existing interpersonal mobile services. The decision makes it possible for 088 numbers to be used for eCall and explicitly allows the extraterritorial use of 088 M2M numbers. It further maintains ComReg's current approach of not charging fees for assigning numbers. The use of 088 numbers is subject to the General Authorisation conditions. A specific condition of use attached to 088 numbers is that they should be used in compliance with consumer protection and other national rules in the country in which they are used. ComReg has already notified other CEPT³⁴ countries of the introduction of the new 088 range for M2M service, with the assistance of the European Communications Office, and has expressed its readiness to provide BEREC with the required details in the light of Article 93(4) of the EECC. ComReg assigned the first 088 numbers in September 2018 and is liaising with the industry to ensure that numbers are operational ideally by the end of 2018 and in any case not later than June 2019.

6. Conclusion

Ireland's NBP is an ambitious project based on future-proof technologies. Expediting its implementation will help not only to bridge the country's geographical divide but also improve ultrafast broadband coverage, which is currently lagging behind. Ireland still lacks a 5G connectivity strategy and a clear timetable for assigning the 700 MHz band. However, it has already assigned substantial spectrum at 5G conditions in the 3.6 GHz band. Persistent delays specifically in laying down rules on the penalties for breaching the net neutrality rules and on transposing Article 8 of the Broadband Cost Reduction Directive 2014/61, as well as the absence of dissuasive, direct sanctioning power of ComReg as regards market monitoring and regulation, might also undermine legal certainty and the further development of the electronic communications sector. Delays also persist in market analysis. The notification of Market 4 is now postponed until Q3 2019. The agreement reached between DCCA and DPER, which secured a substantial increase in ComReg's staff, should substantially improve this situation. Finally, Ireland is reviewing the general enforcement powers of its Regulator to ensure it can meet current and future challenges in the sector.

³² ComReg Document 18/106 and Decision D15/18.

³³ "Review of Mobile Numbering – Promoting Innovation and Facilitating New Services" ComReg 18/68 D06/18, 11/6/2018.

³⁴ European Conference of Postal and Telecommunications Administrations, www.cept.org.