



An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

Review of Requirements Regarding Battery Back-up and Information for Electronic Communication Services Over Non-Public Switched Telephone Networks

Information Notice

Reference: ComReg 21/143

Version: Final

Date: 23/12/2021

An Coimisiún um Rialáil Cumarsáide
Commission for Communications Regulation

1 Lárcheantar na nDugaí, Sráid na nGildeanna, BÁC 1, Éire, D01 E4X0.
One Dockland Central, Guild Street, Dublin 1, Ireland, D01 E4X0.
Teil | Tel +353 1 804 9600 Suíomh | Web www.comreg.ie

Contents

1	Executive Summary	3
1.1	Introduction	3
1.2	Purpose of this Information Notice	4
1.3	ComReg’s approach and next steps	4
2	ComReg’s approach	6
2.1	Background.....	6
2.2	Relevant Research.....	8
2.3	Next Steps.....	10

1 Executive Summary

1.1 Introduction

The Commission for Communications Regulation (“ComReg”) is responsible for ensuring that providers of Publicly Available Telephone Services (“PATS”)¹ fully inform their customers of the difference in the technology and how it will impact them in using their service. ComReg is also responsible for specifying any relevant regulatory requirements to assist in ensuring the fullest possible availability of voice services.

Regulation 16 of the Regulations² requires undertakings to ensure, to the fullest extent possible, the availability of fixed voice in the event of catastrophic network breakdown or unforeseen circumstances. Voice providers must also take all necessary measures to ensure uninterrupted access to the emergency services.

ComReg, pursuant its functions and objectives under the Act³ and its functions under the Regulations, specified minimum information requirements to be complied with by fixed voice providers, when offering voice services over a non-Public Switched Telephone Network (“non-PSTN”).⁴ In January 2018, ComReg placed information obligations on all fixed voice providers offering fixed voice over a non-PSTN (“D02/18”).⁵ The Decision also placed additional obligations in relation to compatible battery back-up (“BBU”) devices where a BBU is currently available.⁶

A BBU is a device that an end-user could use to power customer premises equipment (“CPE”), notably, a router/modem to be able to continue to use, in particular, a home landline telephone service to make and receive calls including to contact emergency services, on a temporary basis, during a power outage.

The European Electronic Communications Code⁷ (“the Code”) was enacted on 20 December 2018, with a transposition deadline of 21 December 2020. The Code modernises and reforms the existing telecommunications regulatory framework in Europe. The Department of Environment, Climate and Communications (“DECC”) is

¹ Means a service made available to make and receive calls, also known as a telephone service or voice service.

² European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011. S.I. No. 337/2011.

³ Communications Regulation Act 2002 (as amended) (“the Act”).

⁴ For example, a fibre-to-the-home (FTTH) service, Cable (Cable TV) service, or FWA service.

⁵ ComReg Decision D02/18, entitled, “Requirements regarding Battery Back-up and information for Fixed Voice Services over non-Public Switched Telephone Networks”, 30 January 2018.

<https://www.comreg.ie/publication/requirements-regarding-battery-back-information-fixed-voice-services-non-public-switched-telephone-networks>.

⁶ Obligations on fixed non-PSTN PATS providers with 10,000 or more fixed subscribers.

⁷ Directive (EU) 2018/1972 of the European Parliament and of the Council of 11 December 2018 establishing the European Electronic Communications Code (Recast).

responsible for the transposition of the Code into national law in Ireland, and this is ongoing.

In accordance with Article 101 of the Code, Member States may continue to apply, until 21 December 2021, consumer protection provisions, diverging from Article 108 of the Code,⁸ provided those provisions were in force on 20 December 2018 and any restrictions arising were proportionate. Member States were obliged to notify the European Commission (“EC”) by 21 December 2019 of any national provisions to be applied. The EC was notified that D02/18 would continue to be applied until 21 December 2021.

1.2 Purpose of this Information Notice

ComReg is now withdrawing D02/18 having regard, in particular, to Article 101 of the Code. This information notice is advising stakeholders of this and also that ComReg is cognisant that end-users are protected and can make an informed choice and, of obligations that may be required to be imposed on providers following transposition of the Code to ensure availability of electronic communications services (“ECS”).

The information notice is also designed to inform stakeholders, in particular, industry, of ComReg’s approach and next steps.

1.3 ComReg’s approach and next steps

With respect to availability of services, as set out further below, the Code introduces requirements ensuring the fullest possible availability of voice communications services and internet access services (“IAS”) provided over public electronic communications networks (“ECN”) in the event of catastrophic network breakdown or in cases of force majeure. In addition, the Code has provisions to ensure uninterrupted access to emergency services and uninterrupted transmission of public warnings.

ComReg collected information, on foot of information requests,⁹ consumer surveys and other relevant material available to it at this time. This was conducted as part of its review of requirements as regards information and BBU. The information was collected in consideration of whether any measures are required to be introduced going forward for the availability of ECS in the event of a power outage at the home, including any appropriate obligations in respect of vulnerable users.

⁸ Article 108 allows Member States to “*take all necessary measures to ensure the fullest possible availability of voice communications services and internet access services provided over public electronic communications networks in the event of catastrophic network breakdown or in cases of force majeure.*”

⁹ Information Requirement pursuant to section 13D(1) of the Communications Regulation Act 2002 (as amended).

The Regulations¹⁰ and the Code¹¹ place end-user information obligations directly on providers. Providers who should continue to give end-users required information, including, disclosure of risk of interruption to ECS. ComReg will also communicate with end-users and provide information to end-users as regards availability of ECS during a power outage and BBU. ComReg will monitor changing market and legislative developments and changing consumer behaviour and attitudes towards information and BBU. Following transposition, ComReg may intervene if it is necessary, appropriate, and proportionate to help enable end-users to make informed choices and use ECS with confidence.

¹⁰ Pursuant to Regulation 14 of S.I. No. 337/2011.

¹¹ Pursuant to Article 102 (Information requirements for contracts) and 103 (Transparency, comparison of offers and publication of information) of the Code.

2 ComReg's approach

2.1 Background

ComReg has noted that the use of a non-PSTN connection and voice over internet protocol technology ("VoIP services")¹² may be interrupted if there is a power outage at the home, possibly impeding an end-user's ability to make or receive calls including contact with emergency services.

Services such as VoIP, whereby the consumer and end-users' broadband provides telephony-like services, are at risk of interruption during a power outage at the consumer and end-users' premises because these services rely on local power being supplied to the broadband modem. Consequently, it may not be possible to make essential voice calls, including to emergency services during a power outage to the end-user's premises.

This differs from the use of a conventional fixed telephone service over a publicly available telephone network ("PSTN")¹³ which can continue to work if there is a temporary power outage at the home.¹⁴ However, it is noted that the use of cordless ("DECT") phones may also not be possible in a power outage, even where a copper connection is in place.

One option available to end-users who are using a non-PSTN connection/VoIP service(s) over that connection, to mitigate against a risk of temporarily losing a telephone or internet access during a power outage, is the use of a mobile phone (this is dependent on coverage as well as a device that has battery sufficient to make a voice call). Availability and use of a mobile phone are largely universal in Ireland, though ownership of a mobile phone may be relatively less among older age groups.¹⁵ In addition, end-users can use a BBU device when it best meets their circumstances and needs.

Regulation 16 of the Regulations, requires undertakings to ensure, to the fullest extent possible, the availability of PATS in the event of catastrophic network breakdown or

¹² This is the latest home landline technology. VoIP (or also known as voice calls over broadband) landline phone or the cradle must be plugged into the broadband modem as well as into a mains power supply to receive your voice service. Separate from a VOIP landline telephone service, a VoIP type service usually involves using a device (computer, laptop, tablet or mobile smart phone) to place or receive voice calls via the internet (e.g., internet-based applications, such as, WhatsApp, Skype, Viber, Facebook Messenger etc) rather than over a home landline telephone connection.

¹³ This is the standard home phone that existed prior to the introduction of wireless technology. It plugs into the original copper telephone line.

¹⁴ This is because traditional telephone line /service takes its power from the local telephone exchange, which has back-up power available.

¹⁵ It is noted that 9% of those aged over 65 years reported they did not own and use a mobile phone. See ComReg's [Mobile Consumer Experience Survey 2019](#).

unforeseen circumstances.¹⁶ PATS providers must also take all necessary measures to ensure uninterrupted access to the emergency services.¹⁷

ComReg has a role to ensure consumer protection including to ensure the continuity and reliability of the voice service including uninterrupted access to emergency calling. Cognisant of its objective of protecting consumers, ComReg, in D02/18 placed information obligations on all fixed PATS providers offering fixed PATS over a non-PSTN which in summary included that:

- New subscribers must be provided with the following information in advance of entering into a non-PSTN contract:
 - i. details of the technology being used, and
 - ii. details of any limitations of the technology and potential limitations in the event of a power outage.
- Existing subscribers must be provided with the following information one to three months in advance of a change to a non-PSTN service of the following:
 - i. the change in technology that may impact on the subscribers' access and use of PATS in the event of a power outage; and
 - ii. the change may have an effect on access to emergency services or caller location information.
- Non-PSTN fixed PATS providers with 10,000 or more fixed subscribers¹⁸ must also provide end-users (both new and existing) with information on a compatible BBU where one is available or inform end-users and subscribers that there is no compatible BBU facility available.

As regards “*Availability of Services*”, Article 108 of the Code requires that:

“Member States shall take all necessary measures to ensure the fullest possible availability of voice communications services and internet access services provided over public electronic communications networks in the event of catastrophic network breakdown or in cases of force majeure. Member States shall ensure that providers of voice communications services take all necessary measures to ensure uninterrupted access to emergency services and uninterrupted transmission of public warnings.”

¹⁶ Regulation 16 (1)(a) and (b) of the Regulations.

¹⁷ Regulation 16 (2) of the Regulations.

¹⁸ Referred to as 'Relevant Fixed PATS Provider' in ComReg Decision D02/18.

It is noted that Article 108 of the Code extends to IAS, ‘the fullest possible availability of voice communications services and internet access services’, whereas under the Regulations, undertakings must ensure fullest availability of PATS (voice services).

In relation to the Pre-Contractual Information, Annex VIII, Part A (1)¹⁹ of the Code, it requires the following to be included, for providers of ECS (except transmission services for M2M services):

- “as part of the main characteristics of each service provided, any minimum levels of quality of service to the extent that those are offered”
- “Where no minimum levels of quality of service are offered, a statement to this effect shall be made”.

In addition, ComReg notes information requirements in accordance with Article 102 regarding access to emergency services. For providers of IAS or number-based interpersonal communications services, Annex VIII, Part B (II) of the Code sets out such providers shall also provide the following information:

- (1) any constraints on access to emergency services or caller location information due to a lack of technical feasibility insofar as the service allows end-users to originate calls to a number in a national or international numbering plan;

ComReg will consider its responsibilities and powers following transposition with regard to ensuring availability of voice communications and IAS.

2.2 Relevant Research

ComReg has carried out relevant research and has considered issues relating to requirements for information and BBU in light of market, technological and legislative developments, and the implementation by fixed PATS providers of D02/18 information requirements.

ComReg commissioned research to:

- Measure consumer awareness of the potential impact of a power outage at the premises on the availability of voice or IAS provided over a non-PSTN connection (i.e., that in the event of a power outage, voice or IAS and associated equipment might not work temporarily).
- Understand consumer behaviour, attitudes and choices regarding the availability of voice or IAS provided over a non-PSTN connection, and BBU facilities, if there is a power outage at the home.

¹⁹ Annex VIII information is required to be provided in accordance with Article 102 (1) of the Code.

- Understand consumer awareness of information provided to end-users and subscribers by service providers pursuant to D02/18.

ComReg has published the survey results.²⁰

ComReg has found that due to the Covid-19 pandemic, households in Ireland have increased their reliance on broadband. The latest ComReg survey on the impact of Covid-19 on home broadband and mobile service usage²¹ indicated that 81% of respondents claim their household usage of broadband has increased since 1 March 2020. Almost all respondents who have broadband, believe that any interruption to their home broadband service would be a problem during the Covid-19 pandemic, with 55% indicating it would present a serious problem and 32% a moderate problem.²²

As the market evolves and the copper-switch off progresses,²³ end-users will increasingly migrate from the conventional PSTN to non-PSTN connections (due to the rollout of new VHCN²⁴).

It is envisaged that these developments will increase benefits for end-users in terms of, choice of broadband and voice (VoIP) services (whether sold inside or outside a bundle), increased quality of service and the potential for savings for example, cheaper landline calls.

However, if there is a power outage at the home,²⁵ a wider range of households across all areas of Ireland may be exposed to a risk of losing access and use of ECS and associated CPE. It is also recognised that some consumers (some may be vulnerable end-users) may find it difficult to understand the evolution of technology or navigate using the latest digital technology.

ComReg understands that there are currently BBU devices available on the market that end-users can purchase or for a retail service provider to source.

²⁰ ComReg Document 21/143a, entitled, “Consumer awareness and attitudes to information and battery back-up in a power outage - Survey December 2021”, 23 December 2021.

²¹ [Study on the Impact of Covid-19 on Home Broadband and Mobile Service Usage | Commission for Communications Regulation \(comreg.ie\).](#)

²² Amongst those respondents that were currently working in Q1 2021, 1 in 3 were working from home to some degree. Of those working from home, 85% claim they are using their home broadband service more to work remotely and 15% rely on their fixed landline service for work activities.

²³ For more information, please see ComReg 21/78 “Call for Inputs Migration from Legacy Infrastructure to Modern Infrastructure” <https://www.comreg.ie/publication/migration-from-legacy-infrastructure-to-modern-infrastructure>.

²⁴ Very High-Capacity Networks.

²⁵ Non-PSTN connections are unable to support ECS including voice calls in the event of a power outage as they do not conduct electricity, otherwise typically there should be no disruption to ECS.

2.3 Next Steps

In transition from PSTN to non-PSTN broadband connections, ComReg aims to help ensure that end-users have, at each stage of the consumer journey, easy access to relevant information so they can make informed and confident choices when purchasing a broadband and /or home landline telephone service.²⁶ They also need to know what steps they can carry out to assist in protecting themselves in a power outage.

ComReg's guiding principle is that end-users, at a minimum, have clear and effective information regarding service technology, any limitation in access to ECS including, contact of emergency services or, related changes.

ComReg considers that the availability and effective dissemination of appropriate information can support end-users to make informed choices. These may be to understand how VoIP services work and how to use them, to choose or not to have a BBU service to address their particular needs and/or to manage expectations about reliability and functionality in their household or at their premises through suitable alternative approaches, including, a mobile phone.

Providers should already include information in their contract terms with end-users in respect of the features of a VoIP / broadband service and disclose risk of interruption to ECS (that the digital telephone service or broadband equipment may not function in instances of a power outage at the home) and related impacts and changes. ComReg expects providers, in meeting their obligations under the applicable legislation as regards contractual information, will continue to make available to end-users required information at sign-up and in the contract terms. Providers also ought to inform end-users that they may require an alternative back-up in a power outage for use with their non-PSTN services including the home landline telephone service or DECT phone. This could include a battery back-up or a mobile phone for example. Battery back-up power is also available on the market and in some cases through service providers, this should continue.

It may be that a coordinated industry-led process would be a useful component of communication to end-users regarding technological changes and possible steps to mitigate against a risk of temporarily losing a telephone or internet access during a power outage. ComReg could at the request of industry assist to disseminate relevant information in that regard, to raise end-user awareness of the full potential of IAS and VoIP services and differences to the PSTN and BBU, as relevant.

ComReg will monitor end-users' experiences of these matters and developments in general. ComReg may consider it necessary to conduct a communications and

²⁶ See ComReg's Electronic Communications Strategy Statement 2021 to 2023 <https://www.comreg.ie/media/2021/06/ComReg-2170.pdf>.

engagement programme to inform the public about the latest broadband and VoIP technology and its benefits. This could include information on differences in ECS technology, potential limitations of and changes to technology, and details of available BBU as potential solutions for end-users to continue use of voice services and internet over non-PSTN during a power outage at the home. In addition, ComReg may conduct a campaign and/or outreach to support vulnerable end-users that may have special requirements as regards BBU and information.

If there are unaddressed risks or ComReg otherwise considers there is a need to intervene, ComReg may further specify requirements in respect of requirements of Article 108 of the Code, to help ensure that end-users are protected, and that the objectives of the Code are met.