

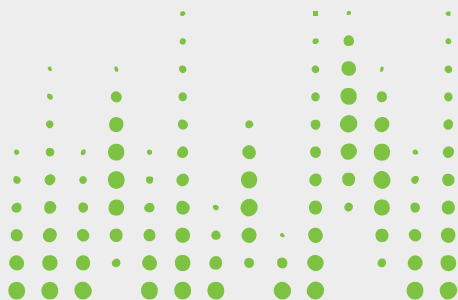
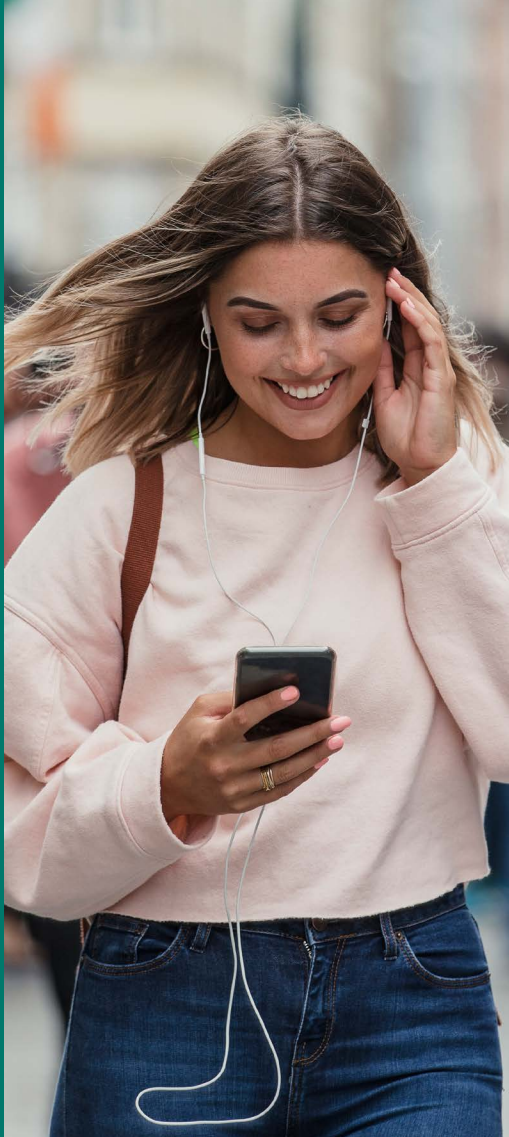


An Coimisiún um
Rialáil Cumarsáide
Commission for
Communications Regulation

All About Mobile

Information and advice on your
mobile service, technology,
roaming, and more

ComReg.ie



Who is ComReg?

ComReg is the Commission for Communications Regulation.

- We are an independent public body with powers under the law
- We protect consumers and provide independent advice and information

At ComReg, we regulate:

- The electronic communications sector which includes phone and broadband
- Postal services like An Post



For further
information
visit
[comreg.ie](https://www.comreg.ie)



Mobile Technology Explained

Today's mobile phone services include phone calls (voice), text messages (SMS), and internet (data), which are delivered through an interconnected network of mobile telephone masts. This technology has greatly evolved over the past three decades.

2G



VOICE & BASIC
DATA

3G



VOICE & DATA

4G



MORE DATA &
FASTER SPEED

5G



EVEN MORE
DATA, FASTER
SPEED & MORE
APPLICATIONS

How has mobile phone technology developed?

The first national mobile service in Ireland was 1G, launched back in 1985. Mobile technology has evolved since, seeing 2G first launched in 1993, 3G in the early 2000s, 4G in the early 2010s, and, most recently, with the rollout of 5G in the 2020s.

Each generation brings with it upgraded speeds and capabilities that allow us to do more with our mobile devices.

What does the G in mobile technology stand for?

The 'G' stands for the 'Generation' of mobile phone technology, for example, 3G is the third generation. Each evolution has been capable of faster mobile internet (data) services, which has enabled year-on-year growth in data consumption, the mobile service most used by Irish consumers.



What is 5G?

5G is the 5th generation of mobile networks and the latest development. 5G technology is faster, has fewer delays, and more data can be sent and received at one time compared with previous generations. As a result, 5G-focused developments in connected vehicle technology, immersive gaming, and smart home devices are on the horizon.

5G will operate alongside other technologies enabling faster data speeds and enhanced connectivity between wireless devices.

Can I get 5G?

More and more mobile providers are offering a 5G service and expanding their 5G coverage throughout Ireland. If you want to see how coverage currently looks and where 5G coverage is available, then we have a free mobile coverage map, visit: **comreg.ie/coveragemap**

Please be aware that while 5G is becoming more and more prevalent, not every package provides 5G and some devices may not be compatible.

Call, text, and data allowance

Many mobile phone plans, be they bill pay or prepay, offer unlimited data, calls, and or texts. Plans may include a cap on how much data you can use, minutes of calls you can make, or the number of texts you can send within a specified period (usually a month).

This means that if you exceed any of these caps you may need to pay additional charges. Information regarding these caps and the price for going over your cap will be included in the terms and conditions of your contract. See the contract section of our website for more information.



How much mobile data am I using?

Here are some common uses of your mobile phone and examples of estimated data consumption based on these uses:

Web browsing



1 HOUR
10MB – 100MB

Basic video streaming



1 HOUR
300MB

Sending email



1 EMAIL
(without
attachments)
20KB – 100KB

Social media update



1 UPDATE
(with photo)
350KB – 2MB

Ultra HD video streaming



1 HOUR
7GB

Downloading application



1 APP
40MB – 400MB

*1 kilobyte (KB) is 1,000 bytes, 1 megabyte (MB) is 1,000 kilobytes, 1 gigabyte (GB) is equal to 1,000 megabytes. Precise estimates would depend on a range of factors, and these estimates are for illustrative purposes only.



Get the most out of your mobile service

While mobile technology aims to make life easier for everyone, we can run into unexpected problems – particularly when it comes to slow devices and coverage issues.

What can cause poor outdoor mobile coverage?

A certain level of coverage is required to make a call, send a text, or connect to the internet. Many things can impact our mobile coverage and signal levels throughout the country.

The quality of your connection can be affected by:

- Travelling through a mountainous area or valley
- Nearby dense foliage such as a forest
- Distance from a mobile phone mast
- The density of mobile phone masts on your network
- How many people are using the mobile network in the same area, at the same time
- Which technology you are connected to e.g. 4G or 5G





The type of mobile you are using can also affect the voice calls or data access. The most modern devices will out-perform those more basic models that are several years old.

ComReg provides an online facility to allow the public to view details of the mobile masts throughout Ireland. This tool is called **Siteviewer** and may be used to determine the Mobile Network Operator mobile masts in an area. Access is available at [comreg.ie/siteviewer](https://www.comreg.ie/siteviewer)



Why is my coverage at home or indoors bad?

You may also notice that your mobile coverage at home is not always optimal. This may be due to several factors, such as:

- Insulation
- Double and triple glazed windows
- Metal framed windows
- Thickness of walls

Our research has found that building materials used to improve insulation in the home will often limit mobile coverage.





Improving coverage at home

If you are looking to improve your mobile coverage at home:

- See what mobile operators offer the best level of coverage in your area
- Enable Wi-Fi calling if supported by your provider and your device
- Further boost coverage with a device like a mobile repeater. These devices are designed to boost signal within the home, but it is incredibly important that consumers only buy legally compliant products.

For information on compliance of mobile phone repeaters, visit [comreg.ie](https://www.comreg.ie).



Find the right plan for you

Your plan may have a limit on data usage, phone call minutes or the number of texts you can send per month. If you exceed these limits you may have to pay extra. It is worth shopping around to find a deal that best meets your needs.

For in-contract bill pay customers, you are entitled to **Best Tariff Advice** from your current mobile provider before the end of your contract. You are also entitled to **Best Tariff Information** once per year. This should provide you with information on your usage as well as a recommendation on what plans best suit your needs.





If you are continuously exceeding your plan's limits it may be a sign that you need a different plan to better suit your usage needs. Visit our Compare Tool for more information comreg.ie/compare.

If you're thinking about moving your service to another provider, see our switching information on comreg.ie.

How do I reduce my mobile data usage?

Some common ways to quickly reduce mobile data usage:

- Turn on data saver mode
- Download large files, apps, or updates over Wi-Fi rather than on mobile data
- Do the same with music and video streaming services
- Certain apps download video or other content in the background – check for an option to limit this to Wi-Fi only
- Turn off your data roaming when abroad
- Use video calling over Wi-Fi

Wi-Fi calling lets you make and receive calls and send messages over a Wi-Fi connection, such as your home broadband. This feature requires a Wi-Fi connection and Wi-Fi calling must be enabled on a compatible device.





Messaging Apps vs SMS

The rise in instant communication has seen several different apps such as Facebook Messenger, WhatsApp, and more become the primary mode of communication for many. They use different services to send messages. SMS messages are transmitted by your mobile operator's network. This means you don't need an internet connection to send an SMS, but you do need mobile coverage and an active subscription with a mobile provider.

WhatsApp and other instant messaging services rely on an active internet connection. This could be a mobile internet connection (4G or 5G) or a Wi-Fi connection to send your message. If sent using mobile data, then it will count towards your overall data usage.



VS



Roaming

Data roaming refers to using your mobile data when abroad – this means connecting to the internet and using web services like browsers, apps, emails, etc. As with calls and texts, you will connect to a local network and be able to use their mobile coverage to connect to the internet.

Using mobile data while in another country may cost you extra – the cost depends on if you are in the EU and how much data you use. We have more information on data usage and your rights when roaming in the EU or outside of the EU on [comreg.ie](https://www.comreg.ie).

Also, when travelling in a foreign country – be that in Europe or further afield – using an eSIM roaming plan or a local SIM card to access local data plans may help to avoid roaming costs and improve connectivity.





The future of mobile

Mobile technology has continuously evolved from voice-only devices to smartphones that function as phones, internet browsers, banking devices, and streaming platforms. Here are some of the important developments in recent mobile technology.

Increased 5G functionality and coverage

As mobile operators expand their infrastructure, we will see a wider area of the country being provided with 5G coverage. This will mean that it will be possible to access 5G coverage in more parts of the country, and not just in certain locations.

With more 5G-enabled devices entering the market, within the next few years as older phones are upgraded, more and more of us will be able to utilise the benefits of this faster and more reliable mobile technology.

The benefit of this will not only be seen in general consumer mobile usage but also in the world of connected devices. This will extend to smart devices within vehicles, smart appliances in our homes, and smart devices used by hospitals and medical services.



eSims

An eSIM is a digital SIM integrated on a user's device which enables a new approach in switching between operators, such as simply requiring a user to scan a QR code to connect to a mobile operator and begin using their service.

This means increased functionality and flexibility for users. Switching will be easier as you will not have to wait for a physical SIM to switch from one provider to another. It will be easier to use dual-SIM-enabled phones, such as a work phone and a personal phone. Two different SIMs will allow users to use different numbers on the same device.

3G retirement

Mobile service providers are gradually phasing out their 3G network services and will continue to do so in the coming months and years. This allows providers to focus on increasing the deployment of more advanced technologies, 4G and 5G.

What will happen when 3G is retired?

Older mobile devices that can connect only to 3G and 2G networks will continue to make and receive phone calls over the 2G network, but data services will be affected. This means your ability to connect to the web (via apps and browsers, etc.) will be slower.

For those with a 4G or 5G-enabled smartphone or device, this change is not likely to affect you.

Your mobile provider might contact you in due course to let you know if you are affected and what steps you need to take. You should check with your mobile provider for the latest updates and news on their plans to retire 3G.



What is replacing 3G?

The retirement of 3G services means mobile providers will have more resources to improve both their 4G and 5G networks. Both 4G and 5G provide faster internet speeds, better signal quality and improved mobile service for customers.

Do I need to replace or upgrade my device?

If you are using an older device that doesn't support 4G or 5G, you may need to get a new handset if you wish to continue using mobile data services.

Older devices will continue to support data services on the 2G network but with much slower data speeds. Your mobile provider may be in contact to offer you an upgrade or you can get in touch with them to find out what they can do to help.





Other devices that may be affected

Mobile devices are not the only devices affected by the 3G network retirement. Here we have listed a number of types of devices which may no longer work once 3G has been phased out. To ensure your device continues to work following the phasing out process, or to see if you need to upgrade or to purchase a new SIM, we advise checking your device or contacting your supplier.

A sample list of other types of devices that may be affected:

- Some vehicles use 3G networks for updates and remote communication. Check with your local dealer to learn more
- Monitored care alarm devices (fall detectors, communicators, etc.)
- Security alarms
- Fire alarms
- Point of Sale (POS) card payment terminals
- Inventory trackers
- Smartwatches
- E-readers (Kindles, Nooks, etc.)
- GPS trackers (including for pets)
- Safety devices
- Automated electric gates
- Water features/fountains
- Heating systems

For more information on 3G retirement, visit our dedicated webpage at [comreg.ie](https://www.comreg.ie).

Contact us for advice and support

Consumer Care Team

Phone: (01) 804 9668
Monday to Friday: 8am to 8pm
Saturday: 9am to 1pm

Email: consumerline@comreg.ie

Text: COMREG or ASKCOMREG to 51500 to receive a call or text back (standard SMS rates apply)

By Post: Consumer Care Team, ComReg, One Dockland Central, Guild St., D01 E4X0

Web Chat and Online Form: **[comreg.ie](https://www.comreg.ie)**

Access officer

Phone: (01) 804 9639

Email: access@comreg.ie

By Post: As above addressed to the Access Officer

ITRS (Irish Text Relay Service)

The ITRS ensures that those of us who are deaf, hard-of-hearing and, or speech-impaired, may make and receive calls independently. The service provides the translation of text into voice and voice into text. These calls are relayed through an ITRS agent who performs the relay of the text.

The service is accessible from mobile phones, tablets, and PCs. The ITRS service is operated by Eir serving the customers of Three, Eir, Sky, Tesco Mobile, Virgin Media and Vodafone.

Visit itrs.ie for more information.

Privacy information: Our Privacy Notice explains what personal information we collect and use about individuals, what we do with it and why. See our Privacy Notice here comreg.ie/privacy

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