ComReg Mobile Phone Coverage Map
Information Notice

Information Notice
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Overview

The Commission for Communications Regulation (ComReg) has today made available an online outdoor mobile phone coverage map which allows consumers to check ComReg’s calculation of operators’ mobile phone coverage and signal levels at locations throughout the country. The mobile coverage map can be found on the ComReg website at coveragemap.comreg.ie

The ComReg mobile coverage map will allow mobile phone users throughout the country to see the level of mobile coverage where they work or live. It will also help consumers when making choices between operators based on predicted coverage availability in their area or chosen location.

The online tool allows consumers to search and zoom in to a particular area or address. It has been designed to use eircodes and or local addresses for information on coverage at specific locations. Users will be able to zoom into their selected location down to 10 x 10 metres.

The ComReg mobile coverage map has been generated using data provided by the Mobile Network Operators: Eir, Three Ireland and Vodafone. ComReg has applied a propagation model to generate coverage predictions. The outdoor mobile coverage map also includes data for the mobile virtual network operators MVNOs (service providers whose services are hosted by the main mobile network operators Eir Mobile, Three Ireland and Vodafone). These MVNOs include 48, Lycamobile, Postmobile, Tesco Mobile and Virgin Media.

The map is set out in a colour-coded format – dark brown shows very good coverage through to beige which shows fringe coverage. The map shows signal strength for all Mobile Service Providers ranging from very good, good, fair, fringe and no coverage. It also offers the ability to check 2G (Voice), 3G and 4G (data) coverage.

ComReg will update the map on a regular basis to reflect changes in predicted coverage as operators expand their networks. ComReg will also launch a mobile phone app for the coverage map in due course.
Background

Ireland is a digitally advanced economy and its connectivity needs will continue to grow. This will require a range of connectivity infrastructures which support demand from users. The devices which we use will continue to utilise a number of different networks to take advantage of each network’s specific capabilities and characteristics. In practice all our devices will use a mixture of services at different times of the day or for different purposes and no single network (mobile or fixed) will provide all the connectivity solutions required by users.

In home and business life, we are all becoming more dependent on mobile phones as connectivity becomes more embedded in society. We live in an age where there is increasing dependency and reliability on our mobile phones. They are no longer just a device we use to make phone calls and send text messages – with smartphones we can download and stream films, book our holidays, turn on our home heating or even pay for our grocery shopping. However, in order for us to use our handsets in all of these ways, we need to have sufficient mobile coverage and a reliable service wherever we live or work.

ComReg’s mobile phone coverage map will give consumers access to information on ComReg’s predictions of outdoor signal levels of Mobile Service Providers. It will provide consumers with information when they are choosing a mobile service provider that best meets their needs for where they live and work.

As a participant in the Government’s Mobile Phone and Broadband Taskforce, ComReg undertook the task of producing a composite national outdoor mobile coverage map. One of the aims of the taskforce was to identify solutions to mobile coverage deficits.

ComReg is pleased to provide access to this online tool which at a local level will provide information about coverage at specific areas in the country.

ComReg has delivered a number of other actions aimed at enabling users to have a better experience when using mobile services. ComReg has provided information on mobile handset performance\(^1\). We have also permitted the use of mobile phone repeaters\(^2\) to improve signal performance in fringe areas.

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\(^1\) ComReg 18/109: Mobile Handset Performance (Voice) – Technical Report
\(^2\) ComReg 18/58: Mobile Phone Repeaters: Response to Consultation and Final Decision
What factors can affect mobile coverage?

Mobile coverage is dependent on several factors such as the number of people using mobile handsets at the same time and location, how close we are to a mobile mast or whether we live in an area surrounded by hills or foliage. See our infographic below.

If you are experiencing good mobile coverage in your area, factors affecting coverage may not have much bearing on you. For those in an area with only fringe or poor coverage, they will have a greater impact on your ability to obtain a level of mobile service.
FACTORS THAT MAY AFFECT CONSUMERS’ QUALITY OF MOBILE EXPERIENCE

- **TERRAIN**
  Mountains, hills, valleys and foliage

- **DENSITY OF NETWORK**
  The number of base stations

- **SPECTRUM BANDS BEING UTILISED**
  2G (GSM), 3G (UMTS), 4G (LTE)

- **DISTANCE**
  Distance between the user and the base station they are connected to through which signal has to pass

- **HANDSET PERFORMANCE**
  How a handset performs with voice and data will affect the experience

- **BUILDING MATERIALS**
  Materials used in walls and insulation in the home can affect signal strength

  Consumers may choose Wi-Fi calling or mobile phone repeaters to amplify signal

- **NUMBER OF PEOPLE**
  Actual number of people using mobile handsets at the same time and location

WHAT IS COMREG DOING?

- **COVERAGE MAP**
  Website live

- **MOBILE HANDSET PERFORMANCE (VOICE)**
  Higher TRP = better chance of network connection

- **MOBILE HANDSET PERFORMANCE (DATA)**

- **BUILDING MATERIALS**

- **PERMITTING THE GENERAL USE OF MOBILE PHONE REPEATERS**
  *In fringe coverage areas i.e. where the coverage is poor and the user is far away from the nearest base station, handsets with better TRP values can make the difference in maintaining a voice connection and not.
Future developments

ComReg will update the map on a regular basis to reflect changes in predicted coverage as the mobile operators expand their networks. We will also launch a mobile phone app for the coverage map in due course.

We commit to communicate the planned enhancements to the tool as they happen and keep consumers updated on how the outdoor mobile coverage map allows consumers to make informed choices about picking a mobile provider.

We also invite users to leave feedback on their experience of the outdoor mobile coverage map which will assist us in further developments of the tool.