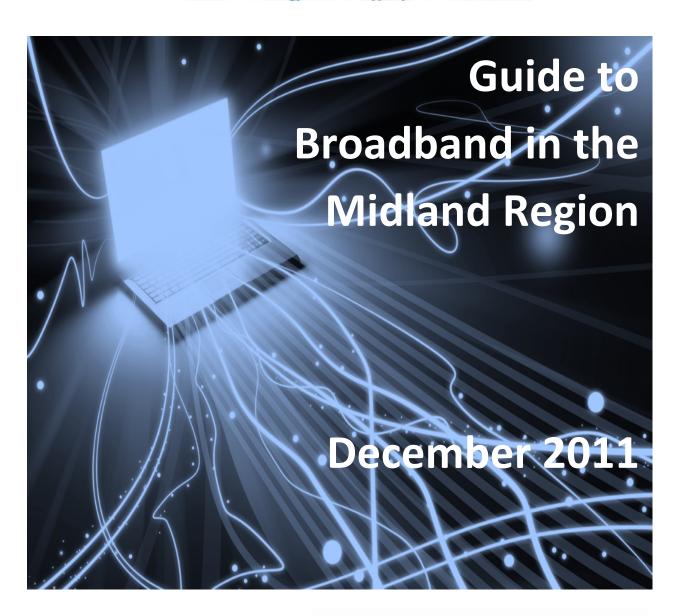


# MIDLAND REGIONAL AUTHORITY Údarás Réigiúnach Lár na Tíre

Laois | Longford | Offaly | Westmeath









As Cathaoirleach of the Midland Regional Authority I welcome this Guide to Broadband in the Midland Region. Broadband is central to regional development, enabling businesses to compete in national and international markets.

This Guide has been prepared at the request of the Members of the Midland Regional Authority, who have identified broadband provision as a priority within its current work programme.

This Guide has been developed to help the reader understand what is meant by broadband and to define and outline the various methods and technologies through which one can avail of broadband.

When selecting an internet service provider, one is advised to review guidance offered by communications regulator ComReg through the website www.callcosts.ie which offers practical guidance and price comparisons on packages offered by various internet service providers.

Cllr. Micheal Carrigy Cathaoirleach, Midland Regional Authority



## **ACKNOWLEDGEMENTS**

The Midland Regional Authority would like to thank the Public Services Committee, its constituent local authorities, the Department of Communications, Energy and Natural Resources, and ComReg for their assistance in preparing this Guide to Broadband in the Midland Region.



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# **Background & Introduction**

Broadband is central to regional development, enabling businesses to compete in national and international markets. Restricted access to broadband will limit the ability of the Midland Region to compete with competitor locations in securing investment, growing small business and advancing innovative opportunities.

The commitment of the Members of the MRA to broadband provision in the Midland Region is illustrated in the Regional Planning Guidelines for the Midland Region 2010 – 2022 which includes specific policies and objectives relating to telecommunications including "to support and assist the Department of Communications, Energy and Natural Resources, to achieve 100% broadband penetration across the region".

As broadband provision was identified as a work programme priority for 2011, the MRA in partnership with the Department of Communications, Energy & Natural Resources, and ComReg, (the communications regulator) and the Information Technology Sections of its constituent local authorities designed and delivered a Broadband Information Seminar to the Members of the MRA. The programme for the Broadband Information Seminar was prepared with guidance from the Public Services Committee of the MRA.

At the request of the MRA members this report collates the information relayed at the Broadband Information Seminar, together with the questions that were raised by members. It is intended that this information will be made available to the residents of the Midland Region to provide guidance and direction in terms of acquiring a broadband service, method of delivery and correct procedures in dealing with complaints.

<sup>&</sup>lt;sup>1</sup> The PSC of the MRA is chaired by Mr Pat Gallagher, County Manager, Offaly County Council. Members of the committee include representatives from Department of Communications, Energy & Natural Resources, ComReg, IDA Ireland, Enterprise Ireland, Office of Public Works, Department of Transport, National Transport Authority, Shannon Development, Failte Ireland, Bord na Mona and the Cathaoirleach of the Midland Regional Authority.



#### What is Broadband

Broadband is defined as an 'always on' internet connection which provides high upload and download speeds usually for a flat fee to an internet service provider (ISP).

#### **Fast Internet Access**

With broadband, everything on the internet becomes faster. Web pages display quicker, files transfer faster, websites with video become accessible and online horizons just seem to expand.



#### **Speed Gains**

Most broadband suppliers offer data transmission speeds starting at 1Mbps, but connection speeds overall are on the increase. Most providers offer a range of data speeds at different prices.

#### **Predicable Costs**

Broadband also has an impact on cost. Monthly payments are usually fixed at a flat rate, with a generous maximum download limit. A variety of package offerings from internet service providers generally allow users pick a competitive package to best suit their needs. Considerable savings can also be made by subscribing to combined telephone and/or television services, and broadband.

#### **Methods of Delivery**

Broadband can be provided through various mediums involving phone lines, fibre, cable, wireless, satellite or mobile. This section outlines the mediums through which broadband is possible:

## **Digital Subscriber Line (DSL)**

Digital Subscriber Line (DSL) or Asymmetric Digital Subscriber Line (ADSL) is the technical term for broadband over phone lines. For broadband to be available over the phone, the phone line is split into two separate channels, one for internet data and one for voice calls. A modem is supplied so that the phone and internet can be used simultaneously. If a wireless modem, called a router is used, then internet access is available to other personal computers which contain a wireless card.

For DSL to be available to you, your telephone exchange must be 'enabled' i.e. special equipment has to be installed to enable phone lines to be split. In the event that your local



exchange is not enabled, you will be unable to access the internet over your phone line. The quality of the service is dependent on distance from the exchange (generally you must be within 3km of the exchange) and the contention ratio.<sup>2</sup>

ADSL2+ is an improvement on DSL technology and offers higher speed broadband access from traditional ADSL lines. Speeds of up to 20MB are possible. ADSL2+ is now offered in many parts of Ireland where ADSL was previously available.

A list of exchanges within the Midland Region is located in Appendix 1.

Advantages	Limitations
Uses existing telephone wires	Distance from exchange effects speed
Facilitates market competition easily	Requires a landline phone
Allows faster connection speed	

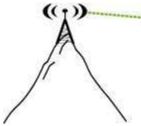
#### **Cable**

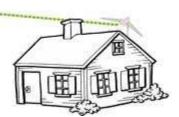
Similar to the principle of DSL, two cable sockets are installed; both sockets can be used simultaneously. The capacity of the wiring used permits faster transmission speeds to those currently available over phone lines.

Advantages	Limitations
Competitively priced where available	Not available in rural areas

#### **Fixed Wireless**

A fixed wireless internet service is normally delivered by line-of-sight radio transmission, which is received by an antenna in or on the users premises.<sup>3</sup> A radio transmitter is installed and aligned to a "basestation" providing an always-on connection. broadband transmitter must have 'line of sight' view to the base station.







<sup>&</sup>lt;sup>2</sup> Contention refers to the maximum number of users who might be sharing the resources of a connection at any one time, a contention ratio of 50:1 would mean that the maximum number of people you could be sharing the connection with at anytime is 49 other people.

<sup>&</sup>lt;sup>3</sup> Some fixed wireless does not require line of sight.



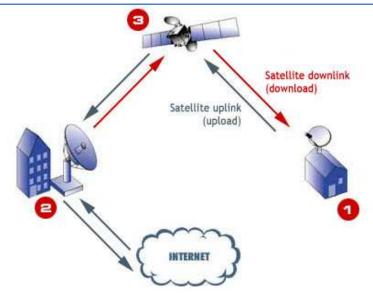
WiFi 'hotspots' use a different type of wireless transmission, enabling users within a limited range, to connect wireless-enabled laptops or other computer devices to the internet. By in large, wireless is the broadband medium used in public internet 'hotspot' locations, such as airports and cafes where people can access broadband on a wireless-enabled laptop.

Advantages	Limitations
Does not require a landline	Usually has download limit
Cost effective for remote areas	It is dependent on line of sight
Easy to install	Contention Ratio

#### **Satellite**

Satellite broadband is used in more remote locations, mainly areas which are outside the reach of other broadband delivery methods or where the cost of providing the necessary infrastructure can be prohibitively expensive. Satellite access is generally more expensive than phone and wireless access and users can experience a time lag in data transmission, although advances in the technology used is gradually improving this issue.

Advantages	Limitations
Global availability	Expensive installation costs
No phone or cable wiring required.	Latency/delay in signal transmission
High Bandwidth for areas with no DSL, Cable	
etc.	



#### Mobile

Broadband access via a mobile device is becoming a popular choice amongst broadband users. It offers the benefit of 'pay as you use', as the majority of service providers do not require a contract.



Advantages	Limitations
Can be used on the move	Coverage maybe intermittent
Easily shared between devices	Slower connection speeds
Easy to install / setup.	

## **Factors that Affect the Quality of a Broadband Service**

## **Connection Speeds**

Connection speeds are expressed in bits per second (bps). Faster is better because as the data transfer rate increases more information can be transferred in the same amount of time. Websites load faster and files download quicker. Broadband speeds typically start at 1Mbps and move up to 2Mbps and higher.

Generally download speeds are usually faster than upload speeds. If you want to send as well as receive large files (photographs, video, etc.) or you need to use services that require high speed data transfers in both directions (such as video conferencing, for example), choose a service providing a fast upload speed too.

#### **Contention Ratio**

Somewhere along the line you share the broadband capacity with others. As more subscribers sign up, this could reduce the speed of your service. To compare services, providers supply information on the numbers sharing as contention ratios – these give an indication of the maximum number of people you might have to share broadband capacity with at any one time. Lower contention ratios (fewer subscribers sharing) are best.



## **Line of Sight**

Line of sight refers to technologies that are using radio waves, e.g. wireless broadband requires 'line of sight' between the end user and the base station. The transmitter installed on the users premises must have line of site to the transmitter base station. Trees, mountains and other natural obstacles can affect the level of service and may result in loss of service e.g leaf growth on trees in spring.

## **Fair Usage Policy**

Although many broadband providers claim to offer unlimited broadband downloads some do have 'fair usage policies' which can impose restrictions on users whom they consider to use excessive bandwidth. Additional items covered under 'fair usage policies' include but are not limited to, no sharing of bandwidth with third parties, downloading illegal software, movies, music etc.

#### **Distance from the Exchange**

The distance from the telephone exchange will have an effect on connection speeds for DSL and ADSL connections. Typically a distance of between 3km and 6Km will be the max distance a signal can be received at. This could be the most crucial factor to affect what speed you are capable of getting as throughput declines exponentially with the distance from the exchange. The nearer to the exchange or base station you are, the faster the speed.

#### **Next Generation Broadband**

Next Generation Broadband (NGB) is future high speed (8 MB to 20 MB connection). Discussions with the telecoms industry around deploying next-generation broadband throughout Ireland under the programme for government's NewEra proposals are being advanced.

Applications such as video streaming and visual networking, advanced public services, remote education and healthcare, advanced e-commerce, cloud computing and advanced smart phone applications are founded on the availability of high speed internet.

The challenges of supplying Next Generation broadband services to rural areas where it may not be profitable for businesses to roll out the infrastructure need to be overcome.

Ireland's dispersed and rural population, with less than 10% of people living in apartments and around 40% of people living in rural areas is in sharp contrast with other advanced economies. The structure of the fixed line also plays a key part in the deployment of Next Generation broadband. The highly dispersed and rural nature of the population of Ireland means that in rural areas there are copper lines of substantial length. This hinders the availability of high speed broadband as DSL technologies can only deliver their maximum speeds over a relatively short distance. In addition, DSL requires that the quality of the line is high, which may not be the case in some parts of Ireland.

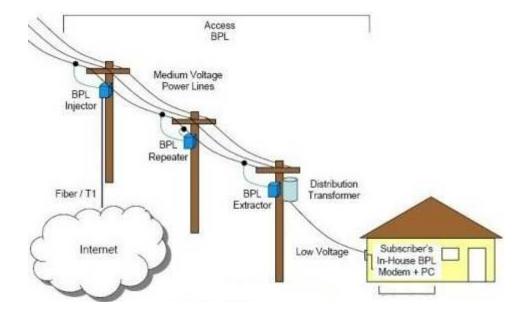


Providing funding for development of NGB in current economic climate is also going to be challenging.

## **Broadband Over Power Lines (BPL).**

Broadband over Power Lines (or BPL) uses the existing power grid infrastructure to provide high-speed, broadband Internet access to homes and businesses. It is a new innovation based upon existing Power-Line Communications (PLC) technology.

The technology offers many advantages but principally its high availability is key. Unfortunately the technology comes with many obstacles including high interference rates on the lines, problems passing the signal through transformers. Furthermore the fact that power-lines use unshielded wires means that 'signal loss' effects radio communications.



## **Choosing and Internet Service Provider**

Choosing an Internet Service Provider (ISP) can be a difficult decision. There are a lot of factors involved that can and should influence your decision.

**Speed** How fast do you need your Internet access to be? What access speed

can the ISP provide? Is it consistent?

This information you can get directly from the ISP.

**Reliability** How reliable is the service? Are they always available or do they have

frequent down times?

Ask people that use this provider about their experience, either in person

or in Newsgroups online.

**Price** How expensive is the service? Do they have a plan for unlimited access

for one monthly fee? How much is it and how does it compare to other

ISPs?

**Other Fees** Are there any other charges, such as a one-time setup fee?

Bundles Besides the Internet access, what else is on offer? Additions such as

satellite TV or home phone connections may be on offer along with

access to hotspots when on the go.

**24/7 Tech Support** Do they have Tech Support? If so, when are they available? Monday

through to Friday, 9-5? Or 24 hours, seven days a week? How can you reach support? By fax, e-mail, phone? Is there a charge for contacting

support such a premium or high rate phone numbers?

**Contention Ratio** A low contention ratio such as 10:1 or 15:1 is desirable but may be more

costly.

One should consult ComReg's independent price guide at www.callcosts.ie which allows you to compare the costs of Home Phone; Broadband; Mobile and combined packages for your specific usage details.



#### **Broadband Schemes**

#### **MANs**

High speed broadband is an important asset in order to attract inward investment into Ireland. MANs enable telecommunications companies to provide cheap 'always-on' high-speed access to the internet, a vital tool for industry and business to be efficient and competitive. It is also invaluable for educational institutes, health and research bodies and private consumers. The MANs also facilitate new entrants, new services and more competition for broadband throughout Ireland.

The MANs are publicly owned, while allowing all telecommunication operators open access to the networks. They are fibre-based and technology neutral resilient networks, which will ensure adequate capacity for generations to come.

Initially MANs were installed in the linked gateway towns of Athlone, Tullamore and Mullingar and in the principal towns of Longford and Portlaoise. MANs are also in place in Edenderry, Birr and Banagher.

#### **Broadband to Schools Scheme**

The Broadband to Schools Scheme project is the result of cooperation between the Department of Communications, Energy and Natural Resources (DCENR) and the Department of Education and Science, the Higher Education Authority, HEAnet and the National Centre for Technology in Education.

Since 2010, under the **Broadband to Schools Scheme**, fibre-optic and wireless networks were installed in 78 schools, at least one in every county. These networks allow for speeds similar to those on offer to multinational corporations based here. Schools have been selected against various criteria including geographical location, and an adequate mix of schools to ensure broad social inclusion. Of the 78 schools selected, 6 are located in the Midland Region:

County	School Name	Town	
Laois	Coláiste Íosagáin	Portarlington	
Longford	Mercy Secondary School	Ballymahon	
Offaly	Killina Presentation Secondary School	Rahan, Tullamore	
Westmeath	Moate Community School	Church Street, Moate	
Westmeath	Athlone Community College	Retreat Road, Athlone	
Westmeath	Our Lady's Bower	Retreat Rd., Athlone	

## **National Broadband Scheme (NBS)**

The NBS, concluded in October 2010, delivered broadband to target electoral divisions (EDs) in Ireland in which broadband services were deemed to be insufficient. DCENR awarded a contract to '3' to provide services to any premises in the NBS EDs that requested a service.

Under the terms of the NBS contract, '3':

- Provided coverage in all 1,028 EDs by the end of October 2010.
- Provided wholesale access to any other authorised operator who wishes to serve premises in the NBS area.

The following tables detail the EDs within the Midland Region provided with broadband access under the NBS.

Laois	Longford	Offaly	Westmeath
• ARDERIN	• ARDAGH WEST	• AGHANCON	• BALLYMORE
<ul><li>BALLYBROPHY</li></ul>	• BALLINAMUCK EAST	<ul> <li>BALLYCUMBER</li> </ul>	<ul> <li>BALLYMORIN</li> </ul>
<ul><li>BALLYLEHANE</li></ul>	<ul><li>COLUMBKILLE</li></ul>	<ul><li>BRACKNAGH</li></ul>	<ul><li>BALLYNASKEAGH</li></ul>
<ul><li>BALLYROAN</li></ul>	• CREEVY	<ul><li>CLONBULLOGE</li></ul>	<ul><li>CHURCHTOWN</li></ul>
<ul><li>BLANDSFORT</li></ul>	• DOORY	<ul><li>CLONYGOWAN</li></ul>	<ul><li>CLONARNEY</li></ul>
• BRISHA	<ul><li>DRUMGORT</li></ul>	• DOON	<ul><li>CLONLOST</li></ul>
• CAHER	<ul><li>KILCOMMOCK</li></ul>	• ETTAGH	<ul><li>COLLINSTOWN</li></ul>
<ul><li>CARDTOWN</li></ul>	• KILGLASS	<ul><li>GORTEEN</li></ul>	• COOLE
<ul> <li>CASTLECUFFE</li> </ul>	<ul><li>MOYNE</li></ul>	<ul> <li>KILCOLMAN</li> </ul>	<ul><li>COPPERALLEY</li></ul>
<ul><li>CLONMORE</li></ul>	<ul> <li>MULLANALAGHTA</li> </ul>	• KILLEIGH	<ul><li>DRUMRANEY</li></ul>
<ul><li>COOLRAIN</li></ul>	<ul><li>SONNAGH</li></ul>	<ul> <li>RAHEENAKEERAN</li> </ul>	• FORE EAST
<ul> <li>CUFFSBOROUGH</li> </ul>		<ul><li>RATHROBIN</li></ul>	• FORE WEST
• CULLAHILL		<ul><li>ROSCOMROE</li></ul>	• GLORE
• DONORE		• SEIRKIERAN	• HILLTOWN
<ul> <li>DYSARTGALLEN</li> </ul>		• TULLA	<ul><li>JAMESTOWN</li></ul>
• EMO			• KILCUMNY
• ERRILL			• KILLARE
• GARRYMORE			• KILLULAGH
<ul><li>GRANTSTOWN</li></ul>			• KILPATRICK
• KILCOKE			<ul><li>KNOCKDRIN</li></ul>
• KILDELLIG			<ul> <li>MULTYFARNHAM</li> </ul>
• KYLE			• RIVERDALE
• KYLE SOUTH			• STONEHALL
• LACKA			• TAGHMON
• MARYMOUNT			• UMMA
• MONEENALASSA			• WOODLAND
• NEALSTOWN			
• RATHASPICK			

## **Rural Broadband Scheme (RBS)**

While the completion of the Government's National Broadband Scheme (NBS) means that broadband services are now available throughout the country, there are remaining un-served rural premises which could not be included in the NBS or which are difficult to reach for mainly technical reasons. The Rural Broadband Scheme (RBS) is designed to identify those premises through a public application process and, ultimately, to bring a broadband service to them either through existing private sector service providers or through a service provider procured by Government. The RBS has been set up in conjunction with the Department of Agriculture as a measure under the Rural Development Plan using funding from the European Agriculture Fund for Rural Development.

The Scheme aims to identify the premises that cannot currently obtain a service and once all of these premises have been identified, to ascertain whether existing telecommunications operators can provide a service directly to these premises. If an existing service provider cannot be identified, the Department will seek to procure such a service. The combination of private and public sector programmes in the broadband market will ensure that Ireland reaches the EU target of ubiquitous basic broadband access ahead of the 2013 deadline.

The Regional and Local Authorities and rural representative bodies played an active and valuable role in raising public awareness of the Scheme during the Application Phase which ran from 9 May to 29 July 2011.

Once processing of applications is completed, the Verification Phase of the Scheme will commence. Under this phase efforts will be made to obtain a service for those who have applied under the Scheme from commercial Internet Service Providers under existing market terms. This process is expected to run through to January 2012 at least. If internet service providers confirm that a particular applicant cannot be served at present, the Rural Broadband Scheme will seek to offer a service through whichever company is successful in bidding for the RBS procurement contract.

The procurement process is expected to commence toward the end of October and will aim to identify the preferred supplier. Pending contract negotiations a service provider will be appointed in early 2012.

Rollout of the service under the Scheme is expected to be completed by the end of 2012.



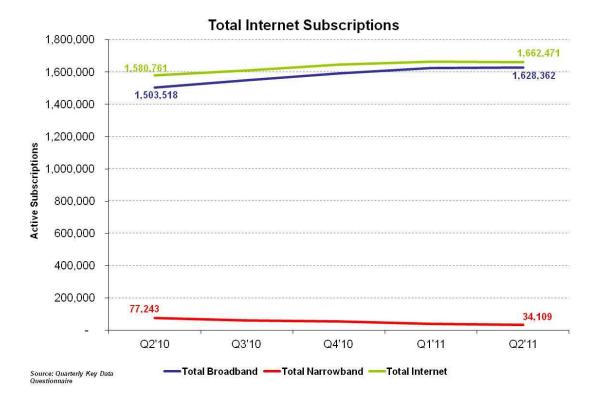
#### **Market Data**

## **Broadband in Ireland Today**

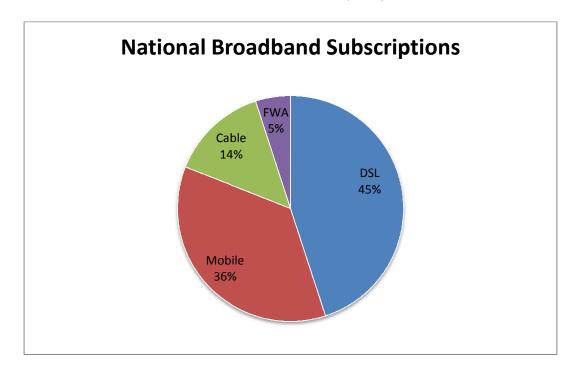
- Cable broadband services are now the fastest growing segment of the broadband market in Ireland.
- Broadband is now delivered over multiple networks including fixed line, fibre, cable, fixed wireless, satellite and mobile with over 40 service providers in the market.
- 100MB Broadband is now offered by at least one service provider in Ireland
- European Commissioner for Digital Agenda Neelie Kroes set a target that, by 2020, all homes and businesses will have a minimal standard of 30Mbps broadband while half of European households will achieve 100Mbps connectivity.
- Current plans to have 100% population coverage by end of 2012.

## **National Broadband Subscriptions**

According to ComReg figures, national broadband subscriptions passed 1.6m by the second quarter of 2011. The per capita penetration rate is 35.5% or 53% of households. 2% of all internet subscriptions are now dial up (narrowband) compared with 99% seven years ago.

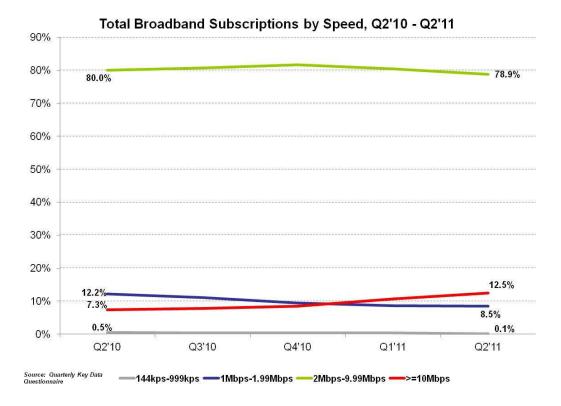


Of all broadband subscriptions; DSL accounts for 45%, mobile broadband accounts for 36%, cable accounts for 14%, and fixed wireless access (FWA) accounts for 5%.



## **Broadband Subscription Speeds**

Over the last two years there is a significant shift from lower speed connections to medium and higher level speeds. ComReg reports that as of Q2 2011, almost 13% of all broadband connections in Ireland are >=10Mbps.



## **Frequently Asked Questions**

The Midland Regional Authority organized a Broadband Information Seminar for its Members. The following details questions which were raised during the course of the seminar.

#### **Broadband Availability**

## Can I check if a broadband service is available in my area?

There is a function on www.callcosts.ie to filter results for broadband services that are available in your county. There is also a link over to the operators website where you should be able to check more specific information.

## Why are line rental charges included in DSL / ADSL Plans?

Line rental charges are included with DSL / ADSL plans as you need to have a telephone line to avail of these plans.

## **Broadband Quality**

## What can I do if I am experiencing problems with my broadband service?

Any customers experiencing problems with their broadband service should contact their service provider to seek resolution.

In cases where customers have exhausted the service provider's complaint handling procedures, they can contact Irish Communications Regulator, ComReg, at 1890 229 668 or online at www.askcomreg.ie or email Consumerline@comreg.ie for further assistance and guidance.

#### **National Broadband Scheme**

#### Where can I find out about the National Broadband Scheme (NBS)

Details of the National Broadband Scheme and electoral divisions covered under the NBS are are available at www.three.ie/nbs including national and county-by-county coverage maps.

## What areas are covered by the National Broadband Scheme?

1028 Electoral Divisions throughout the country are provided with broadband coverage under the NBS. Individual county maps, together with the list of Electoral Divisions covered under the scheme within each county, are available on the Department's website at www.dcenr.gov.ie/NBS. Maps, including an online address checking facility, are available on 3's website at www.three.ie/nbs

No of EDs Addressed by NBS in the Midland Region				
County	County County			
Laois	28	Longford	11	
Offaly	15	Westmeath	26	

## How does the Department monitor the NBS service performance?

Under the NBS contract, 3 is required to deliver guaranteed service standards with respect to product speeds, contention ratio, customer interface, wholesale service, reporting and marketing.

The Department, along with the assistance of independent technical consultants, Analysys Mason Ltd, actively monitors performance of the infrastructure, service availability, service delivery and customer experience as well as overall compliance with contractual obligations by 3 on a monthly basis throughout the contract term.

#### How can I subscribe to the NBS Service?

All customers located within the NBS coverage area can avail of the NBS service by contacting "3", the NBS Service Provider:

- by phone at 1800 944 791 (free of charge)
- online at www.three.ie
- by calling into one of 3's authorised retail outlets.

#### Rural Broadband Scheme (RBS)

#### Who is running the RBS?

The RBS is an EU funded measure under the Rural Development Programme operated by the Department of Communications, Energy and Natural Resources, in cooperation with the Department of Agriculture, Fisheries and Food.

#### Where can I get further information?

Details of the Scheme can be found by visiting the website of the Department of Communications, Energy and Natural Resources www.dcenr.ie, and follow the links for the RBS.

## When will the service under the RBS be available?

Applications will be checked to assess whether the applicants can be served by existing service providers. Subject to agreement with the companies concerned, the Verification Phase should be completed by January/February 2012. We would expect that some of the applicants under the Scheme will be offered a service by these companies during this phase. The Department expects to carry out a procurement process to select a service provider to offer a service to

remaining applicants once the Verification Phase has been completed. Rollout of the service under the Scheme is expected to be completed by the end of 2012.

## Who will provide the service under the Scheme?

The Department of Communications Energy and Natural Resources will carry out a procurement process to select a service provider under the RBS.

## How will the service provider be appointed and what technology will be used?

The service provider for the RBS will be selected in a procurement process to be carried out under EU rules. This process will be technology neutral – it will be up to the bidders in the process to choose the technical basis for their bids.

## Under what circumstances will satellite be used to provide the service under the Scheme?

The service provider for the RBS will be selected in a procurement process to be carried out under EU rules. This process will be technology neutral – it will be up to the bidders in the process to choose the technical basis for their bids.

## What speeds can subscribers expect at launch?

Details of the service under the RBS, speeds etc. will be established during the procurement process to select a service provider for the RBS.

### How much will it cost?

While the Department will be making a contribution towards the infrastructure cost of providing the service under the RBS, the applicant will be responsible for paying for the service itself and this may include an up-front charge as well as an on-going monthly fee. The costs of the RBS will be determined during the procurement process.

## Conclusion

This Guide to Broadband is designed to inform the reader as to the various technologies through which one can avail a broadband service. In terms of selecting an ISP, one is directed to the ComReg website which offers details in terms of the ISPs, capacity of services and packages available in your county.

The MRA will continue to advise its members of changes in national programmes and policies with regard to broadband provision and availability.

# **Appendix 1 – Eircom Exchanges in the Midland Region**<sup>4</sup>

<b>Current Status</b>	LAOIS	<b>Current Status</b>
Enabled	Killenard	Enabled
Not Planned	Kilminchy	Enabled
Enabled	Luggacurran	Not Planned
Enabled	Mountmellick	Enabled
Not Planned	Mountrath	Enabled
Not Planned	Portarlington	Enabled
Enabled	Portlaoise	Enabled
Not Planned	Rathdowney	Enabled
Enabled	Rosenallis	Enabled
Enabled	Shanahoe	Not Planned
Enabled	Stradbally	Enabled
Not Planned	The Heath	Enabled
Not Planned	Timahoe	Not Planned
Enabled	Wolfhill	Not Planned
Not Planned		
Enabled		
Not Planned		
	Enabled  Not Planned  Enabled  Enabled  Not Planned  Not Planned  Enabled  Not Planned  Enabled  Not Planned  Enabled  Enabled  Enabled  Not Planned  Enabled  Not Planned  Enabled  Not Planned  Enabled  Not Planned  Not Planned  Enabled	Enabled Killenard  Not Planned Kilminchy  Enabled Luggacurran  Enabled Mountmellick  Not Planned Mountrath  Not Planned Portarlington  Enabled Portlaoise  Not Planned Rathdowney  Enabled Rosenallis  Enabled Shanahoe  Enabled Stradbally  Not Planned The Heath  Not Planned Timahoe  Enabled Wolfhill  Not Planned  Enabled

<sup>&</sup>lt;sup>4</sup> Source: Eircom, November 2011

LONGFORD	<b>Current Status</b>
Ardagh	Not Planned
Aughnacliffe	Enabled
Ballinalee	Enabled
Ballymahon	Enabled
Clondra	Not Planned
Colehill	Not Planned
Drumlish	Enabled
Edgeworthstown	Enabled
Granard	Enabled
Kenagh	Not Planned
Killashee	Enabled
Lanesborough	Enabled
Lisnacaffrey	Enabled
Longford	Enabled
Moyne	Not Planned
Newtowncashel	Not Planned
Newtownforbes	Enabled

Offaly	<b>Current Status</b>	Offaly	<b>Current Status</b>
Aghancon	Not Planned	Geashill	Enabled
Ballinagar	Enabled	Gracefield	Enabled
Ballycumber	Enabled	Kilcormac	Enabled
Ballydaly	Not Planned	Killeigh	Enabled
Banagher	Enabled	Kinnitty	Not Planned
Birr	Enabled	Lea Beg	Not Planned
Bracknagh	Not Planned	Moneygall	Enabled
Clara	Enabled	Mountbolous	Enabled
Cloghan	Not Planned	Mucklagh	Enabled
Clonbollogue	Not Planned	Pollagh	Not Planned
Clonygowan	Not Planned	Rahan	Enabled
Collins Lane	Enabled	Rhode	Enabled
Crinkill	Not Planned	Shannonbridge	Not Planned
Daingean	Enabled	Shinrone	Enabled
Edenderry	Enabled	Tullamore	Enabled
Ferbane	Enabled	Walsh Island	Not Planned
Five Alley	Enabled		

Westmeath	<b>Current Status</b>	Westmeath	<b>Current Status</b>
Athlone	Enabled	Killucan	Enabled
Ballymore	Not Planned	Kinnegad	Enabled
Ballynacarrgy	Not Planned	Kinnegad	Enabled
Ballynahowen	Enabled	Lakepoint Business Park	Enabled
Bliary	Enabled	Miltownpass	Enabled
Castlepollard	Enabled	Moate	Enabled
Castletowngeoghan	Enabled	Moyvore	Enabled
Clonmellon	Enabled	Mullingar	Enabled
Collinstown	Enabled	Multyfarhnam	Enabled
Crookedwood	Enabled	Rathowen	Enabled
Delvin	Enabled	Rochfortbridge	Enabled
Finea	Not Planned	Rosemount	Not Planned
Glassan	Enabled	Roslevin	Enabled
Horseleap	Enabled	Tyrellspass	Enabled
Kilbeggan	Enabled		