



Report of the Mobile Phone and Broadband Taskforce



Contents

Ministerial Forewords	2
Key Messages	5
Introduction	8
Chapter 1: Strategic Planning	13
Chapter 2: Planning and Licensing	19
Chapter 3: Access to Infrastructure	29
Chapter 4: Consumer Issues	41
Chapter 5: Network Improvement	51
Chapter 6: Conclusions and Next Steps	55
Appendix 1: Membership of the Taskforce	58
Appendix 2: Terms of Reference of the Taskforce	60
Appendix 3: Table of Actions	62
Glossary	75

Ministerial Forewords



Ministerial Foreword

I am critically aware of the frustrations being felt across Ireland. From inner cities to remote rural parishes, there are communities that are partly or sometimes wholly excluded from basic criteria of modern convenience and comfort in terms of communications. It is exactly because of this that a top social, economic and political priority for me as Communications Minister is delivering the new National Broadband Plan (NBP) in the shortest time possible.

The Plan will revolutionize businesses and communities across provincial towns in rural Ireland. It will be one of the single biggest investments in rural Ireland for generations. The procurement process is well underway and all three bidders have indicated that they intend to propose a predominantly fibre-to-the-home network.

The actions in this final report of the Mobile Phone and Broadband Taskforce are part of a wider drive to eliminate the rural-urban divide. The Government established the Taskforce to immediately address and help alleviate the frustration of poor connectivity and to prepare the ground for the build-out of the National Broadband Plan network.

This final Taskforce report contains 40 strong actions, 19 of which we have singled out for immediate implementation. We have listened carefully to the telecoms industry who highlighted actions that we as Government can take to help them rollout networks faster. We will monitor progress every 90 days and the appointment of a Broadband Officer as a single point of contact for telecoms operators in each Local Authority will be key to overcoming obstacles quickly.

The actions will facilitate increased 4G coverage across Ireland – particularly in rural Ireland, where mobile services are vital for areas not currently served by high-speed broadband networks.

They will also empower consumers to make well-informed choices, to enable them to get the most of the mobile phone handsets and services available on the market now and into the future.

Ultimately, our aim is put Ireland to the fore internationally, in terms of connectivity, and to reap the benefits of a truly digital society.

I thank the members of this Taskforce for their time, expertise and commitment. And to those outside Government who have given their valuable time to be members of the Taskforce – your contribution is greatly appreciated also.

The next step in this process is to ensure that the recommended actions are fully implemented as quickly as possible. I look forward to working with Minister Humphreys to ensure that real results are delivered promptly.

Minister Denis Naughten, T.D.

Minister for Communications, Climate Action and Environment

December 2016

Dini Paughtin



Ministerial Foreword

The telecommunications sector is a key contributor to Ireland's economy and will continue to play a very important role in enabling businesses to grow, and in improving the day to day lives of individuals and families right across the country. We need a state of the art telecoms infrastructure that is able to support a growing digital economy, in both urban and rural areas.

The work of the Mobile Phone and Broadband Taskforce lays the foundation for the implementation of the National Broadband Plan. It plays a vitally important role in assisting the rollout of high speed broadband, which will bring immediate benefits to people and companies in every city, provincial town and rural area throughout Ireland.

The Taskforce report addresses, in a very comprehensive manner, a wide range of issues impacting on broadband and mobile services. The practical measures identified in this report will greatly assist in improving planning processes, optimising network performance, improving access to infrastructure, and equipping consumers to make informed decisions on products and services, and improve overall the quality of broadband and mobile services to the people of Ireland.

The work of the Taskforce supports the development of an ecosystem of economic growth, more inclusive social benefits, a competitive business environment, and greater choice for businesses and consumers alike.

The delivery of high speed broadband is central to the Government's plans to empower local communities and give rural Ireland every possible chance to succeed. As Minister with responsibility for the revitalisation of rural Ireland, I welcome the findings of the Taskforce report. I would like to take this opportunity to thank the Members of the Taskforce for giving their valuable time and commitment to this important work.

The implementation of the actions recommended by the Taskforce will have a significant positive impact on the lives of people and companies across Ireland. I look forward to working closely with Minister Naughten, and with the Implementation Group being established, to monitor and progress the actions set out in this report.

Minister Heather Humphreys, T.D.

Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs

December 2016

Alcather 1

Key Messages

The Programme for a Partnership Government gave a commitment to establish a Mobile Phone and Broadband Taskforce to identify immediate solutions to broadband/mobile phone coverage deficits and to investigate how better services could be provided to consumers prior to full build and rollout of the network planned under the National Broadband Plan State intervention (NBP).

While the telecommunications industry continues to play a vital role in the economy, it is currently worth over €12 billion annually and employs approximately 120,000 people - the Government identified the need for the Taskforce to examine solutions to address broadband/mobile phone coverage deficits and to identify tangible actions that can be taken to improve the quality of broadband and mobile voice services being provided to citizens across Ireland.

The Taskforce report outlines the issues considered and sets out its recommendations and actions to alleviate barriers to mobile reception and broadband access. The Taskforce recognises that there has been significant progress made to date in this area and that a number of the actions are already in the process of being brought to fruition. However, significant coverage gaps remain which the Taskforce believe can be somewhat mitigated through the timely implementation of the actions contained in the final report.

Given the exponential growth of mobile data usage, a five-fold increase in mobile data usage over the last five years, there is a clear need to reinforce, develop and expand telecommunications networks on an ongoing basis. To do this effectively requires the input and cooperation of a broad range of public and private actors. The Taskforce has identified how these relationships can be strengthened to deliver a better quality of service to citizens and businesses.

The telecommunications sector underpins our transition to a digital economy. It provides the networks on which we rely, and as networks increasingly reach every home, school and business in Ireland, there is an over-riding imperative to ensure equality of access and service quality. At its heart, this is what the NBP is striving to deliver.

All of the actions that the Taskforce has identified target specific issues that have been raised by stakeholders or identified through the work of the Taskforce. In addition, many address underlying issues that are of fundamental importance to the ability of the telecommunication operators to deliver improved services, particularly in rural areas.

The report includes 40 recommendations and associated actions for delivery by Departments, agencies, local authorities, ComReg and industry providers. Some of the key actions include:

- > ComReg will generate and publish online **a composite national coverage map** (similar to the Broadband coverage map), which will help consumers choose the best network provider for where they live and work.
- > ComReg will provide independent information to consumers on handsets, specifically in terms of handset sensitivity due to antenna performance and network coverage, allowing consumers to make informed choices about the level of signal they can expect from different phones.
- > The application of development contributions to telecommunications infrastructure will cease in every local authority area from early 2017.
- Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (DAHRRGA) will fund all local authorities to assign an officer with responsibility for broadband who will act as a single point of contact for engagement with telecommunications operators who are building out infrastructure.
- Department of Housing, Planning, Community and Local Government (DHPCLG) will bring forward revised 'Exempted Development Regulations' immediately to the Oireachtas which will exempt 4G antenna from requiring planning permission.
- > Transport Infrastructure Ireland (TII) will work to **complete the duct installation on 95km of roadway on the M7/M8 corridor between Dublin and Cork**. The work will be completed by mid-2017 and will result in operators being able to deploy end-to-end telecommunications infrastructure.
- ComReg will develop a licensing scheme allowing for the use of mobile phone repeaters. This will allow householders and businesses to boost the signals into their premises, through the use of repeaters on the building.
- Department of Communications, Climate Action and Environment (DCCAE) and ComReg will assess the extent of blackspots being experienced across the country and identify actions to rectify this.
- > Department of Housing, Planning, Community and Local Government (DHPCLG) and the DCCAE will work to bring forward the necessary legislation to ensure that all new builds are broadband enabled, including mandating that ducting is in place to facilitate connection to high-speed networks.
- > TII will review costs associated with accessing their ducts.

The next 12 months will see tangible progress on a number of fronts, including in relation to the procurement for the National Broadband Plan and the award of the 3.6 Ghz spectrum band. The DAHRRGA will work with the local authorities, through the newly established Regional Action Groups, on the funding and assignment of dedicated officers with responsibility for broadband, to facilitate the smooth rollout of the NBP and the development of local digital strategies.

In order to maintain momentum, an Implementation Group will be established to drive and monitor the implementation of the actions in the Taskforce report. The Implementation Group will be led by the two key Departments (Communications, Climate Action and Environment, and Arts, Heritage, Regional, Rural and Gaeltacht Affairs). The Implementation Group will report every 90 days to both Ministers, who will in turn jointly brief the Cabinet on progress made. The Implementation Group will carry out a fundamental review of progress made after twelve months and will also be mandated to recommend further actions that would result in an improved service for consumers.

Introduction

Establishment of Taskforce

The Programme for a Partnership Government committed to establishing a Mobile Phone and Broadband Taskforce (the 'Taskforce') within a 100 days in order to identify tangible actions that can be taken to improve the quality of broadband and mobile voice services being provided to citizens across Ireland.

The Taskforce was established by the Minister for Communications, Climate Action and Environment, Denis Naughten, T.D. and Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs, Heather Humphreys, T.D., in July 2016. Its role was to examine immediate solutions to address broadband/mobile phone coverage deficits. In that regard, it identified practical measures to accelerate the rollout of telecoms infrastructure ahead of the rollout of the National Broadband Plan (NBP) in 2017.

Under the NBP high-speed broadband will be delivered to every premise in Ireland. The plan will be one of the single biggest investments in rural Ireland for generations – akin to rural electrification. While the Government is committed to delivering the National Broadband Plan in the shortest time possible, the scale of the project means that it will take time for all parts of the country to see the results. Currently, the universal service obligation¹ ensures that reasonable requests for access at a fixed location to a connection and at least a voice service are delivered.

Over the last five years, the telecoms industry has invested €3.3 billion in Ireland. This is roughly equivalent to Ireland's annual public capital programme. As a result, 1.4 million homes and businesses in Ireland can now access high-speed broadband of at least 30mbps and 4G data services are available to more than 90% of the population. However, the reality is there are parts of this country that are significantly behind where they need to be in terms of modern communications infrastructure, particularly in the area of broadband. The Taskforce's role was to look at possible ways of addressing the frustrations of people living in rural Ireland until such time as the NBP addresses the deficit.

In consultation with other Government Departments, ComReg, State agencies, industry and other key stakeholders, the Taskforce has identified actions which will alleviate barriers to improved mobile phone reception and broadband access, particularly in rural communities.

¹ The concept of Universal Service is designed to ensure that every person can receive a basic set of high quality telecommunications services, no matter where they live, at an affordable price. Eir is the current designated 'Universal Service Provider' (USP) and has a number of obligations regarding the provision of certain services.

The membership of the Taskforce, as well as the Terms of Reference, is contained at Appendix 1 and 2 respectively.

Ministers Naughten and Humphreys co-chaired the Taskforce, which met monthly from July 2016. As part of its deliberations, the Taskforce established four sub-groups to examine specific issues identified as having a significant impact on the rollout of telecommunications infrastructure:

- > Planning and Licensing Processes;
- > Access to Infrastructure;
- > Consumer Issues; and
- > Network Improvements.

As part of its work programme, the Taskforce undertook a written consultation with the telecommunications industry, as well as a dedicated meeting with industry representatives. A number of the Taskforce sub-groups also individually met with industry in respect of their specific remit in order to help identify and address barriers to telecoms deployment and to deliver solutions that will help accelerate developments in the short, medium and long term.

This report sets out the issues identified by the Taskforce and its recommendations on the practical measures which should be taken to accelerate the rollout of telecoms infrastructure in advance of, and in tandem with, the NBP State-led intervention.

Chapter 1 looks at the overarching issues considered by the Taskforce, while chapters 2 to 5 cover the issues considered by each of the subgroups. Each chapter sets out:

- the current position in terms of the regulatory, legislative or procedural frameworks in place;
- > issues which the Taskforce identified as warranting specific focus,
- > the proposed solution/recommendation of the Taskforce, and
- > a clearly defined action to be undertaken to address the issue in response to the recommendations.

Background

Importance of telecommunications to the digital economy in Ireland

Currently worth over €12 billion annually and employing around 120,000 people, the digital sector² overall is growing fast and is predicted to be worth at least €21 billion by 2020, according to the Indecon study³.

The commercial telecommunications sector continues to make a strong contribution to enabling the digital economy and to improving the day to day lives of all of us. The telecoms industry enables the digital economy and allows companies throughout the country to achieve their potential by speedily accessing markets they never could have before, thereby facilitating employment, exports and economic growth.

The following statistics underline the exponential growth in data usage and demand in recent years:

- > over the last 10 years there has been an 800% increase in broadband subscriptions from 212,000 to 1.7 million
- > 4 million of us are now using the 3G and 4G mobile network
- > Mobile data usage has increased by a massive 500% over the last five years.

The rate of increase shows no sign of slowing down. It is estimated that by 2020, the volume of global internet traffic will be 95 times its volume in 2005 and fixed internet traffic is set to double every two years.

As the digital economy grows, we must ensure that the business opportunities and benefits are felt in every city, town, village and rural area. We need a digital infrastructure that can support this and one that provides nationwide coverage with sufficient capacity to ensure that data can flow at the volume, speed and reliability required to meet the demands of modern life. A state-of-the-art telecoms infrastructure will be key to Ireland's continued economic competitiveness and is a key part of our future economic development strategy. The National Broadband Plan will play an integral role in delivering this infrastructure and revitalizing businesses and communities across provincial towns in rural Ireland.

The NBP combines commercial investment with a commercial stimulus for those areas where commercial investment may not materialise. The Plan commits to providing affordable high speed services to every home and business in the country.

² The digital sector refers to any job which is related to working online.

³ http://www.dccae.gov.ie/communications/en-ie/Pages/Publication/Assessment-of-Macro-Impacts-of-Internet-Digital-March-2016.aspx

Industry investment

Over the last five years the industry invested €3.3 billion in network infrastructure and 4G licences. Investment is continuing and future investment of the same order is planned. Delivering better mobile coverage to consumers means locating more masts in the most suitable locations from an engineering perspective in order to provide the best possible coverage. Expanding the fibre network means digging up and reinstating more roads.

Through commercial investment, we will see an expansion of fixed line networks and the provision of additional mobile infrastructure sites resulting in increased benefits for all. In order to maximise the value of this enormous investment to benefit the Irish consumer there are many challenges to be faced and obstacles to be addressed and, where possible, removed.

Role of spectrum in delivering telecommunications services

Radio spectrum or band frequency is an increasingly valuable and useful resource for the nation, contributing to the improvement of overall welfare of many sectors of society by supporting an extensive range of desirable, useful and essential services.

Most notable, the rapid rise of the smartphone – which is a device that we use in business and everyday life – is resulting in increased demand on spectrum. Data usage, which has been facilitated by improved 3G and new 4G network rollouts, has increased by 500% since 2012⁴. The use of wireless devices, such as smartphones, tablets and dongles, in providing wireless broadband access to the internet is now an important dimension of meeting the demand for broadband services for many users. Therefore, how we manage our radio spectrum can have far reaching implications particularly on our broadband and mobile services.

Future strategy for optimising the use of spectrum

A significant element of ComReg's spectrum management strategy⁵ is to prioritise the release of harmonised spectrum capable of supporting wireless broadband use both in a fixed and mobile context.

In 2012, ComReg's Multi-Band Spectrum Auction resulted in some €850 million being invested by the commercial telecommunications sector in acquiring spectrum – this spectrum was used for the rollout of 3G and 4G mobile services. This investment is part of an overall investment of over €2 billion by the commercial sector in upgrading and modernising networks to support the provision of high speed broadband services.

⁴ ComReg Document 16/50 - 'Radio Spectrum Management Strategy Statement 2016 - 2018' - 21st June 2016.

While spectrum policy is a matter for the Government and specifically the Minister for Communications, Climate Action and Environment, the day to day management of spectrum (including assignment of spectrum resources and the attachment of conditions to a right of use) is a matter for the Commission for Communications Regulation (ComReg).

These investments will further improve the coverage and quality of broadband and mobile voice and data services throughout the country.

While investment and upgrades to networks continue to be undertaken by operators, ComReg is now considering the future needs and has set out a strategy which could see spectrum being made available for wireless broadband delivery increasing by almost 200% by 2019.

For example, the upcoming release of the 3.6 GHz band⁶, the future release of the 700 MHz band with its favorable characteristics for the provision of both wide area and indoor coverage, and the further anticipated release of other spectrum bands could go a significant way to meeting the increasing demand for mobile data, including supporting broadband availability for all users in as many locations as possible.

The Taskforce notes ComReg's intention to consult on the possibility of introducing elements within future spectrum assignment processes in order to ensure enhanced coverage where blackspots have been identified.

In support of this, the Taskforce welcomes the fact that a further €8 million has been set aside to facilitate the reallocation of the 700 MHz spectrum away from TV broadcasting to support broadband and mobile telephony plans in rural areas. The 700 MHz band is particularly suited to rural environments where the signal can travel relatively long distances. In freeing up a very valuable spectrum band, this crucial investment will deliver better mobile data services, particularly in rural areas.

The Taskforce supports the progress made by the DCCAE and ComReg in its detailed coordination discussions with the UK authorities on how to deal with any likely interference issues and that it has reached provisional agreement on the necessary changes. Successful conclusion to the negotiations is envisaged in the first half of 2017. This will enable a coordinated approach to migration being taken by the two jurisdictions.

⁶ Regulations were recently signed allowing ComReg to proceed with an early 2017 auction of the 3.6GHz radio spectrum band, to provide an 86% increase in total spectrum available for mobile and fixed wireless broadband services. The Taskforce acknowledges this progress particularly as it will provide for significantly enhanced mobile coverage.

Chapter 1: Strategic Planning

The Taskforce identified some issues which it deemed to be overarching in their nature which should be taken to complement the more specific recommended actions set out in chapters 2 to 5 of this report. These issues, if addressed, will contribute to a smoother and quicker rollout of telecommunications infrastructure and services.

While the issues are general in nature, the actions set out below are specific and are focused in achieving clear outcomes and, in the main, will ensure that barrier issues will be continuously reviewed and addressed on an ongoing basis.

Overarching issues and actions

1. An important issue which emerged from the Taskforce's deliberations and from industry submissions was the absence of an ongoing structured and transparent dialogue between stakeholders. Given the rapid pace of technology and the emergence of new equipment and solutions to deliver telecommunications services, it is critical that there is a forum in place which allows stakeholders to raise impediments to the rollout of services. Issues need to be addressed as they arise and should be kept under review and discussion.

For example, industry is of the view that issues exist in relation to planning guidelines ("Telecommunications Antennae and Support Structures Guidelines") in terms of:

- the frequency with which they are updated;
- > their content, which lends itself to inconsistent interpretation and varied application by the various local authorities; and
- > the fact that there is no formal process/forum in place for ongoing dialogue between industry and the DHPCLG, which would allow for issues to be identified and discussed as they arise.

While only one of many examples across a wide range of topics, it serves to show how industry and planning authorities' views can differ. The absence of a structured dialogue between relevant stakeholders can therefore lead to unnecessary impediments to the rollout of services.

The Taskforce recommends that an annual forum be held for all stakeholders including telecommunications operators and local authorities to discuss implementation of the Taskforce recommendations and wider issues impacting on the rollout of telecommunications infrastructure.

2. The fact that telecommunication services are not currently dealt with in the building regulations in a manner that ensures that all new builds are broadband enabled was identified by the Taskforce as an issue which was potentially impeding the rollout of services.

The NBP has established (down to every premises in the country) exactly where high speed broadband will be provided and where it will not be provided by the commercial telecoms market. Through an extensive mapping process, DCCAE has identified the State "intervention area" where it is not deemed to be viable to provide high speed broadband services on a fully commercial basis. A major procurement process is currently underway, to select a company or companies to rollout high speed broadband to these areas. The new network in the intervention area will be part funded by Government.

DCCAE has, however, identified ongoing issues in relation to individual access cases, which it believes require the additional back-up of a Universal Service Obligation type provision. Accordingly, while the Government is of the view that the State should assist in funding the build-out of networks, once these networks are in place, it will be necessary to ensure that the owners of the networks will continue to connect homes and businesses – particularly where new homes or businesses are built after the network is in place. Pending the outcome of ongoing deliberations in the context of the NBP tender, the Taskforce is of the view that consideration needs to be given to the question of whether high speed broadband in buildings should be considered an essential service under the building regulations.

The Taskforce recommends that the relevant Departments review and amend the relevant legislative framework to ensure that all new builds are broadband enabled, including mandating that ducting is in place to facilitate connection to high-speed networks.

3. The Taskforce notes the point made in a number of the submissions received from industry of the need for a dedicated and adequately resourced local point of contact in each local authority, to be given responsibility for promoting and assisting the rollout of telecommunications infrastructure.

As an overarching proposal, the Taskforce recommends that each local authority designate a senior manager with responsibility for promoting and overseeing telecommunications infrastructure development under the NBP in their areas.

In addition, each local authority should (if they have not done so already) assign an officer with responsibility for broadband to liaise with operators on coverage and infrastructure rollout issues.

Funding should be provided to local authorities to assign an officer with responsibility for broadband who will act as the single point of contact for engagement with operators within the local authority and whose primary role should be to assist with accelerated rollout of the National Broadband Plan and demand stimulation.

4. The Taskforce considered that there was a need to increase public awareness around many of the issues it discussed, including its recommendations on measures which will be taken to alleviate barriers in the medium term and the wider aspects of the NBP.

A public awareness campaign should be undertaken which outlines all aspects of the National Broadband Plan, the work of the Taskforce, the various tools being developed to inform consumers, business, local government and all relevant stakeholders on all of the on-going work being undertaken by all parties to improve mobile phone and broadband services.

5. While the measures discussed by the Taskforce focus on unlocking barriers to investment in mobile and broadband services and exploring potential immediate solutions to address broadband/mobile phone coverage deficits, the Taskforce was committed to ensuring that the measures identified were practical in nature and would accelerate the rollout of telecoms infrastructure ahead of the rollout of the National Broadband Plan (NBP) in 2017. The rollout of the NBP was recognised as crucial in the longer term. The Taskforce notes the commitment in the six year Capital Plan, Building on Recovery (September 2015), which included an allocation of €275 million for the National Broadband Plan. This will provide the initial stimulus required to deliver the Government's intervention and it is expected that further funding will be available over the lifetime of the NBP contract(s). The Taskforce further notes that the Programme for Government guarantees the delivery of next-generation broadband to every household and business in the country.

In line with this Programme for Government commitment, the Government should continue to ensure that appropriate funding is made available to support the timely rollout of the NBP as a priority.

6. The actions identified by the Taskforce are only impactful if they are implemented. There is a need to ensure that the responsible stakeholders take the appropriate actions as identified by the Taskforce. Furthermore, it is important to ensure that the responsible stakeholders are adequately resourced to successfully deliver any recommendations they are tasked with.

In order to ensure that the actions identified by the Taskforce in this report are implemented, an Implementation Group led by officials from the DCCAE and the DAHRRGA should be established to monitor and report to Government on progress.

ACTIONS TO ADDRESS OVERARCHING ISSUES

To deliver on the Taskforce's recommendations the following actions will be taken:

No.	Action	Responsible	Timeline for Delivery	Impact
1	Hold an annual forum for all stakeholders to discuss issues impacting on the rollout of telecoms infrastructure.	DCCAE/DAHRRGA	Q4 2017	Earlier identification and resolution of issues impacting on the rollout of Telecommunications services.
2	DHPCLG and the DCCAE will work to bring forward the necessary legislation to ensure that all new builds are broadband enabled, including mandating that ducting is in place to facilitate connection to highspeed networks.	DHPCLG/DCCAE	Q4 2017	If high speed broadband is included in building regulations, the requirement to facilitate installation in future new build homes and businesses will be a given.
3	DAHRRGA will fund all local authorities to assign an officer with responsibility for broadband to act as the single point of contact for engagement with operators to assist with accelerated rollout of the National Broadband Plan and create awareness of/stimulate demand for broadband services.	Local authorities/ DAHRRGA	Q1 2017	A dedicated and single point of contact in each local authority will ensure consistency in engagement with operators and assist the rollout of Telecommunications infrastructure.

No.	Action	Responsible	Timeline for Delivery	Impact
4	Run a public awareness campaign on all aspects of the National Broadband Plan and the work of the Taskforce.	DCCAE/DAHRRGA	Q1/Q2 2017	Consumers will be better informed of the progress being made to improve the quality and availability of broadband and mobile phone services.
5	In line with the Programme for Government commitment, the Government will ensure that appropriate funding is made available to support the timely rollout of the NBP.	Government	Ongoing	Timely rollout of the NBP to the State intervention areas, improving access to high speed broadband to domestic and business users.
6	Establish an Implementation Group led by officials of DCCAE and DAHARRGA in order to ensure that the actions identified by the Taskforce are implemented and reported on to Government.	DCCAE/DAHRRGA	Q1 2017	Implementation of the actions recommended by the Taskforce will be closely monitored and reported to Government.

Chapter 2: Planning and Licensing

Overview of planning and licensing issues

Telecommunications infrastructure must be correctly sited in order for quality mobile and broadband services to be provided to consumers. The erection of equipment, such as masts and antennae, or access to or laying of ducts is essential to the delivery of such services. However, such structures and infrastructure must be sited and erected in a manner that fits within the wider planning framework and within the appropriate planning guidelines and principles.

Erecting equipment or opening roads to access or lay ducts can require development consent or permission in the form of planning permissions or roadworks licences. Timely decision-making is also important in the delivery of telecommunications infrastructure.

An operator wishing to deploy telecommunications infrastructure will need to engage with the relevant local authority to work through the planning regulations and/or the licensing system to ensure that the necessary approvals and permits from the relevant competent authorities are in place before commencing any works.

One of the main issues identified by the Taskforce is the need for a consistent approach in the way road opening and planning procedures are dealt with across local authorities. These variations can sometimes be a result of different geographic, topographic or scenic characteristics of an area. However, these inconsistencies can result in a variance in the costs and charges applied to telecommunications projects, leading to differing levels of service being provided in different counties.

The Taskforce noted that there is often significant opposition to planning permission for masts at a local level; this can result in poor mobile coverage when essential infrastructure is either delayed or not installed. This needs to change if mobile coverage is to improve. Added to this, the constant rapid evolution in telecommunications technology requires planning and licensing processes to keep pace with consumer demand and the growth in new and emerging technologies (e.g. 5G).

The Taskforce examined the above issues in great detail, including engaging directly with industry, and in each case looked at the current position, the issue arising and proposed solutions. The following issues were identified as warranting specific focus:

Planning issues

1. The DHPCLG (formerly the Department of the Environment, Community and Local Government) issued a Circular Letter (PL 07/12) in October 2012 to local authorities updating certain sections of the Telecommunications Antennae and Support Structures Guidelines (1996). These statutory Guidelines aim to provide relevant technical information on telecommunications installations and to offer general guidance on planning considerations so that the environmental impact is minimised and to help ensure a consistent approach is adopted by the various planning authorities. The Guidelines are also intended to be of assistance to operators and to the general public in understanding how the process works. The Taskforce has identified that some elements of the Guidelines are not being consistently applied across all local authorities.

Moreover, the 1996 Guidelines only dealt with mobile phone installations; the scope of any revised Guidelines should be extended to cover more recent technological developments, including broadband.

The Taskforce recommends that a review of the relevant statutory Planning Guidelines should be undertaken, in conjunction with telecoms industry representatives and other relevant stakeholders, with the aim of evaluating and updating key aspects of the Guidelines to provide clarity and consistency in their interpretation and implementation.

2. Development contributions were introduced under legislative provisions⁷ which empowered local authorities to require payment of a development contribution as a condition of a planning permission.

The primary objective of the development contribution scheme is to partly fund the provision of essential public infrastructure, without which development could not proceed. Development contributions have enabled much essential public infrastructure to be funded since 2000.

In January 2013, DHPCLG issued guidelines⁸ for Planning Authorities on Development Contributions. The Guidelines advised that subject to the overriding principles of proper planning and sustainable development, development contribution schemes should contribute to the promotion of sustainable development patterns, economic

⁷ Section 26(2) of the Local Government (Planning and Development) Act 1963. The Planning and Development Act 2000 introduced provisions requiring local authorities to prepare development contribution schemes. All planning permissions granted by planning authorities (under section 34) after the adoption of development contribution schemes under the Planning and Development Act 2000 are subject to the conditions of those schemes.

⁸ Development contributions Guidelines for Planning Authorities.

activity and to securing investment in capital infrastructure and economic activity. They should also reflect the reduced costs of infrastructure provision in recent years relative to when schemes were last revised. It is recommended under the Guidelines that planning authorities include waivers from development contributions for broadband infrastructure.

The Taskforce notes that, while it is acknowledged that 26 of the 31 local authorities are compliant in respect of applying waivers to development contributions for broadband infrastructure, there is not a consistent application by all local authorities of planning development contributions under the 2013 Guidelines. The Taskforce is of the view that development contributions should be waived by all local authorities to allow for appropriate placement of telecommunications infrastructure to address rural mobile coverage and welcomes the intention of the remaining five local authorities to apply the waiver. This approach is fully in line with the 2013 Guidelines.

The Taskforce is of the view that all remaining local authorities should immediately bring themselves into full compliance with the 2013 Guidelines in relation to development contributions.

Any development which is exempt from the requirement to obtain planning permission for the purposes of the Planning and Development Act, 2000, is referred to as 'Exempted Development'9. Such development is generally of a minor nature – proposed developments which warrant third-party scrutiny are not exempted. Industry has highlighted a number of instances where the current exemptions do not take account of emerging technologies, thereby requiring planning applications for relatively minor developments.

The Taskforce recognises that the rollout of improved mobile telecommunications infrastructure has been slowed by the fact that the relevant planning exemptions have not been updated since 2001. Amending the current exemptions to allow for somewhat larger equipment (e.g. antenna size, dimensions of equipment etc.) will allow for prompt deployment of relevant equipment and save valuable time in local authority planning departments without impacting adversely on third party rights. This is particularly important in rural areas.

⁹ The exempted developments of relevance to mobile telecommunications provision are set out in Class 31 of Part 1 of Schedule 2 of the Planning and Development Regulations 2001 – 2015.

The Taskforce considers that a review of Exempted Developments and the relevant legislative provisions should be undertaken to take account of evolving dimensions, requirements and structures of telecoms infrastructure. It further notes that this process has already commenced in the context of engagement between DCCAE and DHPCLG. All of the proposed amendments should be aimed at facilitating the deployment of the newer technologies coming on-stream and ultimately enabling enhanced coverage for the delivery of telecommunication services, while still respecting the principles of proper planning and sustainable development. More substantial forms of development would still require planning permission.

Provisions relating to planning exemptions for telecommunications infrastructure should be amended to facilitate its smoother deployment and the removal of barriers to investment.

3. An aim of all telecommunications providers is to provide a good service to their customers travelling on the road network, or in premises adjacent to the road network. This is achieved by installing radio sites on lands adjacent to roads and telecommunications cables along roads.

Radio sites need to be located in all areas where coverage for mobile phones and data devices is required in the area surrounding the site. Typically coverage is needed in all towns and along all main roads.

In order to provide coverage most effectively, 'near line-of-sight' is needed from the antenna to the mobile units. For this reason, sites located at high levels work most effectively and masts or high existing structures are needed to support the antennae. Equipment containers or equipment cabinets are needed adjacent to the masts/ antennae.

However, when rolling out electronic communications infrastructure on land sites adjacent to public roads, mobile operators are required to obtain licences. One of the issues identified by the Taskforce is that the actual process relating to obtaining these licenses is seen as a barrier by the mobile operators.

It is part of the remit of the Roadworks and Licensing Working Group¹⁰, chaired by the DTTAS, to address such barriers. The "Guidance on Potential Location of Overground Telecommunications Infrastructure on Public Roads" (Green Book) was published in April 2015 and is aimed at providing advice to telecommunications operators on how infrastructure can be accommodated along all road types, including motorways.

The Taskforce notes that the locations along the road network, and the types of telecommunications infrastructure being referred to throughout the Green Book, are intended to be purely indicative, and that the feasibility of utilising parts of the road network requires detailed consideration for each specific proposal on a case by case basis. The type of telecommunications equipment is an important factor in these deliberations. While there may be a physical possibility of locating telecommunications infrastructure at a particular location, it may not actually result in infrastructure being sited when other factors, including planning, are taken into consideration.

Since its publication, the Green Book has not been actively used by telecommunications operators as a framework for dialogue with TII/local authorities in terms of identifying suitable fit-for-purpose locations. Engagement on identifying suitable fit-for-purpose locations on public roads does not seem to be progressing - resulting in continued poor coverage along specific points of the national road network.

In order to address this, the Taskforce recommends that the Green Book is actively used by telecommunications operators as a framework for dialogue with TII/local authorities in order to ensure that the most effective coverage is delivered through active and structured engagement on identifying suitable fit-for-purpose locations. Following on from such structured engagement, the Green Book should be reviewed if issues are identified that still need to be addressed.

¹⁰ The Roadworks and Licensing Working Group was set up in July 2012 to address infrastructure issues which were identified by industry as creating barriers to deployment of services. The Group was tasked with reviewing the processes involved in the issuing of Road Opening Licences by both the Transport Infrastructure Ireland (TII) and local authorities to telecommunication and other Utility Companies, with a view to standardising guidance notes and licence certification. It is chaired by the Department of Transport Tourism and Sport (DTTAS), and includes members from the Department of Communications, Climate Action, and Environment (DCCAE), the Department of Housing, Planning, Community and Local Government (DHPCLG), the Local Government Management Agency (LGMA), the Transport Infrastructure Ireland (TII), and the County and City Management Association (CCMA).

4. The Taskforce recognised that at a strategic level, more innovative approaches to planning are needed that reflect the pace of economic, social and technological change, while at the same time respecting the environment and needs of the wider community.

The Taskforce welcomes the proposals currently being developed by DHPCLG, the Local Government Management Agency (LGMA) and the local government sector to make the overall planning process and procedure more efficient. This includes new e-planning arrangements to facilitate the online submission of planning applications, appeals and associated fees, as well as online access to planning services. The introduction of these reforms is aimed at modernising and streamlining the planning system and making it more accessible and efficient.

As an example of a more efficient planning process, in Scotland over 70% of all planning applications are now made online, as opposed to using traditional paper based postal applications. This is increasing efficiency in delivery and enabling substantial savings to be made both by applicants and by planning authorities every time an application is made through their ePlanning portal.

The Taskforce recommends that such an opportunity be taken to the fullest extent possible in the context of ongoing work to develop e-planning and online access to planning and development services in Ireland. Broadband and mobile phone infrastructure planning applications should be facilitated as part of the nationwide rollout of e-planning and online access to planning services.

The Taskforce considers that there is scope to consider more innovative approaches to planning which reflect the pace of economic, social and technological change while at the same time respecting the environment and needs of the wider communities.

As part of the Smart Dublin initiative, the four Dublin local authorities and Enterprise Ireland launched the €100k Small Business Innovation Research Challenge (SBIRC) in March 2016. The initiative sought smart, innovative and cost effective solutions to increase the number of people cycling in Dublin. The SBIRC model is one where innovative proposals are sought in a competitive process to address specific problems or objectives.

The Taskforce recommended that this smart, innovative and cost effective solution-based problem solving approach that the Taskforce recommends be explored in respect of planning.

5. The availability and access to reliable, affordable high speed broadband has been highlighted time and time again in local authority development plans. In order to remove any disconnect between the availability of high speed broadband services and the deployment of infrastructure in local areas, two Broadband Regional Action Groups (RAGs) were established in September 2016 to help accelerate the broadband network build. The more efficient and cost effective the various approval systems are for the rollout of telecommunications infrastructure, the faster industry can deliver the high speeds required.

The 31 local authorities are represented on these two groups with the main objective of ensuring that each local authority is fully prepared for facilitating the rollout of the National Broadband Plan.

It is recognised that in order to deploy infrastructure in local authority areas, there are specific processes and planning issues that arise that are solely within the remit of the local authorities to address. It is on these internal processes and planning issues that the Regional Action Groups will need to actively engage to ensure the efficient and cost effective rollout of the NBP.

The Taskforce recommends that a mandate be given to the newly established Northern and Southern Broadband Regional Action Groups to review and address any barriers [within their remit] identified by Stakeholders as impacting on the rollout of telecommunications infrastructure, in partnership with the local government sector.

ACTIONS TO ADDRESS PLANNING AND LICENSING ISSUES

To deliver on the Taskforce's recommendations the following actions will be taken:

No.	Action	Responsible	Timeline for Delivery	Impact
7	Review the statutory planning guidelines (Telecommunications and Antennae and Support Structures Guidelines (1996) – updated October 2012), in conjunction with telecoms industry representatives and other relevant stakeholders.	DHPCLG	Q4 2017	Consistency in interpretation and implementation of guidelines by local authorities; Guidelines will keep a pace with newer forms of technology.
8	All remaining local authorities to be fully compliant with the Development Contributions Guidelines for planning authorities, issued by the DHPCLG in January 2013.	DHPCLG/local authorities	Q1 2017	No development contributions will be charged for the placement of telecommunications infrastructure. This frees up capital, enabling further investment in infrastructure.
9	Revised Exempted Development Regulations will immediately be brought forward to the Oireachtas.	DHPCLG	Q1 2017	A broader range of Telecommunications infrastructure will be exempted from planning requirements, subject to the principles of proper planning and sustainable development, which will ultimately enable enhanced coverage for the delivery of telecommunication services.

No.	Action	Responsible	Timeline for Delivery	Impact
10	Telecoms operators will engage with TII and local authorities in order to ensure that the Green Book is actively used to identify specific access sites. The Green Book will be reviewed, if necessary, in light of the experience gained from this engagement.	DTTAS/TII/local authorities/ telecommunications operators	Q2 2017	Actively using the Green Book will ensure a more structured dialogue between operators and the relevant planning authorities to identify fit-for-purpose locations for telecoms infrastructure along roadways.
11	Ensure that broadband and mobile phone infrastructure providers have access to new on-line facilities for planning applications as part of the new e-planning arrangements.	DHPCLG/local authorities/LGMA	Q3 2017	A more accessible and efficient planning application process in relation to broadband and mobile phone infrastructure saving time and reducing costs for local authorities and telecoms operators.
12	DHPCLG to explore the potential of introducing smart, innovative and cost effective solutions- based problem solving approach in respect of planning.	DHPCLG	Q4 2017	More innovative approaches to planning will reflect the pace of economic, social and technological change while at the same time respecting the environment and needs of the wider communities.

No.	Action	Responsible	Timeline for Delivery	Impact
13	The Northern and Southern Broadband Regional Action Groups will review and address barriers [within their remit] identified by Stakeholders as impacting on the rollout of telecommunications infrastructure in partnership with the local government sector.	DAHRRGA/local authorities	Q1 2017 – establish sub-group of Regional Action Groups Q3 2017 – Standardised approach agreed by local authorities	More standardised, efficient and consistent application processes in relation to broadband and mobile phone infrastructure supporting the rollout of the NBP.

Chapter 3: Access to Infrastructure

Overview of access issues

In order to deliver telecommunications services effectively, operators need access to appropriate locations to house their relevant infrastructure and equipment so as to effectively reach the widest possible number of consumers.

In looking at "Access to Infrastructure" issues, the Taskforce examined matters other than planning or licensing issues which are addressed separately in Chapter 2.

As the State is the largest asset owner of land and property in the country, telecommunications operators recognise the opportunity in using State assets to house telecommunications infrastructure.

The Taskforce similarly recognises the potential for State-owned assets to be used to improve telecommunications networks, while acknowledging that many State bodies do not currently have a commercial mandate, remit or competence to fully exploit this opportunity. Furthermore, many State bodies have no visibility of the potential financial benefits to be accrued from allowing telecommunications operators to locate infrastructure on their property.

The Taskforce is of the opinion that requests for access to State-owned assets that are appropriate and reasonable should be facilitated in order to address telecommunications service deficits.

The Taskforce noted that industry cites international practice as an example of how the State can facilitate access to infrastructure.

International example

In February 2013 the French Government published a National Broadband Plan with the objective of creating a superfast broadband network throughout France¹¹. The Plan was subsequently updated in 2015. In it, the French Government commits to 100% coverage of the country with high-speed broadband.

 $^{11 \}quad https://ec.europa.eu/digital-single-market/en/country-information-france\\$

The Plan involves a cooperative approach. Local authorities will provide sites to build a mast and a connection to the electricity grid. In areas where access is an issue, the Plan provides for local authorities to examine a range of options for network delivery. Mobile network operators will install active equipment and either share the infrastructure or use a national roaming service. The operators have also undertaken to deliver mobile telephony and mobile internet to 800 strategic sites (a range of cultural, tourist, recreation sites). Sites are being identified via proposals submitted by the local authorities.

The Taskforce noted that in Ireland there has been a lack of consistency in the approach being adopted by various local authorities in relation to road openings. This has resulted in industry facing considerable uncertainty when planning large scale or national investment in telecom infrastructure due to the wide variance in processes, timelines and prices. Uncertainty increases costs for telecommunication providers and, ultimately, consumers.

The Taskforce recognises that greater consistency is required in relation to the application of these processes.

The Taskforce examined these issues in greater detail, including engaging with industry, and in each case looked at the current position, obstacles and proposed solutions. The following issues were identified as warranting specific focus:

Access issues

1. The majority of non-commercial public sector bodies have no formal framework or expertise for engaging with telecommunications operators seeking access to, and use of, State-owned property.

Information should be made available by those bodies, in so far as possible, on what assets are available that could be used by operators in rolling out telecoms services. Assets include ducts, and non-commercial State bodies and local authorities should publish maps of available ducts, where possible.

Equally, industry has a role in identifying appropriate sites and locations where it wishes to install or deploy its infrastructure. Proper engagement between asset owners and telecoms operators is the key to ensuring that appropriate access to the relevant infrastructure is achieved. Once sites are identified operators should engage meaningfully with the local authorities through the single point of contact. This engagement should include local community input to ensure a smooth planning application process.

The Taskforce is of the opinion that access to State owned assets that are appropriate and reasonable should be facilitated in order to address telecommunications service deficits.

The Taskforce sees merit in public sector asset owners considering formally designating a single point of contact with telecommunication operators to facilitate the rollout of telecommunications infrastructure.

The Taskforce also recommends that non-commercial State bodies and local authorities should publish maps of available ducts, where possible.

The Taskforce recommends that once industry identifies a suitable site, operators should engage meaningfully with the local authorities and local communities through the single point of contact to scope and manage any issues and risks associated with the site selection.

In addition, the Taskforce notes the Programme for Government commitment to establish a dedicated agency for the management of the NBP contract(s) and the management of all of the State's commercial communications contracts.

The Taskforce is of the view that the Government should consider designating the body established to manage the NBP contract and other State commercial communications contracts, as the entity tasked with the provision of advice and assistance to non-commercial public sector bodies in their engagement with telecommunications operators seeking access to, and use of, State-owned property.

2. In terms of State assets, the Taskforce recognises the strategic importance of the Metropolitan Area Networks (MANs) in providing wholesale fibre infrastructure in regional towns and cities. It notes that service providers believe that more could be done to incentivise the use of the MANs to provide greater availability of connectivity in the regions.

The Taskforce recommends that the DCCAE explore whether take up of the Metropolitan Area Networks (MANs) can be improved, including considering a review of the pricing and other arrangements relating to connections to the MANs.

3. Over the course of the last number of years, a new central office – the Road Management Office (RMO), together with a new central online licensing system – the MapRoad Roadworks Licensing (MRL) system, has been created by DTTAS, in partnership with the local government sector, to streamline the application process for all road openings.

In terms of the process of accessing roads, all road opening applications should be processed through the RMO and comply with relevant standards relating to roadworks. These standards are set down in the "Guidelines for Managing Openings in Public Roads" (Purple Book), which prescribe procedures and requirements in relation to the use of this new licensing system.

In October 2016, DTTAS issued a revision to the Purple Book. This revision was the result of work carried out by the Road Works and Licensing Group, chaired by DTTAS and involving representatives from the DCCAE, the local authorities, National Roads Authority and the County and City Management Association (CCMA).

The Purple Book sets out a summary of the legal framework relating to powers of road authorities, various statutory bodies and private individuals in opening or forming openings in public roads in Ireland. The document prescribes the procedures and standards in respect of road openings, backfilling and the reinstatement of road surfaces and the associated materials to be used.

However, the Taskforce recognises that while the establishment of the RMO has streamlined the processes, a lack of consistency still exists in charging, application processes and the length of time taken to process applications by various local authorities in relation to road openings. This has resulted in industry facing considerable uncertainty when planning national investment in telecom infrastructure due to the wide variance in processes, timelines and prices. Uncertainty increases costs to telecommunication providers and, ultimately, consumers.

The Taskforce welcomes the progress made in relation to updating and launching a revised Purple Book in October 2016. It also welcomes the work being done by the RMO and the introduction of the MapRoad Roadworks Licensing (MRL) system, together with the commitment from DTTAS and the RMO to rollout a training programme to support consistency in the implementation of the Purple Book.

The Taskforce wishes to see the relevant Purple Book guidelines reviewed on an ongoing basis so that they keep pace with the emerging needs and demands of the telecoms services, while ensuring that the integrity of our road network is protected. To this end, it was noted that there is currently no formal forum in existence which facilitates industry engaging with the relevant local authorities on a regular basis so that issues can be raised and resolved in a collaborative manner.

Such a forum should be established as soon as possible to allow for a clear and transparent engagement process between stakeholders and then monitored to ensure that it delivers. The MRL system should be used by all local authorities and operators to move towards a more standardised approach.

In order to maintain the momentum and to address issues as they arise in real time, a high level multi-sector group should oversee the progress of the licensing system and stakeholder forum.

4. The Transport Infrastructure Ireland (TII) was established through a merger of the National Roads Authority and the Railway Procurement Agency under the Roads Act 2015. The TII's primary function is to provide an integrated approach to the future development and operation of the national roads network and light rail infrastructure throughout Ireland. Telecommunication operators have sought access to the ducting on the national roads network in order to provide an improved user experience. The Communication Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 includes provisions to facilitate the TII in making its ducts available to telecommunication operators. As such, it made the TII the authority for road applications in the case of national roads (including motorways). It also gave the TII the power to charge telecommunication operators for use of existing ducts on its roads.

Since its introduction over four years ago, industry has stated that access to ducts has been problematic. Industry contends that the charges associated with accessing these ducts are too high. In addition, gaps in the motorway ducting have made the motorway ducts less attractive to telecoms operators.

The duct rental charge is subject to Ministerial approval (by Minister for Transport, Tourism and Sport, the Minister for Communications, Climate Action and Environment and the Minister for Finance) and as such, it is not a simple matter for the TII to unilaterally decide to reduce charges. However, in addition to the duct rental charges, the TII has "discretionary charges" which cover administration charges for roadworks other than those involving cable or new duct installation.

The Taskforce notes that the TII will update their discretionary charges in relation to duct access.

The Taskforce recommends that the cost of access to TII ducts should be set at a level that serves to encourage usage of the ducting by telecoms operators while also ensuring that the costs of duct installation and management are recouped in a reasonable timeframe. The Taskforce also recommends that TII bring forward updated charges in relation to duct access and report on the cost of access to the Taskforce Working Group within six months and annually thereafter.

5. The Taskforce also welcomes the commitment of the TII to work towards aligning the reinstatement requirements in the TII standards with those in the revised Purple Book, where appropriate on the national road network.

Updating the TII standards should be completed within nine months of the finalisation of the Purple Book requirements.

6. The TII has also committed to completing the duct installation on gaps in the M7/M8 corridor between Dublin and Cork. This is welcomed by the Taskforce. These gaps exist as significant sections of the M7/M8 route between Dublin and Cork were constructed prior to a 2004 agreement between TII (formerly the NRA) and DCCAE for the provision of telecommunications ducting along the motorway network.

The majority of the motorway routes from Dublin to the other principal cities were constructed after this date and so have telecommunications ducting installed. Recognising that these gaps represented a major disincentive to telecoms operators using the M7/M8 corridor, TII commenced a multi-million euro scheme in November 2016 to install ducting on the gap sections of the Dublin to Cork route. Work is ongoing to install telecommunications ducting along almost 100km of the 250km route and is scheduled to be completed by Q3 2017. The added benefit from the provision of continuous ducting on the route is the future proofing of the route to accommodate communications for future intelligent transport system (ITS) technologies, including autonomous and connected vehicles.

The Taskforce welcomes the commitments made by the TII to complete the duct installation gaps and asks that the TII report on the progress of this work to the Taskforce Implementation Group every six months until the task has been completed.

7. Since the introduction of the 2010 Act, where a national road (not being a motorway or dual carriageway and therefore the majority of cases) lies in the functional jurisdiction of a local authority, the application for a road opening is then passed from the TII to the local authority for consideration and back to the TII. This causes undue delays and costs.

It is recognised that an unintended consequence of the Communication Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 was the addition of an extra layer of bureaucracy by involving the TII directly in the consent process.

The Taskforce consider that there is a need for DCCAE to review and amend the Communication Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010 to remove this or any other unintended consequence or operational impediments at play. However, it also considered that the relevant Road Act - governing TII's and local authority statutory roles and functions - should be reviewed by DTTAS, specifically as it relates to managing roadworks, as well as the processes and charging regime in so far as they relate to telecommunications operators accessing the assets under the control of TII. This will allow for greater clarity in the charging process and the role of the TII to be broadened to fully exploit its assets.

ACTIONS TO ADDRESS ACCESS TO INFRASTRUCTURE ISSUES

To deliver on the Taskforce's recommendations the following actions will be taken:

No.	Action	Responsible	Timeline for Delivery	Impacts
14	Non-commercial State bodies will ensure that no impediments are placed in the way of reasonable access to State-owned property.	Non-commercial State bodies	Ongoing	State assets will be optimised to rollout strategically placed telecommunications infrastructure, which will lead to improved coverage.
15	Non-commercial State bodies to consider nominating a single point of contact to engage with telecommunications operators.	Non-commercial State bodies	Q2 2017	This will provide a direct contact route into non-commercial State bodies for operators.
16	Non-commercial State bodies and local authorities will publish maps of available ducts, where possible.	TII/local authorities/ non-commercial State bodies	Q4 2017	Better planning and more cost effective infrastructure deployment by operators by using existing infrastructure where possible.

No.	Action	Responsible	Timeline for Delivery	Impacts
17	Telecommunications operators should identify, in consultation with local communities where appropriate, optimal locations/areas in which they require additional infrastructure to improve coverage prior to engaging with local authorities and non-commercial State bodies. Industry will then engage with the single point of contact to scope and manage any issues and risks associated with site selection.	Local authorities/ local communities/ Non-commercial State bodies/ Telecommunicatons operators	Q1 2017	Greater consensus around site selection for telecoms infrastructure and mitigation of planning delays.
18	The dedicated agency established for the management of the NBP contract(s) and the management of all of the State's commercial communications contracts to be the nominated single entity tasked with the provision of advice and assistance to noncommercial public sector bodies, as appropriate, in their engagement with telecommunications operators seeking access to and use of such State-owned property in the rollout of telecommunications infrastructure and services.	DCCAE	When the entity to manage the NBP contract is formally established and operational.	Non-commercial State bodies will benefit from expertise in telecommunications contract management.

No.	Action	Responsible	Timeline for Delivery	Impacts
19	DCCAE will explore whether take up of the Metropolitan Area Networks (MANs) can be improved including a review of the pricing and other arrangements relating to connections to the MANs.	DCCAE	Q2 2017	MANs products and services are provided on an open access, equality of treatment and non-discriminatory basis.
20	DTTAS will review the Guidelines for Managing Openings in Public Roads (Purple Book) on an ongoing basis and, building on existing arrangements, will establish an appropriate stakeholder forum to provide for a clear and transparent engagement process for formal dialogue between the relevant stakeholders in relation to road openings.	DTTAS	Ongoing	Early identification and resolution of road opening issues as they arise.
21	DTTAS will strengthen the existing multi-sector group to steer and oversee/ monitor the progress of the road opening licensing system and stakeholder forum and to examine solutions to barriers identified by Stakeholders as impacting on the rollout of telecommunications infrastructure and utility works (including a nationally agreed pricing framework).	This group will comprise senior officials from DTTAS, DCCAE, DAHRRGA and DHPCLG	Q1 2017	A consistent approach to the application of the Purple Book on an ongoing basis including the charges applicable across all local authorities, providing clarity and consistency to operators in the licensing process.

No.	Action	Responsible	Timeline for Delivery	Impacts
22	The MapRoad Roadworks Licensing System will be utilised by all local authorities and road opening licencing applicants as the single national centralised road opening licensing system.	DTTAS/local authorities/ telecommunicatons operators	Q2 2017	A more efficient and standardised application process will be in place across local authorities in relation to road openings.
23	A training and communications programme will be developed and rolled out to local authorities and telecommunications operators to support the implementation of the Purple Book.	DTTAS/local authorities	Q2 2017	A consistent approach will be followed in the application of the Purple Book standards.
24	TII will bring forward revised charges in relation to duct access and report on the cost of access to the Taskforce Working Group within six months and annually thereafter.	TII	Q2 2017	More cost effective process allowing for better and easier access to TII ducts and encouraging prompt development of telecommunications infrastructure by operators.
25	TII will work towards aligning the reinstatement requirements in the TII standards with those in the revised Purple Book where appropriate. TII will report to the Taskforce Working Group on progress at six monthly intervals until the task has been completed.	TII	Q4 2017	Consistency in reinstatement requirements across the road network.
26	TII will work to complete the duct installation on 95km of roadway on the M7/M8 corridor between Dublin and Cork.	TII	Q2 2017	Gaps will be filled in ducting on the M7/M8 motorway resulting in operators being able to deploy end-to-end infrastructure.

No.	Action	Responsible	Timeline for Delivery	Impacts
27	Review the legislation governing TII and the road authorities' statutory roles and functions in so far as they relate to telecommunications operators accessing the assets under their control or the TII fully exploiting such assets: - the Communication Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010; and - the Road Acts.	DCCAE/DTTAS	Q4 2017	This will allow for greater clarity in the processes, timelines and charging regimes in so far as they relate to consents for telecoms operators accessing the assets under TII and local authority control.

Chapter 4: Consumer Issues

Overview of consumer issues

The quality of broadband and mobile phone services vary considerably according to location and type of connection. It is important that consumers are fully aware of the factors that potentially may impact on service quality in their area. Equipping consumers with the right information is an important means of helping them choose the right device and/or provider to maximise the quality of the services that they are paying for. For example, most consumers are unaware of the reasons why they lose mobile phone reception indoors which can be due to a number of factors including building materials (metal, concrete, wood, and particularly insulation), wall density, the number of windows and building height. It is important that consumers take these factors into account when choosing a product or service and that they know their rights if they have a problem.

The Taskforce examined the above issues in great detail, and in each case looked at the current position, the issue at stake and proposed solutions. The following issues were identified as warranting specific focus:

Consumer issues

- **1.** Handset performance can vary considerably based on factors such as:
 - whether it is being used primarily for mobile telephony and/or data services;
 - if it is a smartphone or traditional phone;
 - > its make and model; and
 - > the environment in which the device is being used.

The Taskforce is of the view that consumers are not fully aware of this when purchasing their handset.

In order to ensure that consumers are in a position to make informed decisions, independent information should be provided to consumers on handsets, specifically in terms of handset sensitivity due to antenna performance and network coverage. This information should be available online. The Taskforce also recommends that it be available at the point of sale.

2. Aside from handset performance, consumers need to understand the extent of coverage being offered by different operators in their location. The level of coverage and quality of service received can vary from one operator to the next depending on location. This could significantly impact on the choice of provider that individual's make.

The Taskforce considered how operator coverage information could be provided to consumers and examined models implemented in other jurisdictions. Ofcom (the UK telecoms regulator) provides an online map which allows consumers to compare mobile coverage from all providers at a given location and to check fixed broadband coverage and availability. Users can zoom in on a location or enter a place name or postcode to get data on coverage for each mobile network down to 100 square metres. Each area has a colour coded system to provide visual representation of coverage that is easy to interpret. The map shows voice and data coverage by mobile operator, coverage inside and outside buildings and topographical information which allows users to identify areas where there are naturally occurring obstacles such as hills and valleys. The tool also includes information about whether superfast broadband is available and the average broadband speed in any postcode or location. Ofcom also have a smartphone app available which consumers can use to diagnose whether their home Wi-Fi connection is a cause of a poor broadband connection. Ofcom plan to further develop the online map into a more comprehensive portal for consumers.

The Taskforce recommends that a composite national coverage map be generated from comprehensive network architecture data provided by operators and made available by ComReg in the form of interactive maps on its website.

3. The majority of mobile bill-pay customers are required to sign up to fixed term contracts based on an agreed package that traditionally includes a new handset. If a consumer wants to break a contract because of a change in the quality of coverage or other factors, the cost of being released from the contract should be reflective of the outstanding handset charge and not the full cost of the handset.

A breakdown of contract costs should be made available to consumers at the point of sale. This should include clear details of all costs associated with the contract so that consumers know exactly how much they pay each month for their handset and associated services.

4. There needs to be a clearer understanding amongst consumers that coverage issues must be raised with ComReg in order to empower them to act with operators. ComReg's Consumer Line received approximately 3,000 contacts in respect of service issues in 2016, a number of which were escalated to service providers as formal complaints.

The ComReg website contains details of how consumers can expect to have queries and complaints regarding mobile, internet, and home phone dealt with by the Regulator. Those details can be accessed at https://www.comreg.ie/queries-complaints/

ComReg cannot act on customer complaints with a mobile service provider or an internet provider until the customer has first raised it with their service provider and their complaint handling process has been completed. This is because the main responsibility for resolving a complaint lies with the service provider, as they have the direct relationship with the customer. If the consumer has exhausted avenues of complaint, ComReg can seek to resolve disputes between the consumer and the service provider where the service provider's own dispute resolution process has broken down.

All service providers' complaints procedures should be readily available to consumers on all issues relating to mobile phone and broadband services, and outlined in a clear, easy to follow way.

5. Consumers often purchase services with an expectation that the service will match the advertised headline speeds or service quality, whereas in practice the service can often fail to match up to what was advertised. Alongside this, consumers can often be confused about the service they have signed up to. For example, many consumers are under the impression that they have fibre broadband to their premises when actually they have only have fibre broadband to the cabinet¹². Other consumers will never achieve the up to service that is outlined in the contract and will always have service levels at the lower end of the scale due to the nature of the connection into their premises.

Under EU and national consumer protection legislation¹³ regarding online advertising, and the Code of Standards for Advertising, Promotional and Direct Marketing used by the Advertising Standards Authority of Ireland, businesses are not allowed to make statements that are incorrect or likely to create a false impression. This applies to their advertising, their product packaging, and any information provided by their staff or online shopping services to consumers.

¹² Fibre Broadband to the Cabinet i.e. a fibre optic connection running from the core network (backhaul) through to the local exchange after which it runs to a street cabinet.

¹³ The Consumer Protection Act 2007; S.I. No. 774/2007 - European Communities (Misleading and Comparative Marketing Communications) Regulations 2007; and in line with the Premium Rate Communications Services regulated by ComReg, by way of a Code of Practice, as well as EU rules such as the EC Product Prices Regulations 2002.

It also applies to any statements made by businesses in the media or online, such as testimonials on their websites or social media pages.¹⁴

The Taskforce recommends that the Advertising Standards Authority review advertising in this area. The Taskforce also recommends that operators review their own advertising to ensure they are not creating a false or misleading impression, and also that any consumer who feels they have been misled contact Advertising Standards Authority to enable them to investigate.

6. One of the reasons that industry has given for poor coverage is that operators could not forecast the exponential growth in demand for data in previous years. While demand exceeded the capability of the infrastructure to keep up, it has taken until recently for the networks to be upgraded to the point that they can facilitate existing demand. This is not unexpected given that new infrastructure can take time to progress through the relevant planning authorities.

The Taskforce recognises that using forecasts of future consumer demand for services will allow operators to keep ahead of trends in data usage and therefore be in a position to meet that demand in real time.

The Taskforce recommends that ComReg engage with a suitable third party to produce a publication that sets out a forecast of data traffic.

Examples of forecast items will be:

- 1. Mobile data volumes/speeds
- 2. Fixed broadband connections/speeds

Furthermore, foreign markets that are known "early adopters" will be monitored to provide input. Other developments in early adopter markets should also be noted, e.g. uptake of 5G.

¹⁴ Businesses must also comply with the information requirements of S.I. No. 484/2013 - European Union (Consumer Information, Cancellation and Other Rights) Regulations 2013 and the pricing indication requirements of S.I. No. 639/2002 - European Communities (Requirements To Indicate Product Prices) Regulation 2002.

7. Communications services are important for all citizens in today's connected society. They provide people with access to cultural and educational activities and resources, and to services and commerce. They make it easier to participate in modern society, to learn and develop new skills, to connect with family, friends and community, allow greater independence in terms of independent living, and to search for work. They also allow businesses to engage with a wider range of customers and suppliers and allow citizens to engage easier with public services.

Many older, disadvantaged and disabled people are active users of communications services, but may face difficulties when using services which other people take for granted.

The Taskforce welcomes the proactive approach that operators have taken in this regard, for example, the community outreach and smartphone classes being delivered by Vodafone.

These smartphone classes have been up and running since June of this year. The classes are aimed at people who want to improve their knowledge of smartphones and all their features and have proven most popular with older customers.

The programme is four weeks long, and tends to be held in local libraries. Essentially, the classes focus on four key areas 1) An introduction to smartphone and smartphone features, 2) Getting online – using the internet and applications, 3) how to use key features like Skype and email and 4) how to store photos and files etc. securely.

The Taskforce is of the view that all stakeholders should be more proactive in social inclusiveness and in meeting the specific needs of more vulnerable groups. Initiatives, such as the Vodafone smartphone classes, are strongly encouraged and the taskforce would welcome similar initiatives from all service providers.

There are a number of obligations on service providers in terms of what services they must provide to consumers with a disability. These include:

- Accessible complaints procedures service providers must provide an accessible means to contact customer services, offer the ability to nominate a third party to act on behalf of the customer, and provide trained staff to deal with requirements.
- Accessible top-up facility for pre-paid mobile users service providers are required to provide top-up facilities that do not involve voice prompts, provide a receipt (voucher) that is clear, easy to understand and allows the customer to apply the top-up without assistance, and a confirmation of the top-up without voice prompts must be sent to the customer's mobile phone.

- > Accessible directory enquiries if a customer has a visual impairment, their service provider must offer the use of a directory enquiry service free of charge.
- Accessible facility to test compatibility of terminal equipment or appropriate returns policy – for consumers with hearing difficulties, a service provider must offer a facility to test the terminal equipment in advance of purchasing or have in place a returns policy that allows the equipment be returned because it does not meet specific hearing needs.

The Taskforce welcomes these obligations and actively encourages all stakeholders, especially service providers, to ensure that consumers with disabilities are aware of the options available to them.

As part of the Government's National Digital Strategy, a new Getting Citizens Online Programme was recently introduced. The Programme focusses on encouraging and empowering citizens to participate fully in Ireland's digital economy and society. It includes a grant scheme to fund the provision of basic digital skills training to citizens who have never used the internet with a view to removing a key barrier to digital adoption.

The Digital Skills for Citizens Grant Scheme replaces and builds on the BenefIT Grant Scheme. Its overarching objective is to provide citizens who have never used the internet with the confidence, motivation and skills to reap the benefits of participating in today's digital world. Working in partnership with grant-aided organisations, it is envisaged that annually 25,000-30,000 citizens will be supported to move online.

The Taskforce welcomes this new Programme and is fully supportive of this new initiative and recognises the value it has in stimulating demand for telecommunications services.

In line with Programme for Government commitment to help facilitate the local rollout of commercial and National Broadband Plan infrastructure in each county area, the Taskforce supports the proposal that each local authority develop a local digital strategy. These strategies will ensure that the benefits of infrastructure development under the NBP are fully realised from an economic and social perspective and will help ensure that businesses and communities are in a position to realise the full benefit of the NBP once its rollout is completed across the country.

The Taskforce supports the preparation of local Digital Strategies in each local authority area to support the evolving needs of the Digital society.

Small businesses are the backbone of our towns and villages but less than one in four trade online. With €14,000 now being spent online every minute, businesses need to trade online to grow. It is therefore critical that small businesses, particularly in rural towns, develop an online presence.

The Taskforce is of the view that the €3 million that will be spent in 2017 on the Trading Online Voucher Scheme in association with the 31 Local Enterprise Offices of the local authorities is critical to the future of small businesses. The scheme offers grants of up to €2,500 to small businesses to develop their trading online capacity along with training, mentoring and support. Results for the scheme to date show that small businesses grow sales on average by 20%, increase employment by one third, and three in five begin to export.

ACTIONS TO ADDRESS CONSUMER ISSUES

To deliver on the Taskforce's recommendations the following actions will be taken:

No.	Action	Responsible	Timeline for Delivery	Impacts:
28	ComReg will carry out regular testing to determine the sensitivity of mobile phone handsets on the market. The results will be updated at regular intervals. Industry should consider making this information available at point of sale.	ComReg	Q4 2017	Enhanced consumer information and potential increased competition on key factors such as mobile handset signal performance, leading to better consumer choice.
29	A composite national coverage map will be generated from comprehensive data, including data provided by operators and made available by ComReg on its consumer website.	ComReg	Q4 2018	Consumers will be better informed when choosing providers.
30	In line with provisions in respect of contracts and transparency under the existing Universal Services Regulations, a breakdown of contract costs including monthly handset and services costs will be made available to consumers.	ComReg/ telecommunications operators	Q1 2017	Better awareness amongst consumers of conditions and costs when signing contracts for service.
31	Both Service Providers and ComReg will make their complaints procedures readily available to consumers on all issues relating to mobile phone and broadband Services.	ComReg/ telecommunications operators	Q1 2017	Consumers more aware of their right to complain and the procedures to follow.

No.	Action	Responsible	Timeline for	
			Delivery	Impacts:
32	The Advertising Standards Authority should undertake a review of advertising of telecommunications services. Individual operators should review their own advertising to ensure they are not creating a false or misleading impression.	Advertising Standards Authority/ telecommunications operators	Q4 2017	Greater clarity for consumers in terms of products and services which can be provided to them by operators.
33	ComReg will engage with a suitable third party to produce a publication that sets out a five year forecast of data traffic that is reviewed, updated at regular intervals and made available on ComReg's website. Examples of forecast items include 1. Mobile data volumes/ speeds 2. Fixed broadband connections/speeds.	ComReg/ telecommunications operators	Ongoing	Better network planning by operators to ensure they keep pace with consumer demand for services.
34	Adequate funding will be made available to support the commitment in the Programme for a Partnership Government to accelerate the rollout of infrastructure including funding to local authorities to assign officers with responsibility for broadband.	DAHRRGA	Ongoing	The exchequer resources, which are necessary, to roll out high speed broadband will be made available and provide certainty to operators to encourage their own investments.

No.	Action	Responsible	Timeline for Delivery	Impacts:
35	Mobile network operators will be more proactive in social inclusiveness and in meeting the specific needs of more vulnerable groups.	Telecommunications operators	Ongoing	Increased engagement by operators will allow all citizens to participate in modern society by learning and developing new skills, connecting with family, friends and community, allowing greater independence in terms of independent living, and to search for work.
36	Local digital strategies will be developed in each Local Authority Area to ensure that the benefits of infrastructure development under the NBP are fully realised from an economic and social perspective.	DAHRRGA, DCCAE/ local authorities	12 Months	Local digital strategies will help ensure that businesses and communities are in a position to realise the full benefit of the NBP once it is rolled out across the country.

Chapter 5: Network Improvement

Overview of network improvement

Network performance is of fundamental importance to the level and quality of service provided by the operators to consumers. Optimising performance to take account of changing demands, weather conditions, line problems and available relevant data are key factors in ensuring that the ongoing increase in demand on the networks can continue to be met. It is imperative that operators actively manage their networks through constant evaluation and optimisation. Failure to adequately manage networks will often lead to a poor user experience and service complaints to the operator or to ComReg.

Enhanced network performance has a key role to play in delivering wider benefits to consumers. For example, in terms of road safety from 31st March 2018, all new cars must be equipped with an "eCall device". An eCall device will trigger an emergency call in the event of a collision. Information on the accident, especially the location, will be sent to the emergency services. All mobile network operators will treat these emergency calls in the same way as any other emergency call. The difference is that the emergency services will be able to locate the vehicle from coordinates transmitted by the eCall device. A non-responsive driver will not hamper the efforts of the emergency services.

The Taskforce examined in considerable detail issues related to network performance, with the sub-group bilaterally meeting the three providers. In each case the Taskforce looked at the current position, the issues and proposed solutions. The following issues were identified as warranting specific focus:

Network improvement issues

1. With network optimisation so important to the efficient functioning of the mobile networks, combined with the fact that the operators are constantly fixing, improving and upgrading their network, the Taskforce believes that there is a need for greater clarity on what activities are undertaken on a quarterly basis in order to ensure that licence conditions are being met and service quality is being maintained.

The mobile network operators should report quarterly to the Taskforce Implementation Group on activities undertaken to optimise the performance of their networks.

2. The Taskforce recognised early on that there is a requirement to consider the use of mobile phone repeaters, mainly in rural areas, to enhance signal quality. The Taskforce explored this issue in some detail and it became apparent that there were very few solutions open to consumers to overcome the problem of poor indoor signal quality. The conclusion reached was that there is a clear need for a transparent regime that would allow for the orderly installation of suitable mobile phone repeaters which would go some way towards addressing the problem of indoor coverage issues. The repeaters should be to a recognised standard which does not interfere with other wireless infrastructure locally.

ComReg should develop a licensing scheme allowing the use of accredited mobile phone repeaters to help address the issue of indoor coverage, particularly in rural areas.

3. Throughout the Taskforce's deliberations a number of issues, such as WiFi calling and Voice over Long Term Evolution (VoLTE), arise as having the potential to significantly improve the quality of service being provided to consumers and potentially having a positive impact on customer experience. WiFi calling uses home wifi networks to make and receive calls or data. Enabling this feature would provide for the use of a person's internet connection rather than relying on mobile phone reception, which can be negatively impacted by insulation etc. Voice over LTE allows the use of spectrum that would normally be reserved for data usage rather than spectrum such as 3G that is typically used for voice calls. Calls made over VoLTE can use more bandwidth in order to make higher quality audio for both parties.

All operators should introduce WiFi calling, VoLTE and other network feature and functionality enhancements at the earliest juncture and report on progress to the Taskforce Implementation Group.

4. Operators were clear in their messaging to the Taskforce that there are some areas of the country that will always have to endure a poor quality of service. This is either because of local planning issues that preclude the appropriate siting of telecommunications infrastructure or simply because there is not sufficient demand to make it economically viable for operators to invest in those areas. As a consequence, the Taskforce recommends that a review be undertaken to establish the extent of blackspots being experienced across the country and to identify what can be done to rectify them.

A review will be undertaken to determine what, if any, initiatives are needed to address the issue of blackspots. If it is determined that a need exists, consideration should be given to the form of initiatives, which the Government and/or ComReg might take, having regard to the various innovative options available.

5. The Taskforce recognises that the operators are constantly striving to improve their networks and address any issues that may occur in a timely manner. There was a clear sense from the deliberations that the operators needed to do more to communicate the efforts they are making, particularly at a local level to highlight improvements in service quality.

The Taskforce is aware that commercial operators are constantly striving to optimise customer experience by improving their networks. It is important that the public is made aware of these efforts and investments which will demonstrate that operators are constantly working towards optimising their networks.

6. Similar to the previous recommendation, the Taskforce believes that there is merit in the wireless and fixed network operators also providing details on network improvements in the areas that they currently serve.

That wireless and fixed network operators should provide quarterly updating reports to ComReg and the Taskforce Implementation Group on progress made on network improvements.

ACTIONS TO ADDRESS NETWORK IMPROVEMENT ISSUES

To deliver on the Taskforce's recommendations the following actions will be taken:

No.	Action	Responsible	Timeline for Delivery	Impact
37	Comreg will develop a licensing scheme allowing the use of mobile phone repeaters to help address the issue of indoor coverage, particularly in rural areas.	ComReg	Commence Q2 2017	Improve the quality of indoor mobile coverage, particularly in rural areas.
38	Wireless and fixed network operators will report quarterly to the Taskforce Implementation Group on activities undertaken to optimise the performance of their networks.	Telecommunications operators	Ongoing (First report by Q2 2017)	Greater awareness of network improvements with consumers informed of upgrades in their areas.
39	All operators will introduce WiFi calling, VoLTE and other network feature and functionality enhancements at the earliest juncture and report on progress to the Taskforce Implementation Group.	Telecommunications operators	Ongoing (First report by end Q2 2017)	Consumer experience improved by optimising Innovative technology.
40	A review will be undertaken to address the issue of blackspots to include recommendations on initiatives to address the issue, taking account of the various innovative options available.	DCCAE	Q2 2017	Potential actions brought forward that will address the issue of blackspots.

Chapter 6: Conclusions and Next Steps

The global digital transformation currently underway requires a proactive response to ensure that we are ready to embrace a digital society. Technology in the telecommunications sphere is constantly evolving, with the pace of change seemingly increasing year on year. We must keep abreast of the new and innovative products and services required to support high performance internet and mobile connectivity in the Digital Single Market, and improve our understanding of how best to configure existing networks and devices. This is a complex and challenging task and one which we must prioritise to support a robust digital economy to deliver more competition, lower prices and more choice for businesses and residential consumers alike.

The Mobile Phone and Broadband Taskforce was established in order to identify solutions that could immediately improve users' experience of mobile phone and broadband services throughout Ireland. This has been the guiding principle throughout all of the discussions held to date by the Taskforce as well as with key stakeholders, including the telecommunication operators.

Many of the actions that are included in this report will address underlying issues that impact on the ability of the telecommunication operators to deliver improved services, particularly in rural areas. While at times it can be difficult to reconcile planning and development regulations with the ability to make or receive a mobile phone call in rural Ireland, these are very real issues that will make a substantive difference to users nationwide.

The Taskforce is advocating a total of 40 actions, including a number of key priority actions to be implemented over the next twelve months. The next twelve months will see tangible progress on a number of fronts, including in relation to the procurement currently in train to complete a contract for the National Broadband Plan, the scheduling of an auction for the 3.6 Ghz spectrum band and enhanced cooperation between operators, the Regulator and State bodies. This will be a seminal moment for Ireland, not just from an economic perspective, but also from the social benefits that it can bring.

From a consumer perspective, the work that ComReg will do to develop a mobile phone coverage map will be hugely important – particularly viewed in tandem with the results of the mobile handset testing programme that ComReg is planning. For the first time, consumers

will be in a position to independently judge what handset is right for their specific needs, wherever they live or work. We anticipate that this will bring about a huge change in the market.

ComReg has published a strategy which could see spectrum being made available for wireless broadband delivery increasing by almost 200% by 2019. The release of the 3.6 GHz band in early 2017, combined with the future release of the 700 MHz band, with its favorable characteristics for the provision of both wide area and indoor coverage, as well as the anticipated release of further spectrum, will go a long way to meeting the increasing demand for mobile data.

The Taskforce recognises that the rollout of improved mobile telecommunications infrastructure has been slowed due to the relevant planning exemptions not being updated since 2001. Amending the existing exemptions to allow for larger equipment (e.g. antenna size, dimensions of equipment etc.) will allow for prompt deployment of relevant equipment and save valuable time in local authority planning departments. This will be of great benefit for rural areas.

In order to ensure that all of the actions that the Taskforce has identified are implemented in a prompt and efficient manner, an Implementation Group will be led by the Departments of Communications, Climate Action and Environment, and Arts, Heritage, Regional, Rural and Gaeltacht Affairs. The Implementation Group will be charged with ensuring that the valuable momentum generated through this process is maintained, and that all actions are delivered. Considering the range of public sector and private sector organisations required to implement the Action Plan, progress will be informed through ongoing engagement with these partners.

The Implementation Group will report every 90 days to the Ministers for Communications, Climate Action and Environment and Arts, Heritage, Regional, Rural and Gaeltacht Affairs, who will jointly brief the Cabinet on progress made. In addition, the Implementation Group will carry out a fundamental review of progress made after 12 months and will also be mandated to recommend further actions that would result in an improved service for consumers.

The Taskforce is determined that, pending full implementation of the National Broadband Plan, the combined effect of the collaborative actions set out in this report will have a real and positive impact on the everyday lives of citizens and on the ability of State and local government bodies, and businesses to operate effectively across Ireland. Continuing to tackle existing and emerging problems on a dynamic basis is essential to support competitiveness and innovation and allow us all to achieve the full benefits of the Digital Single Market.

Appendices



Appendix 1

The Membership of the Taskforce is as follows:

Member	Organisation
Denis Naughten, T.D. (Co-Chair)	Minister for Communications, Climate Action and Environment
Heather Humphreys, T.D. (Co-Chair)	Minister for Arts, Heritage, Regional, Rural and Gaeltacht Affairs.
Katherine Licken, Assistant Secretary (Working Co-Chair)	Department of Communications, Climate Action and Environment
William Parnell, Assistant Secretary (Working Co-Chair)	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
Mairead McCabe, Principal Officer	Department of Communications, Climate Action and Environment
Stjohn O'Connor, Principal Officer	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
Patrick Neary, Chief Technology Officer	Department of Communications, Climate Action and Environment
Dave Walsh, Assistant Secretary	Department of Housing, Planning, Community and Local Government
Ray O'Leary, Assistant Secretary	Department of Transport, Tourism and Sport
Pat Gallagher, Chief Executive	Chairman CCMA and CE Westmeath County Council
Tommy Ryan, Chief Executive	CE Cavan County Council
Geoffrey Gray, Policy Analyst	Competition and Consumer Protection Commission
Pat Maher, Director of Network Management	Transport Infrastructure Ireland
John Sydenham, Commissioner	Office of Public Works
Martin Bourke, Principal Officer	Office of Public Works
John K Dillon, Senior Financial Adviser	NewERA

Member	Organisation
Seamus Boland, CEO	Irish Rural Link Ltd
Mary MacNamara	Irish Country Women's Association
Linda Doyle, Director of CTVR (Computer Science)	Professor of Engineering and the Arts (Electronic and Electrical Engineering), Trinity College Dublin
John Martin, Former Principal Planning Adviser	Department of Environment, Community and Local Government
Prof. Cathal O'Donoghue	Teagasc Rural Economy and Development Programme
Paul Madden	Enterprise Champion - Midlands Action Plan for Jobs
Clodagh Cavanagh	Abbey Farm Machinery, Business Representative

Observer

Gerry Fahy, Commissioner	Commission for Communications Regulation
	(ComReg)

Secretariat

Ciara Bates, Johnny Gorman, Laure Garcia, Aisling Penrose	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs
Neasa Lehane, Ian Price	Department of Communications, Climate Action and Environment

Appendix 2

Terms of reference for the Mobile Phone and Broadband Taskforce

Objectives

The objective of the Taskforce is to provide immediate solutions to mobile voice and broadband deficits in Ireland. It aims to alleviate telecommunications service deficits, particularly in rural Ireland, prior to full build and rollout of the network which is planned under the National Broadband Plan State intervention.

Terms of Reference

The Terms of Reference for the Taskforce are:

- > To identify and recommend practical actions that can be taken in the short-term to improve mobile reception and broadband access in Ireland, in consultation with Government Departments, local authorities, ComReg, State agencies, industry and other key stakeholders; and
- > To report to Government by the end of 2016 with a set of recommendations and actions to improve mobile reception and broadband access. The report will set out proposed timelines, and the legislative, budgetary or other implications for the prompt delivery of the recommendations and actions.

The Taskforce will consult and engage with telecoms industry representatives in order to identify and address barriers to infrastructure and service deployment and to identify solutions which can be implemented in the short, medium and long term.

The work of the Taskforce will assist local authorities in preparing for the rollout of the new National Broadband Plan network once contract(s) are in place in 2017. It will also address mobile phone reception issues.

Frequency of meetings and Secretariat

It is intended that the Taskforce will meet on a monthly basis up to December 2016 with a view to reporting to the Government by the end of the year.

The Secretariat to the Taskforce will be provided by the DAHRRGA, supported by the DCCAE.

Sub-Groups

The Taskforce may establish Sub-Groups to help progress its work. Each sub-group will be supported by either DCCAE or DAHRRGA.

Sub-Groups may co-opt additional members from outside the main Taskforce to assist in their work. The Secretariat in DAHRRGA should be advised of any additional members who it is proposed to co-opt onto a Sub-Group.

Appendix 3

Mobile Phone and Broadband Taskforce **Table of Actions**

Stra	Strategic Planning			
No.	Action	Responsible	Timeline for Delivery	Impact
1	Hold an annual forum for all stakeholders to discuss issues impacting on the rollout of telecoms infrastructure.	Department of Communications, Climate Action and Environment/ Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	Q4 2017	Earlier identification and resolution of issues impacting on the rollout of telecommunications services.
2	Department of Housing, Planning, Community and Local Government and the Department of Communications, Climate Action and Environment will work to bring forward the necessary legislation to ensure that all new builds are broadband enabled, including mandating that ducting is in place to facilitate connection to high-speed networks.	Department of Housing, Planning, Community and Local Government/ Department of Communications, Climate Action and Environment	Q4 2017	If high speed broadband is included in building regulations, the requirement to facilitate installation in future new build homes and businesses will be a given.

No.	Action	Responsible	Timeline for Delivery	Impact
3	Department of Arts, Heritage, Regional Rural and Gaeltacht Affairs will fund all local authorities to assign an officer with responsibility for broadband to act as the single point of contact for engagement with operators to assist with accelerated rollout of the National Broadband Plan and create awareness of/stimulate demand for broadband services.	Local authorities/ Department of Arts, Heritage, Regional Rural and Gaeltacht Affairs	Q1 2017	A dedicated and single point of contact in each local authority will ensure consistency in engagement with operators and assist the rollout of telecommunications infrastructure.
4	Run a public awareness campaign on all aspects of the National Broadband Plan and the work of the Taskforce.	Department of Communications, Climate Action and Environment/ Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	Q1/Q2 2017	Consumers will be better informed of the progress being made to improve the quality and availability of broadband and mobile phone services.
5	In line with the Programme for Government commitment, the Government will ensure that appropriate funding is made available to support the timely rollout of the National Broadband Plan.	Government	Ongoing	Timely rollout of the National Broadband Plan to the State intervention areas, improving access to high speed broadband to domestic and business users.

No.	Action	Responsible	Timeline for Delivery	Impact
6	Establish an Implementation Group led by officials of Department of Communications, Climate Action and Environment and Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs in order to ensure that the actions identified by the Taskforce are implemented and reported on to Government.	Department of Communications, Climate Action and Environment/ Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	Q1 2017	Implementation of the actions recommended by the Taskforce will be closely monitored and reported to Government.

Pla	Planning and Licensing			
No.	Action	Responsible	Timeline for Delivery	Impact
7	Review the statutory planning guidelines (Telecommunications and Antennae and Support Structures Guidelines (1996) – updated October 2012), in conjunction with telecoms industry representatives and other relevant stakeholders.	Department of Housing, Planning, Community and Local Government	Q4 2017	Consistency in interpretation and implementation of guidelines by local authorities; Guidelines will keep a pace with newer forms of technology.
8	All remaining local authorities to be fully compliant with the Development Contributions Guidelines for planning authorities, issued by the Department of Housing, Planning, Community and Local Government in January 2013.	Department of Housing, Planning, Community and Local Government/ local authorities	Q1 2017	No development contributions will be charged for the placement of telecommunications infrastructure. This frees up capital, enabling further investment in infrastructure.

No.	Action	Responsible	Timeline for Delivery	Impact
9	Revised Exempted Development Regulations will immediately be brought forward to the Oireachtas.	Department of Housing, Planning, Community and Local Government	Q1 2017	A broader range of telecommunications infrastructure will be exempted from planning requirements, subject to the principles of proper planning and sustainable development, which will ultimately enable enhanced coverage for the delivery of telecommunication services.
10	Telecommunications operators will engage with Transport Infrastructure Ireland and local authorities in order to ensure that the Green Book is actively used to identify specific access sites. The Green Book will be reviewed, if necessary, in light of the experience gained from this engagement.	Department of Transport, Tourism and Sport/Transport Infrastructure Ireland/ local authorities/ telecommunications operators	Q2 2017	Actively using the Green Book will ensure a more structured dialogue between operators and the relevant planning authorities to identify fit-for-purpose Icoations for telecoms infrastructure along roadways.
11	Ensure that broadband and mobile phone infrastructure providers have access to new online facilities for planning applications as part of the new e-planning arrangements.	Department of Housing, Planning, Community and Local Government/ local authorities/ Local Government Management Agency	Q3 2017	A more accessible and efficient planning application process in relation to broadband and mobile phone infrastructure saving time and reducing costs for local authorities and telecoms operators.

No.	Action	Responsible	Timeline for Delivery	Impact
12	The Department of Housing, Planning, Community and Local Government to explore the potential of introducing smart, innovative and cost effective solutions- based problem solving approach in respect of planning.	Department of Housing, Planning, Community and Local Government	Q4 2017	More innovative approaches to planning will reflect the pace of economic, social and technological change while at the same time respecting the environment and needs of the wider communities.
13	The Northern and Southern Broadband Regional Action Groups will review and address barriers [within their remit] identified by Stakeholders as impacting on the rollout of telecommunications infrastructure in partnership with the local government sector.	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs/local authorities	Q1 2017 – establish sub-group of Regional Action Groups Q3 2017 – Standardised approach agreed by local authorities	More standardised, efficient and consistent application processes in relation to broadband and mobile phone infrastructure supporting the rollout of the National Broadband Plan.

Ac	Access to Infrastructure			
No.	Action	Responsible	Timeline for Delivery	Impact
14	Non-commercial State bodies will ensure that no impediments are placed in the way of reasonable access to State-owned property.	Non-commercial State bodies	Ongoing	State assets will be optimised to rollout strategically placed telecommunications infrastructure, which will lead to improved coverage.
15	Non-commercial State bodies to consider nominating a single point of contact to engage with telecommunications operators.	Non-commercial State bodies	Q2 2017	This will provide a direct contact route into non-commercial State bodies for operators.

No.	Action	Responsible	Timeline for Delivery	Impact
16	Non-commercial State bodies and local authorities will publish maps of available ducts, where possible.	Transport Infrastructure Ireland/local authorities/ non-commercial State bodies	Q4 2017	Better planning and more cost effective infrastructure deployment by operators by using existing infrastructure where possible.
17	Telecommunications operators should identify, in consultation with local communities where appropriate, optimal locations/areas in which they require additional infrastructure to improve coverage prior to engaging with local authorities and non-commercial State bodies. Industry will then engage with the single point of contact to scope and manage any issues and risks associated with site selection.	Local authorities/ local communities/ Non-commercial State bodies/ telecommunications operators	Q1 2017	Greater consensus around site selection for telecoms infrastructure and mitigation of planning delays.

No.	Action	Responsible	Timeline for Delivery	Impact
18	The dedicated agency established for the management of the National Broadband Plan contract(s) and the management of all of the State's commercial communications contracts to be the nominated single entity tasked with the provision of advice and assistance to noncommercial public sector bodies, as appropriate, in their engagement with telecommunications operators seeking access to and use of such State-owned property in the rollout of telecommunications infrastructure and services.	Department of Communications, Climate Action and Environment	When the entity to manage the National Broadband Plan contract is formally established and operational.	Non-commercial State bodies will benefit from expertise in telecommunications contract management.
19	The Department of Communications, Climate Action and Environment will explore whether take up of the Metropolitan Area Networks can be improved including a review of the pricing and other arrangements relating to connections to the Metropolitan Area Networks.	Department of Communications, Climate Action and Environment	Q2 2017	Metropolitan Area Networks products and services are provided on an open access, equality of treatment and non- discriminatory basis.

No.	Action	Responsible	Timeline for Delivery	Impact
20	The Department of Transport, Tourism and Sport will review the Guidelines for Managing Openings in Public Roads (Purple Book) on an ongoing basis and, building on existing arrangements, will establish an appropriate stakeholder forum to provide for a clear and transparent engagement process for formal dialogue between the relevant stakeholders in relation to road openings.	Department of Transport, Tourism and Sport	Ongoing	Early identification and resolution of road opening issues as they arise.
21	The Department of Transport, Tourism and Sport will strengthen the existing multi-sector group to steer and oversee/ monitor the progress of the road opening licensing system and stakeholder forum and to examine solutions to barriers identified by Stakeholders as impacting on the rollout of telecommunications infrastructure and utility works (including a nationally agreed pricing framework).	This group will comprise senior officials from the Department of Transport, Tourism and Sport, the Department of Communications, Climate Action and Environment, the Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs and the Department of Housing, Planning, Community and Local Government	Q1 2017	A consistent approach to the application of the Purple Book on an ongoing basis including the charges applicable across all local authorities, providing clarity and consistency to operators in the licensing process.

No.	Action	Responsible	Timeline for Delivery	Impact
22	The MapRoad Roadworks Licensing System will be utilised by all local authorities and road opening licencing applicants as the single national centralised road opening licensing system.	Department of Transport, Tourism and Sport/local authorities/ telecommunications operators	Q2 2017	A more efficient and standardised application process will be in place across local authorities in relation to road openings.
23	A training and communications programme will be developed and rolled out to local authorities and telecommunications operators to support the implementation of the Purple Book.	Department of Transport, Tourism and Sport/local authorities	Q2 2017	A consistent approach will be followed in the application of the Purple Book standards.
24	Transport Infrastructure Ireland will bring forward revised charges in relation to duct access and report on the cost of access to the Taskforce Working Group within six months and annually thereafter.	Transport Infrastructure Ireland	Q2 2017	More cost effective process allowing for better and easier access to Transport Infrastructure Ireland ducts and encouraging prompt development of telecommunications infrastructure by operators.
25	Transport Infrastructure Ireland will work towards aligning the reinstatement requirements in the Transport Infrastructure Ireland standards with those in the revised Purple Book where appropriate. Transport Infrastructure Ireland will report to the Taskforce Working Group on progress at six monthly intervals until the task has been completed.	Transport Infrastructure Ireland	Q4 2017	Consistency in reinstatement requirements across the road network.

No.	Action	Responsible	Timeline for Delivery	Impact
26	Transport Infrastructure Ireland will work to complete the duct installation on 95km of roadway on the M7/M8 corridor between Dublin and Cork.	Transport Infrastructure Ireland	Q2 2017	Gaps will be filled in ducting on the M7/M8 motorway resulting in operators being able to deploy end-to-end infrastructure.
27	Review the legislation governing Transport Infrastructure Ireland's and the road authorities' statutory roles and functions in so far as they relate to telecommunications operators accessing the assets under their control or the Transport Infrastructure Ireland fully exploiting such assets: - the Communication Regulation (Premium Rate Services and Electronic Communications Infrastructure) Act 2010; and - the Road Acts.	Department of Communications, Climate Action and Environment/ Department of Transport, Tourism and Sport	Q4 2017	This will allow for greater clarity in the processes, timelines and charging regimes in so far as they relate to consents for telecoms operators accessing the assets under Transport Infrastructure Ireland and local authority control.

Coi	Consumer Issues				
No.	Action	Responsible	Timeline for Delivery	Impact	
28	ComReg will carry out regular testing to determine the sensitivity of mobile phone handsets on the market. The results will be updated at regular intervals. Industry should consider making this information available at point of sale.	ComReg	Q4 2017	Enhanced consumer information and potential increased competition on key factors such as mobile handset signal performance, leading to better consumer choice.	

No.	Action	Responsible	Timeline for Delivery	Impact
29	A composite national coverage map will be generated from comprehensive data, including data provided by operators and made available by ComReg on its consumer website.	ComReg	Q4 2018	Consumers will be better informed when choosing providers.
30	In line with provisions in respect of contracts and transparency under the existing Universal Services Regulations, a breakdown of contract costs including monthly handset and services costs will be made available to consumers.	ComReg/ telecommunications operators	Q1 2017	Better awareness amongst consumers of conditions and costs when signing contracts for service.
31	Both service providers and ComReg will make their complaints procedures readily available to consumers on all issues relating to mobile phone and broadband Services.	ComReg/ telecommunications operators	Q1 2017	Consumers more aware of their right to complain and the procedures to follow.
32	The Advertising Standards Authority should undertake a review of advertising of telecommunications services. Individual operators should review their own advertising to ensure they are not creating a false or misleading impression.	Advertising Standards Authority/ telecommunications operators	Q4 2017	Greater clarity for consumers in terms of products and services which can be provided to them by operators.

No.	Action	Responsible	Timeline for Delivery	Impact
33	ComReg will engage with a suitable third party to produce a publication that sets out a five year forecast of data traffic that is reviewed, updated at regular intervals and made available on ComReg's website. Examples of forecast items include 1. Mobile data volumes/ speeds 2. Fixed broadband connections/speeds.	ComReg/ telecommunications operators	Ongoing	Better network planning by operators to ensure they keep pace with consumer demand for services.
34	Adequate funding will be made available to support the commitment in the Programme for a Partnership Government to accelerate the rollout of infrastructure including funding to local authorities to assign officers with responsibility for broadband.	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs	Ongoing	The exchequer resources, which are necessary, to roll out high speed broadband will be made available and provide certainty to operators to encourage their own investments.
35	Mobile network operators will be more proactive in social inclusiveness and in meeting the specific needs of more vulnerable groups.	Telecommunications operators	Ongoing	Increased engagement by operators will allow all citizens to participate in modern society by learning and developing new skills, connecting with family, friends and community, allowing greater independence in terms of independent living, and to search for work.

No.	Action	Responsible	Timeline for Delivery	Impact
36	Local digital strategies will be developed in each local authority area to ensure that the benefits of infrastructure development under the National Broadband Plan are fully realised from an economic and social perspective.	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, the Department of Communications, Climate Action and Environment/local authorities	12 Months	Local digital strategies will help ensure that businesses and communities are in a position to realise the full benefit of the National Broadband Plan once it is rolled out across the country.

Ne	Network Improvement				
No.	Action	Responsible	Timeline for Delivery	Impact	
37	Comreg will develop a licensing scheme allowing the use of mobile phone repeaters to help address the issue of indoor coverage, particularly in rural areas.	ComReg	Commence Q2 2017	Improve the quality of indoor mobile coverage, particularly in rural areas.	
38	Wireless and fixed network operators will report quarterly to the Taskforce Implementation Group on activities undertaken to optimise the performance of their networks.	Telecommunications operators	Ongoing (First report by Q2 2017)	Greater awareness of network improvements with consumers informed of upgrades in their areas.	
39	All operators will introduce WiFi calling, VoLTE and other network feature and functionality enhancements at the earliest juncture and report on progress to the Taskforce Implementation Group.	Telecommunications operators	Ongoing (First report by end Q2 2017)	Consumer experience improved by optimising Innovative technology.	
40	A review will be undertaken to address the issue of blackspots to include recommendations on initiatives to address the issue, taking account of the various innovative options available.	Department of Communications, Climate Action and Environment	Q2 2017	Potential actions brought forward that will address the issue of blackspots.	

Glossary

CCMA

County and City Management Association

ComReg

Communications Regulator

DAHRRGA

Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs

DCCAE

Department of Communications, Climate Action and Environment

DHPCLG

Department of Housing, Planning, Community and Local Government

DTTAS

Department of Transport, Tourism and Sport

FTTH

Fibre to the home

FTTP

Fibre to the premises. Describes a network architecture where optical fibre is used to deliver connectivity right up to the end user premises.

FWA

Fixed wireless access. Describes a type of network architecture where the final connection to the end user premises is made with a radio link.

ICT

Information & Communications Technology

Intervention Area

The area of the country which will require State intervention to bring about the deployment of high speed Broadband services.

LA

Local Authority

LGMA

Local Government Management Agency

MANs

Metropolitan Area Networks

Mbps

Megabits per second

MRL

MapRoad Roadworks Licensing

NBP

National Broadband Plan

Ofcom

UK telecoms regulator

QoS

Quality of Service. A set of standards and mechanisms for ensuring a given quality of performance of services provided over the network.

RMO

Road Management Office

RSP

Retail service providers. Firms that sell retail products to end users. They do not necessarily have their own network infrastructure.

SBIR

Small Business Innovation Research

TII

Transport Infrastructure Ireland

VoLTE

Voice over Long Term Evolution

WNP

Wholesale network provider



