



Commission for
Communications Regulation

Information Notice

Developing a Next Generation Network (NGN) Regulatory Framework

Proposed Work Programme

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1 Foreword

With the market rapidly changing from traditional voice based products to one that can support a wide range of data driven media applications a new operational structure is required. Next Generation Networks (NGNs), a general term for new technologies which are being integrated into, and progressively replacing, existing legacy telecom networks, are leading this transformation and will form the core of this new environment for digital media transmission. NGNs will enable the delivery of multiple applications over a single infrastructure, thereby enabling end-users to access voice, data, video and new and emerging media applications over the same network.

In contrast to existing legacy networks with their dedicated and vertically integrated platforms for each separate service, NGNs have a layered architecture which facilitates the delivery of multiple services over a single infrastructure. With fewer network elements, simpler service management and more rapid implementation of new services, network operators are increasingly recognising the potential cost savings and richer customer experience that can be provided by consolidating their networks into a single NGN infrastructure.

Investment in these new networks can deliver significant benefits to both the industry and end-users and ComReg is committed to creating the conditions that can facilitate the development of competitive, efficient and innovative NGN services in Ireland. However, the path to large-scale NGN deployment is still characterised by uncertainty, with limited global experience of NGN migrations to date. Throughout Europe, regulators and policy-makers are still grappling with how best to facilitate NGN deployment and to deal with the many opportunities and challenges it will present. Early consideration of the issues involved therefore is vital as it means that regulators can be informed and ready to respond to any detailed proposals that may arrive from market players.

I am pleased to announce that ComReg is initiating a work programme aimed at facilitating a better understanding of the implications of NGN deployments for industry and consumers and establishing what if any the appropriate regulatory framework for future NGN deployment would be in an Irish context. I hope that the industry will fully engage in this process and I look forward to our future co-operation.

**Isolde Goggin,
Chairperson**

2 Introduction

The International Telecommunications Union defines a Next Generation Network (NGN) as:

A packet-based network able to provide Telecommunication Services to users and able to make use of multiple broadband, QoS-enabled transport technologies and in which service-related functions are independent of underlying transport-related technologies. It enables unfettered access for users to networks and to competing service providers and services of their choice. It supports generalised mobility which will allow consistent and ubiquitous provision of services to users¹.

Encompassing technologies such as fibre, softswitches and software-based platforms, NGNs are increasingly facilitating the blending of public switched telephone networks (PSTN) and public switched data networks into a single multi-purpose, IP-based network². Over time this network consolidation is expected to result in fewer network elements, simpler service management and more rapid provisioning of new services. For network operators, the economies of scope in a single converged network creates opportunities for more efficient use of network resources, flexible provisioning of new services and the seamless delivery of services and content across multi-access platforms. For end-users, this in turn offers the prospect of increased value, wider product choice, greater personalisation of services and an overall richer customer experience.

2.1 Challenges of NGN

To maximise these potential benefits of NGNs, ComReg is mindful of the need to develop a competitive, efficient and innovative communications market. Hence, whilst ComReg recognises the many benefits that NGNs can bring, it also recognises that the industry's migration towards NGNs will raise fundamental questions regarding the future nature and scope of regulation. Foremost amongst these is how regulation can best incentivise investment in NGN infrastructure while still meeting its objective to promote competition. Additionally, ComReg must be mindful that consumer rights continue to be protected and that general public interests are also provided for in an NGN environment. To address these and other matters, ComReg is initiating an

¹ ITU Recommendation Y.2001 (12/2004)

² When fully implemented, it is anticipated that NGNs will facilitate large-scale cost-effective delivery of voice, data and video services over a single IP-based infrastructure.

NGN work programme which will be seeking stakeholder input on a broad range of NGN-related issues including:

- ▶ Operators' migration strategies, timelines and potential retail offerings;
- ▶ Asymmetric regulatory issues³ including the technical and competition implications of NGN migration for future access and interconnect arrangements;
- ▶ Symmetric regulatory issues⁴ including continuing protection for end-user interests and rights.
- ▶ Possible industry mechanisms for facilitating future technical and commercial discussions on NGN related issues.

³ i.e. regulatory obligations that apply only to players with Significant Market Power (SMP) in markets which are not yet effectively competitive

⁴ i.e. regulatory obligations that apply equally to all providers of certain services.

3 Goals and Objectives

In exercising its functions in relation to the electronic communications sector, ComReg is required to have regard to its statutory objectives as set out in Section 12 of the Communications Act 2002. These objectives require ComReg:

1. To promote competition;
2. To contribute to the development of the internal market; and
3. To promote the interests of end-users within the Community.

In working towards these statutory objectives, ComReg believes that a key goal over the coming year(s) will be to create the conditions that facilitate the timely development of competitive, efficient and innovative NGN services. To this end, ComReg is initiating a work programme which seeks to establish a set of policy principles that will guide us in the context of what, if anything, the appropriate regulatory environment should be. ComReg hopes that these policy principles can form the basis of an overall regulatory framework which will facilitate the introduction and implementation of NGNs in Ireland.

Key objectives for this NGN work programme will be:

- To frame the industry discourse on NGNs;
- To provide a common understanding of the key regulatory issues
- To establish the foundation for their detailed implementation.

4 Next Steps

Over the coming weeks ComReg will be inviting industry stakeholders to engage individually with it to garner their views on a range of NGN-related issues. ComReg intends to use the insights gathered during these discussions to augment its view on a set of possible NGN policy positions which in turn will inform what if any the regulatory framework for NGN deployment should be. Pending the outcome of these discussions, ComReg will consider the scope and requirements for publicly consulting on NGN matters that ensue from this process. ComReg intends to provide the industry with regular updates on the progress of its NGN work programme.