



An Coimisiún um  
**Rialáil Cumarsáide**  
Commission for  
**Communications Regulation**

## **Implementation of Decision D15/18 on Non-Geographic Numbers (NGNs)**

**Analysys Mason document - Implementation  
and Communications Plan**

**Reference:** ComReg 19/65a

**Version:** Final

**Date:** 25/06/2019



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Background and context	1
1.2	Purpose of this document	2
1.3	Document structure	3
<b>2</b>	<b>Scope of changes and high level timescales</b>	<b>4</b>
2.1	Introduction	4
2.2	Geo-Linked retail tariff	4
2.3	Number range consolidation	4
2.4	Development of INA Solution	5
2.5	Other related activities	7
<b>3</b>	<b>Overall plan</b>	<b>9</b>
3.1	Introduction	9
3.2	Project Gantt chart	10
<b>4</b>	<b>Task breakdown and descriptions</b>	<b>11</b>
4.1	Introduction	11
4.2	Overarching NGN information campaign	12
4.3	Geo-Linked retail tariff condition	15
4.4	Development of INA Solution	18
4.5	Number range consolidation	22
<b>5</b>	<b>Plan monitoring and control</b>	<b>29</b>
5.1	Introduction	29
5.2	Plan execution	29
5.3	Monitoring and control measures	29
5.4	Future considerations	29
Annex A	INA System Process Flow	
Annex B	Criteria for identifying emergency contact NGNs	
Annex C	Summary of future considerations	

---

Copyright © 2019. Analysys Mason has produced the information contained herein for the Commission for Communications Regulation (ComReg). The ownership, use and disclosure of this information are subject to the Commercial Terms contained in the contract between Analysys Mason and ComReg.

---

Analysys Mason Limited  
Suite 242  
The Capel Building  
Mary's Abbey  
Dublin 7  
D07 R6F3  
Ireland  
Tel: +353 1 602 4755  
dublin@analysysmason.com  
www.analysysmason.com  
Registered in Ireland IR304061

# 1 Introduction

## 1.1 Background and context

The Commission for Communications Regulation (“ComReg”) is responsible for regulating the electronic communications sector in the State, in accordance with European Union (“EU”) and Irish law. As part of ComReg’s functions to promote efficiency, ensure sustainable competition, and give the maximum benefit to end users, ComReg is helping industry coordinate the successful implementation of improvements to Non-Geographic Numbers (“NGNs”).

ComReg Document 18/106 contains a Decision (ComReg D15/18) for two measures to be implemented in relation to improvements to NGNs. In summary, these are:

- **‘Geo-Linking’ condition:** To introduce a new ‘Geo-Linked’ retail tariff condition for the 1850, 1890, 0818 and 076 NGNs by 1 December 2019. Calls to these NGNs will be no more than the cost of calling a Geographic Number. If calls to Geographic Numbers are included in a user’s bundle of ‘call minutes’ then calls to these NGNs will also be in their bundle, so no separate charge will apply (unless the user has exceeded their call minutes); and
- **NGN consolidation:** To reduce the number of NGN ranges from five (1800, 1850, 1890, 0818 and 076) to two (1800 and 0818) by 31 December 2021.

Figure 1.1: The two measures in ComReg D15/18 [Source: ComReg, 2018]



ComReg document 18/106 also highlighted that a better way of managing NGNs is needed. ComReg is working closely with industry to develop a solution which allows for the assignment of 1800 and 0818 NGNs on an individual basis. This in turn should simplify the process for Service Providers (“SPs”) moving to new numbers.

Additional information can be found in a number of related ComReg documents, which are summarised in Figure 1.2.

Figure 1.2: Additional information [Source: ComReg, 2019]

ComReg document	Title
17/70	Review of Non-Geographic Numbers Consultation Document
17/70a	Report from DotEcon on Non-Geographic Numbers in Ireland
17/70b	Non-Geographic Numbers: Consumer Study (B&A and The Research Perspective)
17/70c	Non-Geographic Numbers: Organisation Study (B&A and The Research Perspective)
17/70d	Non-Geographic Numbers: Cost Study (B&A and The Research Perspective)
18/65	Response to Consultation 17/70
18/65a	DotEcon Response to Consultation 17/70
18/65s	Submissions to Consultation 17/70
18/106	Response to Consultation 18/65 and Decision
18/106s	Submissions to Consultation 18/65
19/01	Implementing the New NGN Platform – Information Notice

In March 2019, ComReg appointed Analysys Mason as Project Management Consultant (“PMC”) to assist ComReg in coordinating the successful implementation of the two NGN measures (Geo-Linking and NGN Consolidation) by industry, and to ensure that ComReg and industry effectively communicates the impact of these measures to end users (both consumers and SPs).

ComReg has also appointed PR360 as the Communications Consultant to the project.

ComReg has also formed an industry NGN Working Group (the “NGN WG”)<sup>1</sup> to help develop and agree a detailed Implementation and Communications Plan to manage the implementation of the two measures set out in ComReg Document 18/106, and the development of a solution which allows for the assignment of NGNs on an individual basis (the individual number assignment solution, or “INA Solution”).

## 1.2 Purpose of this document

As the PMC, Analysys Mason has prepared a detailed ‘Implementation and Communications Plan’ (“the Plan”) by applying best practice project planning methodologies. ComReg and the NGN WG have provided input for the Plan.

The purpose of this document is to set out how and when the objectives of the Plan are to be achieved, by showing the major tasks, activities and resources required.

<sup>1</sup> Comprised of fixed and mobile network operators (‘Operators’), ComReg, Analysys Mason and PR360

The document covers the tasks, resources, activities and controls specific to each of the NGN measures and the implementation of the INA Solution, and is intended to be used as a baseline against which to monitor progress.

The document covers not just the activities required to complete tasks but also highlights the activities to manage the successful delivery of the entire NGN improvement project – including activities for assurance, quality management, risk management, and any other project controls required.

**This document is intended primarily for the benefit of affected fixed and mobile operators.** For organisations that currently use NGNs (SPs), it is proposed that the serving operator would contact their own SP customers directly to provide full details of the changes and advice on what to do next.

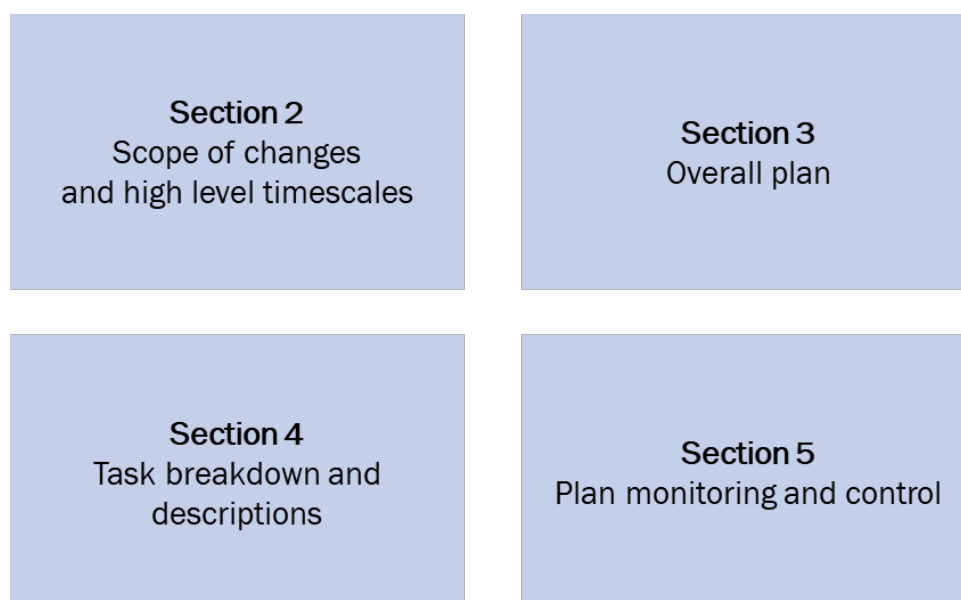
The material presented in this document may evolve as steps in the project and the planning cycle are undertaken. As such, further versions of the document may be released.

Nothing in this document relieves operators of their responsibility to comply with the numbering conditions set out in ComReg Document 15/136R1 – *Numbering Conditions of Use and Application Process*, in particular General Authorisation condition 8 (Number Changes).

### 1.3 Document structure

The remainder of this document is structured as shown in Figure 1.3.

Figure 1.3: Document structure [Source: Analysys Mason, 2019]



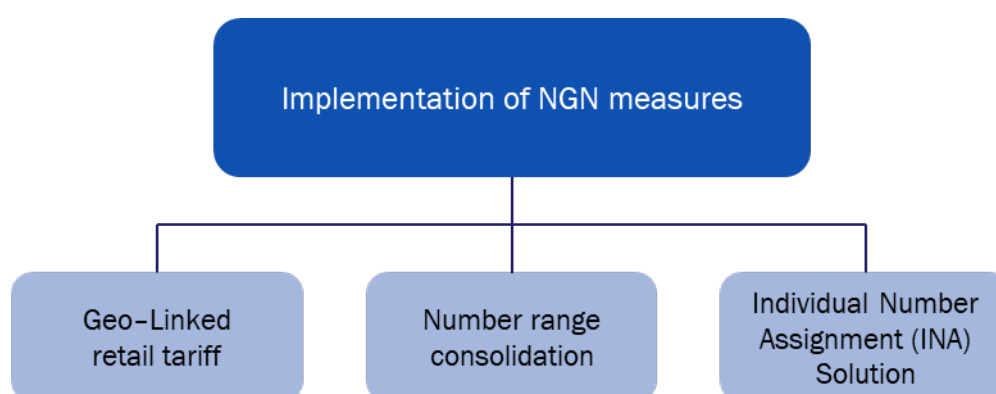
## 2 Scope of changes and high level timescales

### 2.1 Introduction

This section provides a summary of the changes set out in ComReg document 18/106 and clearly identifies the implementation date for each of the NGN measures. It also summarises other activities related to the project.

Figure 2.1 highlights the two measures set out in ComReg Document 18/106, and the development of the INA Solution, and acts as a signpost to the different aspects of the Plan set out in the remainder of the document.

Figure 2.1: Implementation of NGN measures [Source: Analysys Mason, 2019]



### 2.2 Geo-Linked retail tariff

**The Geo-Linked retail tariff condition must be implemented by all originating operators by 1 December 2019.** From that date onwards, a call to any 1850, 1890, 0818 or 076 NGN must cost no more than the cost of calling a Geographic Number (GN) (noting this is a tariff ceiling, so operators are of course free to charge less). If calls to GNs are included in a customer’s “bundle of call minutes” then NGN calls will also be “in bundle”. No separate charge will apply for any NGN call (unless a customer has used up his/her bundle of call minutes).

### 2.3 Number range consolidation

ComReg ceased assigning 1850, 1890 and 076 NGNs on 3 December 2018. 1850, 1890 and 076 NGNs should also no longer be assigned by operators from any existing block assignments in those ranges.

The 1850, 1890, 076 ranges are now being withdrawn. **From 1 January 2022, the five NGN ranges (1800, 1850, 1890, 0818 and 076) will be reduced to two (1800 and 0818).**



Operators will be expected to engage with ComReg and SPs throughout the transition period in order to ensure a successful transition to the new NGN arrangements (1800 and 0818 only).

## 2.4 Development of INA Solution

### 2.4.1 INA Solution

The INA Solution will allow for the individual assignment of 1800 and 0818 NGNs, subject to valid SP requests. ComReg has established that more than 95% of 1800 and 0818 numbers are unused<sup>2</sup>, so the INA Solution will give SPs a wide selection of 1800 and 0818 NGNs, via any operator of their choosing.

The INA Solution will also, for example, enable SPs to identify NGNs in the 1800 and 0818 ranges that are equivalent to their operator's current assignment in the ranges to be withdrawn.

The INA will introduce automatic features to speed up the assignment of NGNs and will allow operators to apply for the assignment of individual numbers which would be automatically approved. These changes will support operators and SPs in a faster turn-around from number application to these numbers going live on operator networks.

**The INA Solution should be in place by Q3 2019** and will allow operators to access 1800 and 0818 NGNs for assignment. Interim manual arrangements are also being planned, and ComReg will contact all operators to provide further clarity on these arrangements.

### 2.4.2 Integration with existing FNP solution

The INA Solution will leverage the existing industry FNP solution and processes to originate NGN number assignment requests. ComReg will set business rules to validate individual number application requests from the FNP and validate and confirm assignments based on the information received. This will enable the INA System / ComReg database to contain up to date NGN information to support the NGN assignment process.

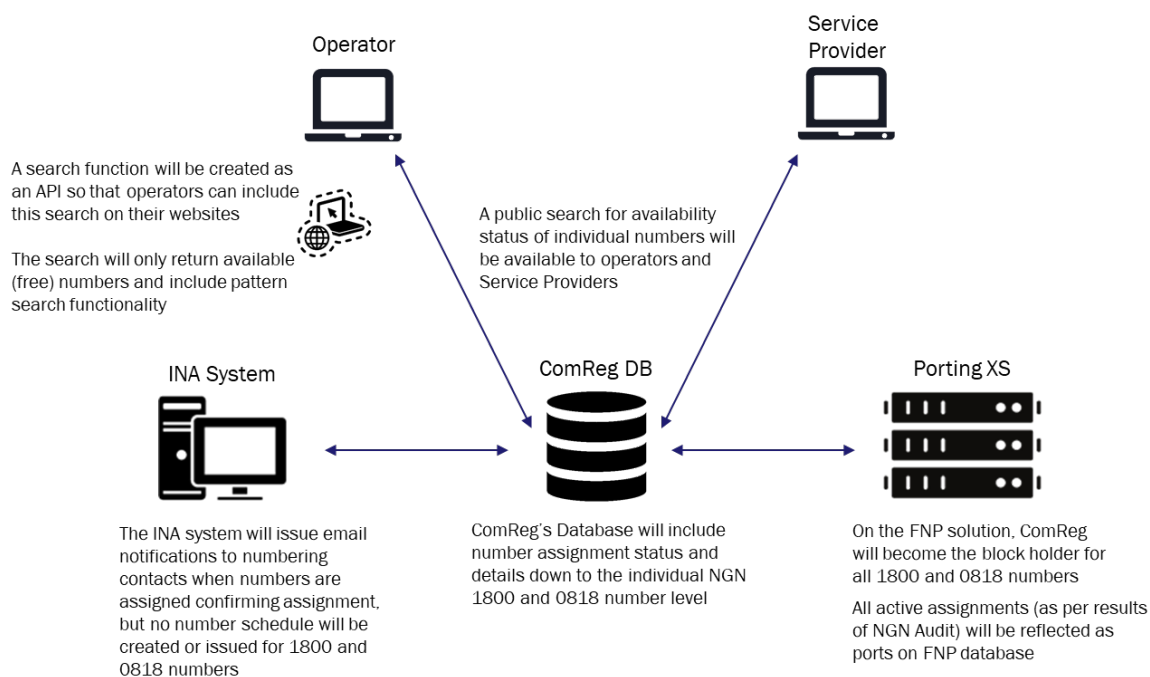
Figure 2.2 provides an overview of the INA Solution design and the integration with the existing FNP solution.

The proposed process flow highlighting the INA System integration with the Porting XS platform, which supports the industry FNP solution, is set out in Annex A.

---

<sup>2</sup> ComReg 19/01, Information Notice: Implementing the New NGN Platform - Outline plan and next steps, Jan 2019

Figure 2.2: INA Solution design and functionality [Source: Analysys Mason, 2019]



The regular porting processes in place in the FNP will continue as they currently exist.

ComReg's NGN database will be integrated to receive port broadcast messages and upon a port will update the assignee field on the database.

### 2.4.3 NGN Audit

In preparation for implementation of the INA Solution, ComReg has undertaken a detailed audit of the 1800, 1850, 1890, 0818 and 076 NGNs to establish the exact quantity of NGNs in active use and to identify the precise number of SPs and end users that will need to migrate from 1850, 1890 and 076 NGNs.

As a result of the audit process, ComReg will recover all 1800 and 0818 NGNs that are not in use, but which are currently assigned to operators. These numbers will then be made available for assignment under the new individual number assignment (INA) system.

## 2.5 Other related activities

### 2.5.1 Emergency contact numbers

A number of Irish utility providers currently use, as emergency contact numbers, NGNs in the ranges that will be withdrawn – in particular 1850. A number of those providers and the Commission for Regulation of Utilities (CRU) referred to this in their responses to ComReg's public consultations and some respondents outlined what they consider would be the difficulties and costs in transitioning from NGNs in the ranges that are being withdrawn by 1 January 2022, due to the many physical assets upon which such NGNs are displayed.

ComReg and industry acknowledges the need to carefully manage the withdrawal of these contact numbers, and ongoing discussions are taking place with the utility providers and the CRU. There has been agreement in principle from all parties on criteria for identifying certain individual NGNs that may need to be kept in service for a period of time beyond 1 January 2022. These draft criteria, which have yet to be agreed by all stakeholders, are presented in Annex B.

### 2.5.2 Organisations using 076 for Direct Dial Inward (DDI)

A small number of organisations use blocks of 076 numbers for corporate Direct Dial Inward (DDI), including agencies provided with 076 numbers by the Office of the Government Chief Information Officer (OGCIO).

Industry has agreed that SPs using 076 numbers for DDI should revert to geographic numbers. SPs' serving operators should be in direct contact with those organisations about this in the coming months.

The move to 076 for corporate DDI is recent, so some operators may have reserved the geographic number blocks that SPs previously used, and those number blocks are likely to still be open on networks.

If new geographic number blocks are required, operators and organisations should note that consumers still value the location information provided by a GN, so GNs appropriate to an SP's actual location should be used.

### 2.5.3 TETRA and 076

ComReg Document 19/01 proposes that 076 numbers be retained for TETRA, since these are primarily being used by the emergency services and are not public facing. This would mean that a 076 sub-range will need to remain open on networks and billing systems.

However, operators are presently working with ComReg to consider an emerging proposal from the OGCIO that 076 NGNs currently assigned to TETRA users be migrated to MSISDNs with the prefix '08x'. The current version of the Plan assumes that all parties reach agreement on this proposal and the task description set out in Section 4.5.2 should be considered in this context.

### 2.5.4 Wholesale pricing for call origination to NGNs

ComReg Document 18/65 considered a number of options to impose specific controls on the wholesale charges set by originating operators. It was preliminarily concluded that ComReg should impose a price control on wholesale charges set by originating operators under Regulations 8(3) and 13 of the Access Regulations. This would be done in conjunction with Regulation 6(2) of the Access Regulations (which allows ComReg to impose obligations on undertakings that control access to End Users) and/or Regulation 23(1) of the Universal Service Regulations (which allows ComReg to specify requirements for the purpose of ensuring access and services).

The current consultation on wholesale pricing for call origination to NGNs (ComReg Document 19/46) builds upon those preliminary wholesale conclusions and responds to the consultation questions posed in ComReg Document No. 18/65.

The consultation period will run until 2 July 2019. Having analysed and considered the comments received, ComReg will review the main proposals set out in the consultation, adjust if necessary, in light of representations received, and will then notify the draft measures to the European Commission pursuant to Regulations 13 and 14 of the Framework Regulations. Once the response under Regulations 13 and 14 is received, ComReg, taking utmost account of any comments received from the European Commission, will adopt and publish the final decisions.

## 3 Overall plan

### 3.1 Introduction

The project Gantt chart is shown in Figure 3.1.

The Gantt chart provides:

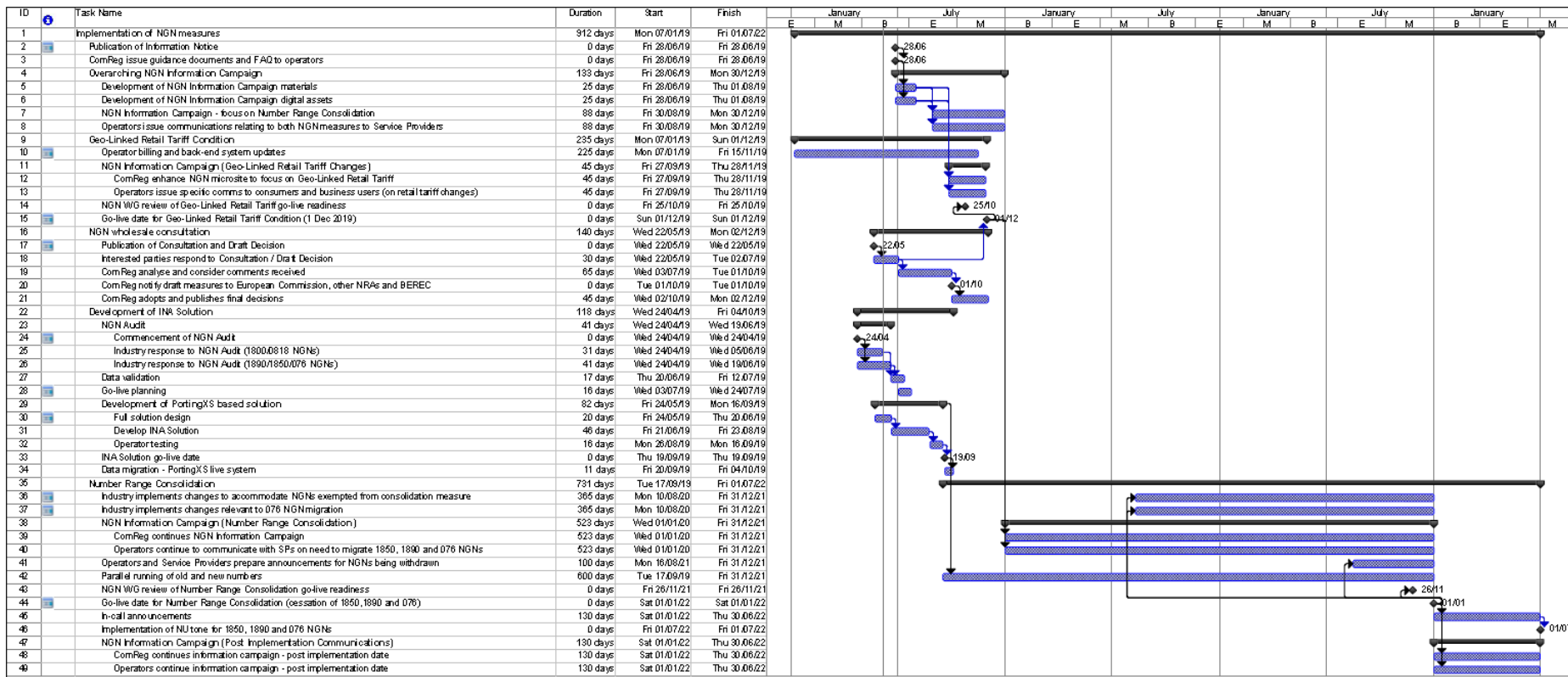
- A view of all summary tasks, individual sub-tasks, their durations and their sequencing
- A view of the overall timeline of the project and the expected completion dates

As the project moves forward the Gantt chart may be adjusted to reflect an up-to-date project schedule.

The current version of the Gantt chart can be provided to operators in Microsoft Project and/or Portable Document Format (PDF) format upon written request to [ngnwg@comreg.ie](mailto:ngnwg@comreg.ie).

### 3.2 Project Gantt chart

Figure 3.1: Project Gantt chart [Source: Analysys Mason, 2019]



## 4 Task breakdown and descriptions

### 4.1 Introduction


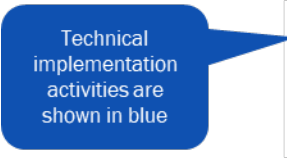

This section now considers each of the key tasks set out in the project Gantt chart, which is shown in Figure 3.1.

The structure of this section of the document is set out as follows:

- Each of the main sub-sections are aligned to the summary-level tasks shown in the Gantt chart, which correspond to the major activities being undertaken as part of the NGN changes, i.e.:
  - Overarching NGN information campaign (Section 4.2)
  - Geo-Linked retail tariff condition (Section 4.3)
  - Development of INA Solution (Section 4.4)
  - Number range consolidation (Section 4.5)
- In turn, each of the subtasks of these summary-level tasks, which represent the more detailed work required of one or more stakeholders, are described within each main sub-section in a table format

To help identify the nature of each of the subtasks, a colour coding scheme is used to denote whether the subtask relates to a communications activity, a technical implementation activity, or a review checkpoint – as shown in Figure 4.1.

Figure 4.1: Subtask colour coding scheme [Source: Analysys Mason, 2019]

	What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
	What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
	What are the actions?	What is the timeframe?	What are the outputs and resource requirements?

The stakeholder(s) responsible for completing, or contributing to, each subtask are highlighted in **bold** text in each of the subtask tables.

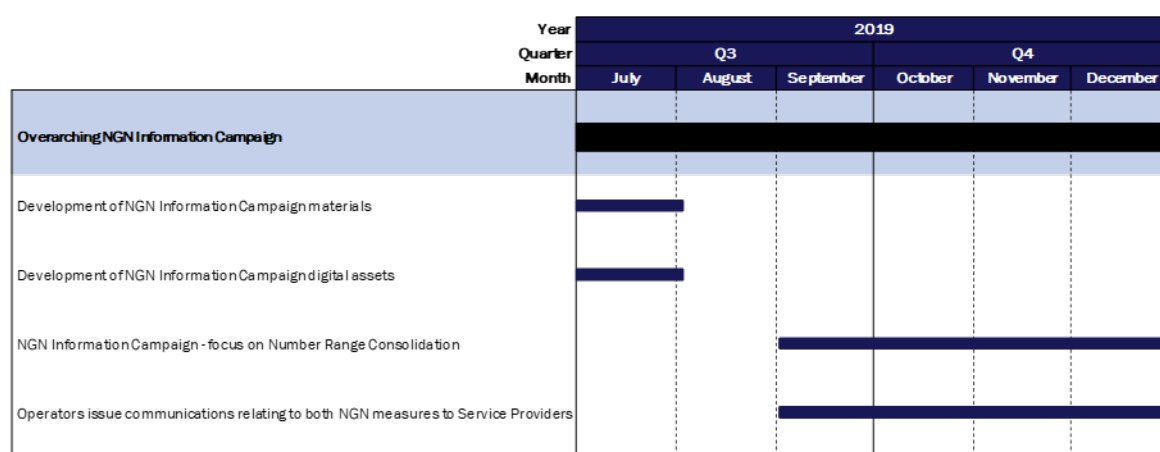
## 4.2 Overarching NGN information campaign

This summary task, or phase, relates to the preparation of the communications materials and assets needed to support ComReg, operators and SPs in communicating the NGN changes.

This phase will be the first key step in developing external-facing communications for all relevant audiences, and in particular for SPs who are required to change their existing NGNs.

A summary of the subtasks is shown in Figure 4.2.

Figure 4.2: Overarching NGN information campaign [Source: Analysys Mason, 2019]



### 4.2.1 Development of NGN Information Campaign materials

The Communications Consultant, in cooperation with the ComReg, will develop guidance for operators and SPs on how to communicate the new NGN changes to their customers, which will include simplified and clear NGN brand / pricing messages (e.g. 'Freephone' for 1800).

Figure 4.3: Task – Development of NGN information campaign materials [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Communications Consultant to:</b></p> <ul style="list-style-type: none"> <li>Prepare draft materials to support ComReg, operators and Service Providers. Materials will include messaging and content for informing customers and end users of changes to NGNs</li> <li>Draft materials will be reviewed and agreed by the NGN WG and tailored/branded by operators, as required</li> </ul> <p><b>ComReg to:</b></p> <ul style="list-style-type: none"> <li>Issue final guidance documents and materials to operators</li> </ul>	<p>Draft materials to be agreed by NGN WG no later than <b>1 Aug 2019</b></p>	<p><b>Communications Consultant to provide:</b></p> <ul style="list-style-type: none"> <li>Communications guidance documents for ComReg, operators and Service Providers setting out communications requirements and guidance</li> <li>Guidance to include key messaging, FAQ document and agreed timelines</li> </ul>



#### 4.2.2 Development of NGN Information Campaign digital assets

The Communications Consultant will consider ComReg’s existing digital assets, conduct a detailed content review, and assist ComReg to develop a bespoke digital strategy for the NGN Information Campaign. In particular, this subtask will focus on the development of a dedicated, distinctive and interactive microsite which will be one of the cornerstones of the overall campaign.

Figure 4.4: Task – Development of NGN Information Campaign digital assets [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>ComReg, working with the Communications Consultant, to:</b></p> <ul style="list-style-type: none"> <li>• Develop a dedicated microsite on the ComReg website for providing information on the changes to NGNs <ul style="list-style-type: none"> <li>○ The microsite will contain all information about the changes in one easy-to-use online repository</li> <li>○ Content of the microsite will be targeted towards end users (the consumer) to inform of how the changes will impact them</li> <li>○ Content will also target operators and Service Providers to inform them of what actions are required, and how the NGN changes may impact them</li> </ul> </li> </ul>	<p>Draft content to be agreed no later than <b>1 Aug 2019</b></p> <p>Microsite to be developed no later than <b>2 Sept 2019</b></p>	<p><b>ComReg, working with the Communications Consultant, to:</b></p> <ul style="list-style-type: none"> <li>• Develop website content tailored to target audiences</li> <li>• Transfer existing information, infographics and animation video to new microsite</li> </ul>

#### 4.2.3 NGN Information Campaign – focus on Number Range Consolidation

Once the NGN Information Campaign materials and the dedicated microsite have been developed, the emphasis will then move to raising awareness of the NGN changes – with a particular focus on the Number Range consolidation measure.

Figure 4.5: Task – NGN Information Campaign – focus on Number Range Consolidation [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>ComReg to:</b></p> <ul style="list-style-type: none"> <li>• Launch information campaign around Number Range Consolidation and the need for Service Providers to migrate existing 1850/1890/076 NGNs to</li> </ul>	<p>Beginning <b>2 Sept 2019</b>, and continuing until <b>end 2019</b></p>	<p><b>ComReg, working with the Communications Consultant, to:</b></p> <ul style="list-style-type: none"> <li>• Develop microsite on ComReg website</li> </ul>

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p>1800 or 0818 NGNs, as appropriate</p> <ul style="list-style-type: none"> <li>• Coordinate media outreach on upcoming changes and their impact – including issuing a media release and conducting follow up activities to raise awareness amongst businesses and consumers</li> <li>• Introduce dedicated microsite</li> <li>• Commence social media activity to promote the new microsite, thereby amplifying media activity and drawing attention to the upcoming changes to NGNs</li> </ul>		<ul style="list-style-type: none"> <li>• Develop media strategy for press engagement</li> <li>• Produce tailored FAQ document for media queries</li> <li>• Develop content for ComReg social media channels</li> </ul>

#### 4.2.4 Operators issue communications on both NGN measures to Service Providers

A key element of the NGN Information Campaign is for operators to inform all of their customers of the NGN measures in a simple and compelling way.

Operators will need to prepare their own branded communications and choose the most effective channel(s) to their own customers to draw attention to the upcoming changes to NGNs.

*Figure 4.6: Task – Operators issue communications on both NGN measures to Service Providers*  
[Source: PR360, 2019]

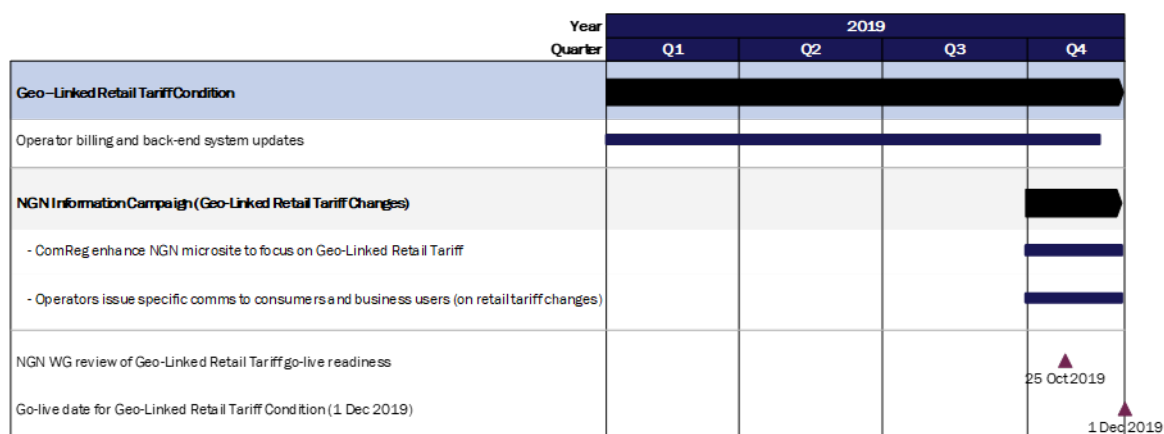
What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>• Issue communiqué (format determined by operator) to relevant customer base informing of need to migrate from 1850/1890/076 NGNs to 1800/0818 NGNs, and the forthcoming retail tariff changes</li> <li>• Issue guidance setting out what actions Service Providers need to take in respect to migrating their existing NGNs. Guidance expected to include link to ComReg microsite</li> <li>• Share further detail through social channels, as/where appropriate</li> </ul>	<p>Beginning 2 Sept 2019, and continuing until end 2019</p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>• Develop content and messaging for operator communications</li> <li>• Develop guidance for Service Providers, to include key messaging, FAQs and timelines</li> <li>• Develop content for operator social media channels, as/where appropriate</li> </ul>

### 4.3 Geo-Linked retail tariff condition

The key technical implementation tasks for all operators for Geo-Linking will likely include operator billing changes and back-end system changes. The key communications tasks will include what, when and how to communicate the Geo-Linked retail tariff measure to consumers and SPs.

The timeline for the main tasks relating to the Geo-Linked retail tariff condition is shown in Figure 4.7. Each of the tasks shown are described in more detail in the following sub-sections.

Figure 4.7: Geo-Linked retail tariff condition [Source: Analysys Mason, 2019]



#### 4.3.1 Operator billing and back-end system updates

Operators will need to update billing systems to account for the changes to the NGN retail tariffs for 1850, 1890, 0818 and 076 NGNs. Operators need to apply a retail tariff to 1850, 1890, 0818 and 076 NGNs which is equivalent to calling Geographic Numbers i.e. to 'Geo-link' NGN calls to equivalent GN calls so that, for example, if a consumer's GN calls are included in their bundle of call minutes then that consumer's NGN calls must also be included in their bundle of call minutes.

Figure 4.8: Task – Operator billing and system updates [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Apply a retail tariff to 1850, 1890, 0818 and 076 NGNs which is at least equivalent to calling Geographic Numbers</li> </ul>	<p><b>Operators</b> must update all relevant billing and back-end systems such that the new retail tariffs apply from the go-live date of <b>1 Dec 2019</b>.</p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Ensure the correct tariffs and pricing rules are implemented in their billing systems and OSS/BSS in accordance with their own processes and procedures, and equipment vendor guidance where applicable</li> <li>Complete their own testing and validation checks to verify the billing accuracy of the new NGN tariff plan in <b>advance of the go-live date of 1 Dec 2019</b>.</li> </ul>

### 4.3.2 ComReg enhance NGN microsite to focus on Geo-Linked Retail Tariff

As the coming into force of the Geo-Linked retail tariff condition approaches, ComReg will enhance their dedicated microsite to include retail tariff information on 1850, 1890, 0818 and 076 NGNs and links to operators' retail tariffs lists.

This should enable consumers to know or to reasonably estimate the retail tariff for NGN calls in advance. Consumers will also be reminded that 1800 is free to call.

ComReg will also provide regular updates on NGNs and NGN retail tariffs via social media and any other appropriate channels.

In completing both of these activities (microsite enhancement and additional content for social media and other channels), ComReg will require industry input to ensure operator information is correctly signposted and hyperlinks to operator resources are correct and up-to-date.

*Figure 4.9: Task – ComReg enhance NGN microsite to focus on Geo-Linked Retail Tariff [Source: PR360, 2019]*

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>ComReg</b>, working with the <b>Communications consultant</b>, to:</p> <ul style="list-style-type: none"> <li>Enhance dedicated microsite to bring focus on Geo-Linked Tariff Changes content and information</li> <li>Ensure additional content of the microsite will be targeted towards end users to inform them of how the tariff changes will affect them</li> <li>Ensure content also informs Service Providers on how the tariff changes will affect them</li> </ul>	<p>Beginning <b>30 Sept 2019</b>, and continuing until <b>go-live date for Geo-Linked Retail Tariff Condition (1 Dec 2019)</b></p>	<p><b>ComReg</b>, working with the <b>Communications consultant</b>, to:</p> <ul style="list-style-type: none"> <li>Develop additional website content tailored to target audiences</li> <li>Develop additional infographics and animation video</li> <li>Develop additional content for ComReg social media channels</li> </ul>

### 4.3.3 Operators issue specific communications to consumers and business users

It is in the interests of all parties in the NGN chain (consumers, SPs and operators) that clear, easily understandable information on NGN tariffs is readily available. Consumers are entitled to know the retail charge for calling NGNs, including how NGNs are treated under bundles. Operators will therefore need to directly inform their customers of the new Geo-Linked retail tariff condition.

Operators will need to directly inform their customers of the costs of calling 1850, 1890, 0818 and 076 NGNs and how NGNs will be treated going forward under the various subscriptions that they offer.

Figure 4.10: Task – Operators issue specific communications to consumers and business users

[Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>• Issue notification (format and content as required by ComReg Document D13/12) to relevant customer base informing of changes to tariffs, to include link to dedicated microsite for further information</li> <li>• Share detail through social channels, as/where appropriate</li> </ul>	<p><b>1 October 2019</b></p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>• Develop content and messaging for operator communications to customers</li> <li>• Develop additional content for operator social media channels, as/where appropriate</li> </ul>

#### 4.3.4 NGN WG review of Geo-Linked retail tariff change go-live readiness

To confirm the readiness of operators to implement the necessary business changes and transition to the new tariff arrangements, the NGN WG will undertake a review of the necessary preconditions which need to be fulfilled in order for the Geo-Linked retail tariff condition to proceed as planned.

Figure 4.11: Task – NGN WG review of Geo-Linked retail tariff change go-live readiness [Source:

Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>NGN Working Group</b>, primarily comprising <b>operators</b> and <b>ComReg</b>, to review all preconditions which need to be fulfilled in order for the Geo-Linked retail tariff change to proceed on 1 Dec 2019 as anticipated by all stakeholders.</p>	<p>The NGN WG to complete the review no later than <b>25 Oct 2019</b>.</p>	<p>The <b>NGN Working Group</b> to consider all tasks and activities which need to be accomplished to ensure a successful outcome of the Geo-Linked retail tariff change, which shall primarily include consideration of:</p> <ul style="list-style-type: none"> <li>- The distribution of all required guidance and information materials</li> <li>- The implementation of all required updates to <b>operators'</b> billing and back-end systems such that the new retail tariffs can be applied from the go-live date of <b>1 Dec 2019</b></li> </ul>

## 4.4 Development of INA Solution

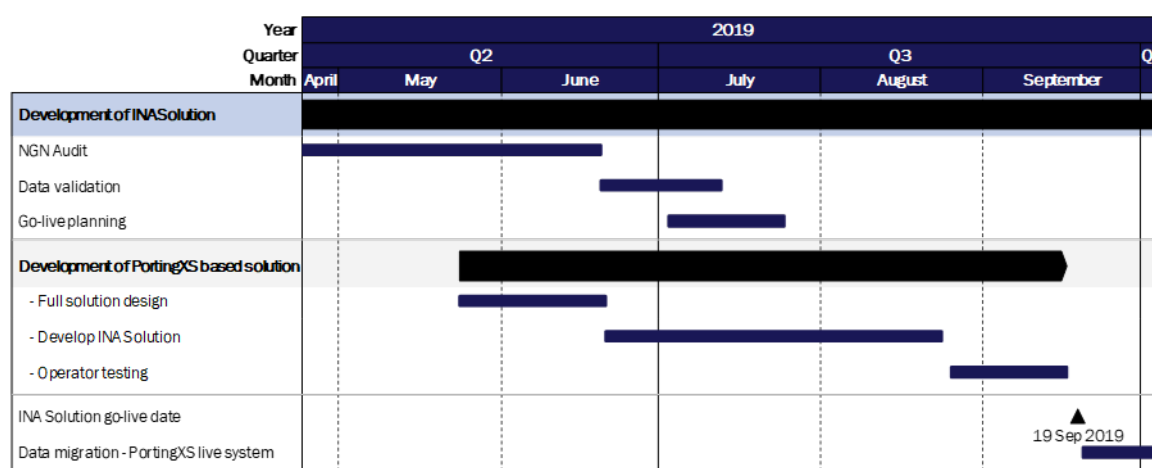
The INA Solution will allow operators to self-serve 1800 and 0818 NGNs for assignment. Assignment will be automatic as operators will be able to identify the status of NGNs and submit a NGN application that will be processed with minimal ComReg intervention.

The INA Solution will support individual rather than block NGN assignments of 1800 and 0818 NGNs and enable SPs/end users and operators to view the status of individual NGNs (free, allocated or quarantined).

ComReg will develop the new INA Solution to take account of operator systems and processes and will use regular meetings of the NGN WG as the main channel to discuss operator needs in this respect.

ComReg will also ensure the engagement and inclusion of the FNP solution providers, Porting XS, throughout the development of the INA Solution.

Figure 4.12: Development of INA Solution [Source: Analysys Mason, 2019]



### 4.4.1 NGN Audit

See Section 2.4.3.

#### 4.4.2 Data validation

The NGN Audit is intended to give ComReg an accurate picture of the current NGN assignments in the 1800, 1850, 1890, 0818 and 076 ranges. The INA System / ComReg database will be populated with the 1800 and 0818 operator data. However, before populating the database, ComReg will work with operators to review the data returned from the audit to resolve any potential anomalies – with the result being an accurate dataset for NGN assignments in 1800 and 0818 ranges.

Figure 4.13: Data validation [Source: ComReg, Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Operators and ComReg to:</b> <ul style="list-style-type: none"> <li>Validate the data received from operators in response to the NGN Audit</li> </ul>	<b>Operators</b> to work with ComReg during a <b>four week</b> period after the NGN Audit is completed to help clean attendant data set	<b>Operators to:</b> <ul style="list-style-type: none"> <li>Work with ComReg to review the data returned from the NGN Audit and analyse and resolve any anomalies – with the result being an accurate dataset for NGN assignments in 1800 and 0818 ranges</li> </ul>

#### 4.4.3 Go-live planning

Go-live planning will be determined and finalised with input from industry and Porting XS through one or more workshops, to ensure:

- The integrity of all data migration plans
- A synchronised go-live plan between ComReg platforms, Porting XS and operators' INs
- The availability of go-live support and fallback contingency

Figure 4.14: Go-live planning [Source: ComReg, Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Operators and ComReg to:</b> <ul style="list-style-type: none"> <li>Plan for Go-live of INA Solution</li> </ul>	Planning period is scheduled from <b>3 July 2019 to 24 July 2019</b>	<b>Operators to:</b> <ul style="list-style-type: none"> <li>Work with <b>Porting XS</b> to assess the impact on call routing of ComReg becoming the block holder of the 1800 and 0818 ranges, and also the migration of active numbers to the ported database</li> <li>Agree to a plan for the Go-live phase of the project, in conjunction with <b>ComReg</b> and <b>Porting XS</b></li> </ul>

#### 4.4.4 Full solution design

The full solution design is intended to provide/facilitate:

- Full integration with the current industry FNP system
- Public pattern search functionality
- Search API creation and documentation
- Notifications to NGN assignees
- Appropriate reporting functionality

Figure 4.15: Full solution design [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>ComReg</b> , with input from <b>operators</b> , to: <ul style="list-style-type: none"> <li>• Develop and agree the full INA Solution design</li> </ul>	To be completed no later than <b>20 June 2019</b>	<b>Operators</b> to: <ul style="list-style-type: none"> <li>• Provide input to business rules as/when required</li> </ul> <b>ComReg</b> to: <ul style="list-style-type: none"> <li>• Develop full technical design in conjunction with <b>operators</b> and <b>Porting XS</b></li> </ul>

#### 4.4.5 Develop INA Solution

INA Solution development will be undertaken using Agile planning and delivery best practice, and will incorporate:

- Business analysis elaboration workshops to fully define the solution scope
- Use case scenarios and acceptance criteria
- Demonstrations of the work completed at each development milestone
- UAT at the end of each development milestone
- Bug fixes for issues identified during UAT
- Final UAT at the end of development

Figure 4.16: Develop INA Solution [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>ComReg</b> to: <ul style="list-style-type: none"> <li>• Develop the INA Solution</li> </ul>	Development of INA Solution to commence <b>no later than 21 June 2019</b> , with completion <b>no later than 23 August 2019</b> .	<b>ComReg</b> to: <ul style="list-style-type: none"> <li>• Develop all integration aspects with Porting XS</li> <li>• Develop automated responses which are required</li> <li>• Integrate business processes into ComReg's own numbering systems</li> </ul>



What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
		<ul style="list-style-type: none"> <li>Develop an API based NGN search facility</li> <li>Perform all required system testing to verify correct functionality and reliability</li> </ul>

#### 4.4.6 Operator testing

Following the INA Solution development, ComReg will involve operators in the pre Go-live testing process.

Figure 4.17: Operator testing [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Operators to:</b> <ul style="list-style-type: none"> <li>Conduct all required user acceptance testing, in accordance with agreed test plan/schedule</li> </ul>	All required testing to be <b>completed between 26 August 2019 and 16 Sept 2019</b>	<b>Operators to:</b> <ul style="list-style-type: none"> <li>Test new NGN assignment process on Porting XS test environment and validate that the INA Solution operates in accordance with agreed INA Solution design</li> </ul>

#### 4.4.7 Data migration – Porting XS live system

To ensure a seamless transition to the new INA Solution, ComReg will work with Porting XS to establish a competent data migration plan.

Porting XS will then be responsible for migrating active numbers to the porting database on the FNP system and making ComReg the block holder of entire 0818 and 1800 ranges.

Figure 4.18: Data migration – Porting XS live system [Source: Analysys Mason, 2019]

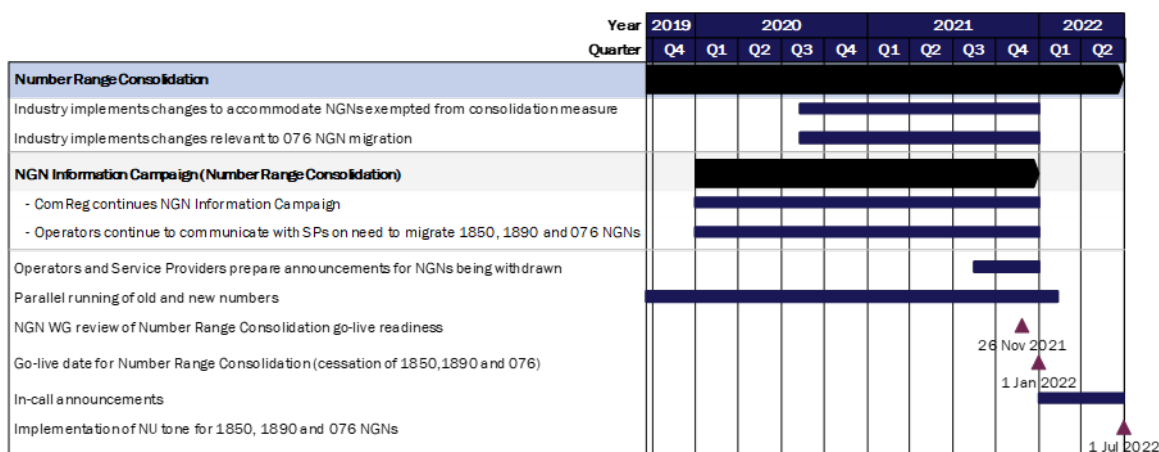
What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Porting XS to:</b> <ul style="list-style-type: none"> <li>Perform data migration on the live FNP system</li> </ul>	During the period <b>20 Sept 2019 to 4 Oct 2019</b>	<b>Porting XS to:</b> <ul style="list-style-type: none"> <li>Migrate active numbers to the porting database on the FNP system and make ComReg the block holder of entire 0818 and 1800 ranges</li> </ul>

## 4.5 Number range consolidation

SPs will need to be fully informed about NGN Consolidation in terms of the timelines and tasks to be completed. ComReg and operators will need to ensure this is done in a clear, consistent and appropriate manner.

Both ComReg and the industry shall run an ongoing broad communications campaign aimed mainly at SPs, highlighting the need for a number change, advantages of an early move, etc. This campaign would coincide with individual operator-led direct marketing campaigns to affected SPs.

Figure 4.19: Number range consolidation [Source: Analysys Mason, 2019]



### 4.5.1 Industry implements changes to accommodate NGNs exempted from consolidation measure

The industry has acknowledged the need to temporarily exempt certain NGNs from the number range consolidation measure in the interests of public safety (see Section 2.5.1).

As such, operators shall ensure that the exempted NGNs can still be reached after the Go-live date for the number range consolidation measure.

Figure 4.20: Task – Industry implements changes to accommodate NGNs exempted from consolidation measure [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Ensure callers can continue to call the exempted NGNs</li> </ul>	<p>Exemption period to be discussed/agreed with the CRU and affected utility providers</p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Ensure that correct tariffs and pricing rules are implemented for the exempted NGNs in their billing systems and OSS/BSS</li> </ul> <p><b>ComReg to:</b></p> <ul style="list-style-type: none"> <li>Ensure list of exempted NGNs are communicated to all operators as part of the number consolidation communications</li> </ul>

#### 4.5.2 Industry implements changes relevant to 076 NGN migration

Industry has agreed that SPs using 076 numbers for DDI should revert to geographic numbers (see Section 2.5.2).

In addition, operators are presently working with ComReg to consider an emerging proposal from the OGCIO that 076 NGNs currently assigned to TETRA users be migrated to MSISDNs with the prefix '08x' (see Section 2.5.3). The current version of the Plan assumes that all parties reach agreement on this proposal and the task description set out below should be considered in this context.

Figure 4.21: Task – Industry implements changes relevant to Government agencies 076 NGN migration [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Implement all required changes to their networks such that any call made to an NGN with the prefix '076' is correctly routed to its newly assigned GN equivalent</li> <li>Ensure that all calls made to numbers with the prefix '08x' are correctly routed to the TETRA network</li> </ul>	<p><b>Operators</b> must implement all required network changes are applied no later than the go-live date of <b>1 Jan 2022</b>.</p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Use inbound test calls to verify correct implementation</li> </ul>

### 4.5.3 ComReg continues NGN Information Campaign

Through 2020 and 2021, ComReg will work to ensure that SPs and end-users migrate from the 1850, 1890 and 076 NGNs. ComReg will run a national press and online campaign close to the date for withdrawal of these ranges, advising SPs of their last chance to change, and to contact their serving operator.

Figure 4.22: Task – ComReg continues NGN Information Campaign [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>ComReg, working with the Communications consultant, will:</b></p> <ul style="list-style-type: none"> <li>• Continue Information Campaign on number range consolidation</li> <li>• Issue project updates and alerts to operators</li> <li>• Issue social media updates</li> <li>• Initiate a national press campaign to advise Service Providers of approaching deadline</li> <li>• Enhanced digital campaign as required to drive final migration to reduced number range</li> </ul>	<p>From <b>Q1 2020 through to Q2 2021.</b></p> <p>A final round of media and digital activity <b>from Q3 2021.</b></p>	<p><b>ComReg, working with the Communications consultant, will:</b></p> <ul style="list-style-type: none"> <li>• Provide updated guidance documents to operators as/when required</li> <li>• Develop additional website content tailored to target audiences, including additional infographics and animation video</li> <li>• Develop additional content for ComReg social media channels</li> <li>• Update media strategy for press engagement</li> <li>• Update tailored FAQ document for further media queries</li> </ul>

### 4.5.4 Operators continue to communicate with SPs on need to migrate 1850, 1890, 076 NGNs

As ComReg continues its NGN Information Campaign (see Section 4.5.3), operators are also expected to continue to communicate with its SP customers on the need to migrate from the NGNs being withdrawn as a result of the consolidation measure.

Figure 4.23: Task – Operators continue to communicate with SPs on need to migrate 1850, 1890, 076 NGNs [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Continue communications to relevant customer base on the need to migrate, primarily through account management channels</li> <li>Issue updated guidance document to Service Providers on what actions they need to take in respect of migrating 1850/1890/076 NGNs to 1800/0818 NGNs</li> </ul>	<p>From <b>Q1 2020 through to Q2 2021.</b></p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Provide updated guidance to Service Providers as/when required</li> <li>Develop additional content for Operator social media channels, as required.</li> </ul>

#### 4.5.5 Operators and SPs prepare recorded announcements for NGNs being withdrawn

Recorded announcements are likely to be required for certain 1850, 1890 and 076 NGNs used for inbound calling, so that if a customer calls one of those NGNs after it has been withdrawn, they will hear a message that the NGN is no longer in use and potentially giving a new number to call.

Figure 4.24: Task – Operators and SPs prepare recorded announcements for NGNs being withdrawn [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Work with <b>Service Providers</b> to ensure fit-for-purpose announcements are prepared for NGNs being withdrawn from service</li> </ul>	<p><b>Operators and Service Providers</b> needs to ensure announcements are prepared at least <b>100 days in advance</b> of the number consolidation measure go-live date of <b>1 Jan 2022.</b></p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>In those instances where a generic announcement is set up to indicate that the NGN is not in service, <b>operators</b> shall use inbound test calls to verify correct implementation.</li> <li>In those instances where a specific announcement is used to indicate the specific alternative number to call, <b>operators</b> shall ensure the functionality supporting this capability is fully verified.</li> <li>Work with <b>Service Providers</b> to sufficiently test those instances where Service Provider systems (e.g. contact centre call directors, IVR etc) are used to provide announcements</li> </ul>

#### 4.5.6 Parallel running of old and new numbers

During the transition period, when SPs are migrating, it will be crucial that customer/client contact is not lost. Parallel running of old and new numbers will therefore be required, in accordance with the General Authorisation conditions set out in ComReg document 15/136R1, Numbering Conditions of Use and Application Process.

Figure 4.25: Task – Parallel running of old and new numbers [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Facilitate a period during which customers can use the original NGN or the new number</li> </ul>	<p>Parallel running shall be facilitated for all migrated NGNs until the number consolidation measure go-live date of <b>1 Jan 2022</b>.</p>	<p><b>Operators to:</b></p> <ul style="list-style-type: none"> <li>Use inbound test calls to verify correct implementation of parallel running, and ensure such arrangements are made effective as soon as an NGN is migrated</li> </ul>

#### 4.5.7 NGN WG review of number consolidation go-live readiness

To confirm the readiness of operators to implement the necessary business changes and make the transition from five NGN ranges (1800, 1850, 1890, 0818 and 076) to two (1800 and 0818), the NGN WG will undertake a review of the necessary preconditions which need to be fulfilled in order for the number consolidation measure to proceed as planned.

Figure 4.26: Task – NGN WG review of number consolidation go-live readiness [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>NGN Working Group</b>, primarily comprising <b>operators</b> and <b>ComReg</b>, shall review all preconditions which need to be fulfilled in order for the number consolidation change to proceed on 1 Jan 2022 as anticipated by all stakeholders.</p>	<p>The NGN WG shall complete the review no later than <b>26 Nov 2021</b>.</p>	<p>The <b>NGN Working Group</b> shall consider all tasks and activities which need to be accomplished to ensure a successful outcome of the number consolidation change, which shall primarily include consideration of:</p> <ul style="list-style-type: none"> <li>The distribution of all required guidance and information materials</li> <li>The implementation of all required announcements can be applied from the go-live date of <b>1 Jan 2022</b></li> </ul>

#### 4.5.8 In-call announcements

After the parallel running period, a generic announcement may be set up to indicate that the NGN is not in service, or a specific announcement could indicate the specific alternative number to call (see Section 4.5.5).

Figure 4.27: Task – In-call announcements [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Operators to:</b> <ul style="list-style-type: none"> <li>Implement all required changes to their networks such that calls made to 1850, 1890 and 076 NGNs are routed to in-call announcements</li> </ul>	Operators, working with SPs, to ensure in-call announcements continue to be in place until at least 6 months after the consolidation measure go-live date, i.e. until at least <b>30 June 2022</b>	<b>Operators to:</b> <ul style="list-style-type: none"> <li>Ensure any special arrangements (e.g. customised announcements) that may be needed to address particular SP circumstances, continue to be in place – and shall use inbound test calls to verify the implementation of all required in-call announcements</li> </ul>

#### 4.5.9 Implementation of NU tone for 1850, 1890 and 076 NGNs

Following the period of announcements (6 months), callers dialling a withdrawn NGN should hear a ‘Number Unobtainable’ (NU) tone.

Figure 4.28: Task – Implementation of NU tone for 1850, 1890 and 076 NGNs [Source: Analysys Mason, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<b>Operators to:</b> <ul style="list-style-type: none"> <li>Implement all required changes to their networks such that calls made to 1850, 1890 and 076 NGNs are routed to NU tone</li> </ul>	From <b>1 July 2022 onwards</b>	<b>Operators to:</b> <ul style="list-style-type: none"> <li>use inbound test calls to verify the implementation of the NU tone for all NGNs withdrawn from service</li> </ul>

#### 4.5.10 ComReg continues NGN Information Campaign – post implementation

There will be up to 6 months post-deadline communications to ensure that operators, Service Providers, businesses and consumers are all aware of the changes that have been implemented.

Additional communications materials and assets will be provided by the Communications Consultant to support ComReg and operators in particular, to manage any remaining queries or issues that arise.

Figure 4.29: Task – ComReg continues NGN Information Campaign – post implementation [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>ComReg</b>, working with the <b>Communications Consultant</b>, will:</p> <ul style="list-style-type: none"> <li>• Informed by NGN migration rates, implement further communications targeting Service Providers</li> <li>• Continue consumer campaign, driving awareness of the 1800 and 0818 numbers, in addition to relevant tariff information</li> </ul>	<p>From <b>1 January 2022</b> to <b>30 June 2022</b></p>	<p><b>ComReg</b>, working with the <b>Communications Consultant</b>, will:</p> <ul style="list-style-type: none"> <li>• Provide updated FAQ to operators</li> <li>• Develop additional website and social media content as required</li> </ul>

#### 4.5.11 Operators continue NGN Information Campaign – post implementation

In the 6 months post implementation, operators may need to manage any remaining queries or issues that arise from Service Providers and/or end users.

Additional communications materials and assets will be provided by the Communications Consultant to support operators in this regard.

Figure 4.30: Task – Operators continues NGN Information Campaign – post implementation [Source: PR360, 2019]

What are the actions?	What is the timeframe?	What are the outputs and resource requirements?
<p><b>Operators</b> to:</p> <ul style="list-style-type: none"> <li>• Continue to manage communications as required</li> </ul>	<p>From <b>1 January 2022</b> to <b>30 June 2022</b></p>	<p><b>Operators</b> to:</p> <ul style="list-style-type: none"> <li>• Utilise updated FAQ document for queries</li> </ul>



## 5 Plan monitoring and control

### 5.1 Introduction

To help ensure the NGN measures set out in ComReg Decision D15/18 are implemented successfully and according to the Plan set out in this document, various monitoring and control processes will be used to check whether the project is going as planned and whether there are any deviations from the baseline.

### 5.2 Plan execution

Individual operators are responsible for ensuring that they implement the two NGN measures by the set dates. The NGN WG and the Plan are intended to assist them in optimising implementation and to collectively resolve any issues arising. The Plan is also intended to ensure that the accompanying ComReg and individual operators' communications campaigns deliver consistent messages, at coordinated times.

### 5.3 Monitoring and control measures

The PMC will help ComReg to review the various summary tasks and subtasks and assess progress on a regular basis to determine how tasks are progressing. The principal method of assessing progress will be regular progress reviews at the NGN WG meetings.

The PMC will also assist ComReg in identifying project risks and mitigation strategies and maintaining a Risk Register.

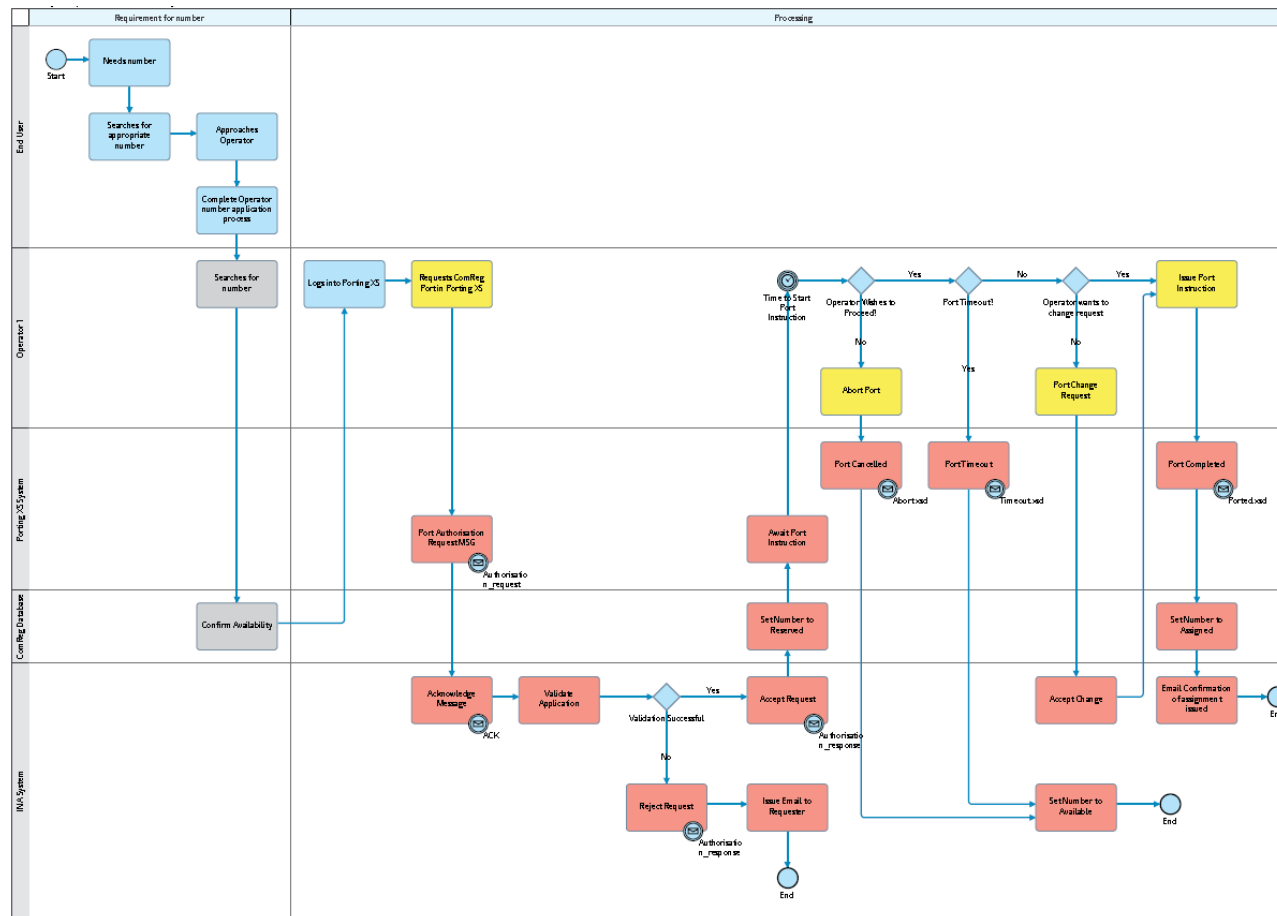
Issues will invariably arise as the project planning and implementation progresses. The PMC will assist ComReg in identifying and resolving such issues. This may require occasional bilateral meetings with key operators, further investigation of technical matters offline, development of discussion papers for the NGN WG, and seeking compromise and agreement on such issues.

### 5.4 Future considerations

Meetings of the NGN WG have identified a number of items which may merit further consideration by industry and other stakeholders. Whilst these items may not necessarily be considered as being directly related to the successful implementation of the NGN measures, details have been recorded in the Plan document to help support their consideration by ComReg, industry, and other stakeholders at a later date. Further details are set out in Annex C – further items may be added in subsequent versions of the Plan document as steps in the project and the planning cycle are undertaken.

# Annex A INA System Process Flow

Figure A.1: INA System Process Flow [Source: ComReg, 2019]



## Annex B Criteria for identifying emergency contact NGNs

### Draft criteria as of 27 June 2019:

To be permitted to retain the use of a particular NGN after 31 December 2021:

- The Service Provider shall be a transmission system owner, a distribution system owner, the holder of a licence granted by the Commission for Regulation of Utilities (CRU) under section 14 (1)(e) – (g) or (k) of the Electricity Regulation Act 1999 (as amended) or section 16 (b) of the Gas (Regulation) Act 2002 (as amended), or an entity regulated by the CRU under the Water Services Acts 2007 to 2014; and
- The particular NGN shall be considered as providing a vital service relating to i) the safety of life [and/or property], and/or ii) the security of supply of water, electricity or gas; and
- The particular NGN is clearly visible on a significant number of assets used by the Service Provider and the removal or replacement of the particular NGN is subject to an asset life cycle (the estimated time before removal and/or replacement happens on such assets) which exceeds [to be determined] years, and
- The Service Provider is actively promoting the use of an NGN using the prefix 1800 or 0818 which shall replace the particular NGN affected by this exemption and has agreed i) not to deploy any new infrastructure where the particular NGN is visible, and ii) to the complete withdrawal from service of the particular NGN by no later than [insert date].

## Annex C Summary of future considerations

Meetings of the NGN WG have identified a number of items which may merit further consideration by industry and other stakeholders. In accordance with Section 5.4 of this document, details have been recorded in this Annex to help support their consideration by ComReg, industry, and other stakeholders at a later date.

Figure C.1: Summary of future considerations [Source: Analysys Mason, 2019]

Item	Future consideration
International accessibility of 1800 range <sup>3</sup>	<p>The 1800 range currently presents a difficulty in respect of international accessibility as there is no trunk prefix and preceding an 1800 NGN with the international prefix would result in geographic call to Dublin (i.e. 00353 1 800 XXXX) instead of to the Service Provider.</p> <p><b>ComReg</b>, in conjunction with <b>operators</b>, to consider a solution to address this current difficulty.</p>
Freephone access to emergency contact numbers that may need to be kept in service for a period of time beyond 1 January 2022	<p>ComReg and industry acknowledges the need to carefully manage the withdrawal of emergency contact numbers used by Irish utility providers, and ongoing discussions are taking place with these providers and the CRU (see Section 2.5.1).</p> <p>ComReg research findings, and the experience of other stakeholders such as the Citizens Information Board (CIB)<sup>4</sup>, finds that most utility providers provide only an 1850 number for people to report an emergency. However, current practice in other jurisdictions is to make use of Freephone numbers, for example the National Gas Emergency Freephone Number 0800 111 999 (UK).</p> <p><b>ComReg</b>, <b>operators</b>, <b>utility providers</b> and the <b>CRU</b> to consider the potential of making calls to those individual 1850 NGNs that may need to be kept in service for a period of time beyond 1 January 2022 free of charge to the caller.</p>

<sup>3</sup> Article 28 of the Universal Services Directive (USD) requires that end users throughout the EU shall be able to access non-geographic numbers in Member States' national numbering plans, where technically and economically feasible

<sup>4</sup> Consultation 18/65s - Submissions to Consultation - Review of Non-Geographic Numbers, published 11 July 2018