Office of Utilities Regulation

# NPA (AREA CODE) RELIEF PLANNING

# **PRELIMINARY PHASE**

# **INDUSTRY NOTIFICATION**

# OF

# NPA '876' Exhaust Period & Relief Code Reservation



August 2010

# DOCUMENT TITLE AND APPROVAL PAGE

DOCUMENT NUMBER: TEL2010010\_ADN001 - Advanced Notice

#### DOCUMENT TITLE:

NPA (Area Code) Relief Planning - Initial Phase Industry Notification of NPA 876 Exhaust Period and Relief Code Reservation

#### PURPOSE OF DOCUMENT

This document is the initial planning document In the NPA Code Relief Planning Process and serves to notify stakeholders in the local telecommunications industry regarding the pending exhaust of NPA (area code) 876 and the results of the initial Relief Planning.

#### **RECORD OF REVISIONS**

Revision Number	Description	Date					
	Initial Document	August 26, 2010					

#### APPROVAL

This document is approved by the Office of Utilities Regulation and the decisions therein become effective on August 31, 2010

On behalf of the Office:

Zia Mian

**Director General** 

26 2010

Date

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## ABSTRACT

Section 8 of the Telecommunications Act, 2000, mandates the Office of Utilities Regulation (the Office, the OUR) to develop a plan for the numbering of telecommunications services, and, to promote the efficient use of numbers, and ensure that sufficient numbers are available for the current and reasonably anticipated future needs of carriers and service providers.

#### NPA Exhaust and Code Reservation

Pursuant to the aforementioned mandate, the Office initiated Relief Planning activities designed to provide Relief to an exhausting NPA (area code). NPA Code Relief refers to an activity that must be performed when the CO Codes within an NPA near exhaust<sup>1</sup>. Providing code relief to such an NPA normally takes the form of assigning a new NPA using one of two basic methods: A splitting of the geographic area served by the existing NPA or an overlay of the new NPA to serve the same geographic area as the existing NPA.

Using the Numbering Resource Utilization and Forecast survey results and historical growth data submitted by carriers with their applications for additional numbers, the Office estimated that the expected exhaust period for NPA (area code) 876 is the 4<sup>th</sup> quarter of 2012. Based on the OUR's preliminary notification to the North American Numbering Plan Administrator (NANPA) regarding the imminent exhaust of the 876 NPA, NANPA has reserved a new NPA for Jamaica, pending formal application for its assignment.

### **Industry Notification & NPA Relief Planning**

This document which is the initial planning document for the NPA Code Relief Planning Process sets out the results of the preliminary Relief activities. Its purpose is to notify stakeholders in the local telecommunications industry regarding the pending exhaust of NPA (area code) 876, the establishment of the exhaust period for the code, the reservation of a Relief Code by the North American Numbering Plan Administrator and, the next phase of the NPA Code Relief Planning Process and the NPA Relief Implementation.

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<sup>&</sup>lt;sup>1</sup> The point at which the quantity of CO codes needed by carriers and service providers exceeds the quantity of codes that is available for assignment.

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## 1. INTRODUCTION

- **1.1** It is universally accepted that non-discriminatory access to, and the availability of, adequate supplies of telecommunications numbers are a key enabler of the development of competition in a liberalized telecommunications market. In addition to serving to identify, reach and bill subscribers, numbers facilitate the development of new products and services, being a critical element of access to such provisions.
- **1.2** Numbers have become universally recognized, similarly as the radio spectrum, as a finite public resource (because of their limited availability) and one to be fairly and effectively administered for the overall national good, and thus, to that end, Section 8 of the Telecommunications Act, 2000 (the Act, the Telecoms Act), mandates the Office of Utilities Regulation (the Office; the OUR) as follows:
  - 8. (1) The Office shall assign numbers for telecommunications services to carriers and service providers on a non-discriminatory basis.
    - (2) In carrying out its functions under this section the Office shall develop a plan for the numbering of telecommunications services and may make rules pursuant to that plan regarding the assignment and use of numbers by carriers and service providers.
    - (3) For the purposes of subsection (2) the Office shall
      - (a) take account of relevant international regulations;
      - (b) ensure that sufficient numbers are available for the current and reasonably anticipated future needs of carriers and service providers;
      - (c) have regard to the role that numbers can play in conveying useful information to customers, including information about the type of service being used;
      - (d) promote efficient use of numbers;
      - (e) promote fair and open competition
      - (f) as far as possible and subject to paragraphs (a) to (e), avoid the imposition of costs on customers as a result of changes in the numbering system;
- **1.3** Accordingly, the Jamaican National Numbering Plan (Document No. Tel, 2003/10) and the Telecommunications Numbering Rules (Document No. Tel 2009/01: Det/01) were developed and promulgated by the Office.

- 1.4 Ensuring that sufficient numbers are available for the current and reasonably anticipated future needs requires judicious administration and utilization of the resource. Numbers are a public resource and administrative assignment of them does not imply ownership of the resource by the entity performing the administrative function, nor does it imply ownership by the entity to which the resource is assigned. The Office must therefore make every effort, fairly and transparently, to ensure that carriers and service providers properly manage, use, and account for numbering resources assigned to them, and provide timely and accurate forecasts of future numbering requirements for new uses and for growth of existing applications. Resource conservation and usage forecasting is especially important in projecting the exhaust of national numbering capacities, and by extension, the North American Numbering Plan<sup>2</sup> as a whole.
- **1.5** Resource usage forecasting is also an integral part of the NPA Relief Planning Process<sup>3</sup> which includes activities whereby timely provisions are made for the Relief or supplementing of an exhausting NPA (area code), and executed through cooperative participatory engagement of affected industry members. The local industry is now at that Relief Planning juncture approximately five years earlier than projected in 1997 when the 876 NPA was implemented. This document therefore signals to the industry the initiation of the NPA Planning and NPA Relief implementation processes for the relief of NPA 876 by the 4<sup>th</sup> quarter of the year 2012.
- **1.6** The Office of Utilities Regulation will act as the NPA Relief Coordinator, with input from the North American Numbering Plan Administrator in terms of NPA code assignment and broader industry notification. The Office will moderate industry relief planning meetings and will do so fairly and impartially, ensuring that all participants have an opportunity to express their views on the attendant issues. However, the ultimate decision as to the relief methods to be employed rests with the Office.
  - **1.7** Numbering has broad importance. Apart from being a technical matter, numbering also addresses important commercial, political and economic considerations for telecommunications operators, regulators and policy makers. The Office must therefore ensure that the National Numbering Plan not only has adequate capacity but also remains adaptable to an environment in which there is increasing flexibility in technology and expanding innovation in service creation, changing customer needs, and a growing national economic and social dependence on the Information and Communications Technologies (ICT) sector.
- **1.8** Thus, prior to the introduction of the new NPA the Office will conduct a public consultation to review the National Numbering Plan which will take account of relevant global perspectives on the future of numbering.

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<sup>&</sup>lt;sup>2</sup> See paragraphs 2.1 - 2.4 for definition

<sup>&</sup>lt;sup>3</sup> See section 4

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## 2. THE NATIONAL NUMBERING PLAN

- **2.1** The basic numbering scheme applied in Jamaica is the North American Numbering Plan (NANP), which serves the United States and its territories, Canada, the Bahamas, Bermuda, Dominican Republic and 15 other Caribbean countries. The NANP is the region's application of ITU-T Recommendation E.164 the international Plan for public telecommunications network numbering and encompasses the majority of the public-diallable telecommunications numbers that are in use in the region.
- **2.2** The area served by the NANP is divided into smaller Numbering Plan Areas (NPAs), each identified by a three-digit NPA code, commonly called an area code. NPA codes are administered by the North American Numbering Plan Administrator (NANPA)<sup>4</sup>
- **2.3** The primary structure of the NANP has a fixed 10-digit format: NXX-NXX-XXXX, where N is any digit 2 through 9 and X is any digit 0 through 9. It is alternatively expressed as ABC-DEF-GHIJ in order to uniquely identify a particular digit or digit position. The representation of each segment of the 10-digit structure is explained in table 2.1.

NXX	NXX	XXXX	
ABC	DEF	GHIJ	
NPA	Central Office (CO) Code	Line Number	
Code	Directory Number		

 Table 2.1 Basic Structure of the North American Numbering Plan

NXX codes that begin with the digit '0' or '1' are not used as NPA and CO codes. The digits '0' or '1', in practical use in a leading digit position, are used as the leading digits of, or singularly as, dialling prefixes or service access codes, and as such, could cause interpretational problems and network switching anomalies, if they were also the leading digits of NPA and CO codes . Accordingly, there are 800 possible combinations associated with the NXX format (200-999) and 10,000 with the XXXX format (0000-9999).

- 2.4 The NPA code is commonly called the area code. NPA codes traditionally are used for identifying specific geographical areas; a few have been allocated in the NANP for other purposes. The NANP has slightly less than 800 assignable area codes (some are allocated as Service Access Codes). Area code '876' was assigned to Jamaica in May 1997 and represents approximately 8 million assignable telephone numbers the complement of telephone numbers currently to be administered under The Jamaican National Numbering Plan (JNNP). Previously, Jamaica shared the '809' Area Code, which was introduced in 1958, with other Caribbean countries. These other Caribbean territories subsequently were assigned individual Area Codes.
- 2.5 The potential problem of NANP exhaustion has been addressed by the North American Numbering Council; already an expansion solution has been developed and

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<sup>&</sup>lt;sup>4</sup> NANPA holds overall responsibility for the neutral administration of NANP numbering resources, subject to directives from regulatory authorities in the countries that share the NANP

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in due course will be the subject for broad industry consideration. NPA and Central Office code relief and various number conservation measures have been applied judiciously to delay the eventual NANP exhaustion.

- 2.6 The assignment in Jamaica of NXXs (CO codes) related to NPA 809 was administered through the North American Numbering Plan Administrator (NANPA) up until 1997when administration of the NXXs within NPA 876 was transferred to Telecommunications of Jamaica Limited (Now Cable & Wireless Jamaica Limited t/a LIME), the monopoly provider of public voice telecommunications services in Jamaica at that time. The Office, by statute, assumed full responsibility for Numbering Administration in 2000.
- 2.7 Under the current Telecommunications Numbering Rules, the OUR assigns Mobile and Geographic (Fixed-Line) numbers only to licensed facilities-based service providers, that is, service providers who own and operate telecommunications facilities that require numbering resources for the provision of prescribed telecommunication services as defined in the Act. These assignments are termed Primary Assignments. Non-facilities-based service providers may obtain assignments of numbers (Secondary Assignments) from holders of Primary Assignment, subject to the *assignment and use* requirements of the Numbering Rules.

# 3. NUMBERING CAPACITY AND NPA EXHAUST

### **Numbering Capacity**

- **3.1** The capacity of an NPA is normally assumed to be seven hundred and ninety two (792) Central Office codes (NXXs) as the N11 (211,311...911) codes, by convention, are not used as CO codes in the NANP. N11 codes are formally known as service codes and are used to provide three-digit dialling access to special services.
- **3.2** However, it may not be possible to assign all 792 NXXs as CO codes, for a variety of reasons. For instance, to avoid confusion of codes, an NXX that is identical with the subsuming area code is not assigned as a central office code. Thus, in the JNNP, NXX '876' is "permanently" reserved; Under the allocation scheme for the Jamaican national Numbering Plan, the assumed capacity of the 876 NPA is 773 CO codes for regular telephone numbers (Mobile and Geographic and VoIP). These are allocated as shown in Table 3.1 which shows the allocation of NPA 876 numbers in the JNNP as at December 31 2009<sup>5</sup>.

NPA 876 NUMBER ALLOCATIONS							
NUMBER RANGE	COMMENTS						
N00	Special Services	Easily Recognizable Codes.					
N11	Access Codes						
1XX	Access Codes						
20X-25X	Growth						
26X -29X	Mobile						
3XX	Mobile						
4XX	Mobile						
444	Special Services	Premium Rate - Mobile					
5XX	Mobile						
60X-63X; 66X-69X	Geographic						
64X-65X	VoIP						
70X-76X	Geographic						
77X-79X	Mobile						
8XX	Mobile						
9XX	Geographic						
976	Special Services	Premium Rate - Fixed					
YYY (222, 333,999)	Special Services	Easily Recognizable Codes					

Table 3.1 Number allocations as at December 31 2009

<sup>&</sup>lt;sup>5</sup> Date of the latest Numbering Resource Utilization and Forecast results, and subscription data, submitted by carriers NPA (Area Code) Relief Planning - Initial Phase

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**3.3** As at December 31, 2009, a total of 6,250,000 Geographic (Fixed-Line) and Mobile numbers have been assigned to carriers.

	RESOURCES A CAR	SSIGNED TO RIERS	% UTILIZATION	SUBSCRIBERS
	CO Codes Numbers		REPORTED	REPORTED/ESTIMAED
FIXED 🕨	188	1,880,000	20	305,000
MOBILE ►	437 4,370,000		90	2,890,000*

Table 3.2 Assigned Numbers and Estimated Subscriber Counts as at December 31, 2009

\* Estimated

- **3.4** There remains, however, a significant disparity, as shown in Table 3.2, between the quantity of numbers issued to carriers for fixed-line services and the reported utilization. The main causative factors in this problem are the substantial legacy assignments from the pre-liberalization period, and the decline of the fixed-line market.
- **3.5** There is, though, potential for a reversal of the present decline of the fixed-line market, in the emerging application of broadband access technologies locally. Moreover, there is still an alive interest in nomadic VoIP services that would be facilitated by extraterritorial use of Jamaican E.164 numbers. To date, the size and influences of the diaspora are the best available indicators of the potential demand for such nomadic VoIP services. The Jamaican Diaspora Foundation estimated that Jamaicans living overseas numbered well over 2 million. The three most popular host countries for migrating Jamaicans have been the United Kingdom, the United States and Canada.

### NPA Exhaust

- **3.6** As mentioned in paragraph 3.2 the assumed capacity of the 876 NPA, for regular telephone numbers, is 773 CO codes. Table 3.2 shows a total of 625 codes assigned as at December 31, 2009, leaving an available 148 codes for assignment to carriers.
- **3.7** The projected 5-year demand for numbers (Table 3.3), as determined from the December 31, 2009 Numbering Resource Utilization and Forecast (NRUF)<sup>6</sup> submissions indicate a need for 131 new CO codes over the next three years, with 100 of these in the Mobile sector.

<sup>&</sup>lt;sup>6</sup> Semi-annual report which includes number utilization information as well as a five-year forecast of demand by year NPA (Area Code) Relief Planning - Initial Phase

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<b>GROWTH PROJECTIONS</b>								
YR 1 <sup>7</sup> YR 2         YR 3         YR 4         YR 5         TOTAL								
MOBILE	35	37	28	38	35	173		
FIXED	11	9	11	10	10	51		
CO CODES ►	46	46	39	48	45	224		
MOBILE	350,000	370,000	280,000	380,000	350,000	1,730,000		
FIXED	110,000	90,000	110,000	100,000	100,000	510,000		
NUMBERS ►	460,000	460,000	390,000	480,000	450,000	2,240,000		

 Table 3.3 Carriers' Five-Year Growth Projections From December 31, 2009 NRUF Survey

Table 3.4 Unutilised Numbering Capacity as at December 31, 2009

SERVICE	ALLOCATED BALANCE	HELD BY CARRIERS	TOTAL		
Mobile	700,000	440,000	1,140,000		
Fixed	1,010,000	1,504,000	2,514,000		

 Table 3.5 Annual NXX Assignments for Mobile Services
 2007-2009

ANNUAL NXX ASSIGNMENTS FOR MOBILE SERVICES (EXCLUDING SPECIAL SERVICE ASSIGNMENTS)								
YEAR QUANTITY [NUMBERS]								
2007	46	460,000						
2008	5	50,000						
2009	20	200,000						
TOTAL	71	710,000						

**Notes:** (1) The period 2008 through 2009 saw protracted OUR engagements of mobile operators regarding the management, use, and accounting of assigned numbering resources. These engagements included formal audit exercises.

- (2) Up to the end of 2007 demand showed a distinct seasonal pattern
- (3) Mobile NXX assignments for January to June 2010 total 15
- **3.8** The remaining allocated numbering space for Mobile services is 70 NXXs or 700,000 numbers and 101 NXXs or 1,010,000 numbers for Fixed-line numbers. Unlike the Mobile resources, the remaining Fixed NXXs are generally scattered in the 6XX and 7XX ranges; this is a consequence of the legacy allocation scheme under which the 6 X and 7X blocks of ten NXXs were allocated on a parish basis and assigned accordingly with the result of the fragmentation of the numbering space.

<sup>7</sup> Year 2010

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- **3.9** Given the growth projections in Table 3.3, the current allocation of Mobile resources is expected to exhaust in the 4<sup>th</sup> quarter of 2012, unless the office mandates the recovery of currently assigned fixed-line numbers to expand the range of available Mobile resources. Considering, however, that the historic growth figures submitted by service providers in support of applications for additional numbering resources are usually noticeably less than the figures projected for the respective periods, the exhaust period could be in the 1<sup>st</sup> quarter of 2013. This estimation does not take into account the probable impact of Number Portability on the demand for additional numbers.
- **3.10** Recovering fixed-line numbers to expand the range of available Mobile resources inevitably would result in some amount of customer disruption in terms of changed numbers. This potentially could impact all carriers, since the location of growth ranges should allow for the expansion of services into adjacent ranges; this is an acknowledged principle in numbering plan design and management.
- **3.11** In the current NPA 876 allocation plan, such rational numbering space expansion opportunity exist only in the 7XX number range, that is, from the 76X block upwards to the 70X block, and in the 6XX number range, that is, from the 60X block downwards to the 69X block. The spare capacities in the two number ranges are illustrated in Table 3.6.
- **3.12** It would seem logical to start an expansion of the Mobile numbering capacity in the 7XX rather than the 6XX range, for two reasons: (1) at that stage only one Carrier, LIME, and fewer NXXs, would be affected; (2) The relocation of LIME's customers would not require the assignment of new NXXs given the company's numbering capacity, and thus would not deplete the stock of spare NXXs for Fixed-line services
- **3.13** However, a larger number of subscribers would be affected. Besides, LIME currently is carrying out a customer/service migration exercise, in accordance with an Office Directive (Document No. Tel. 2007/5, dated June 11, 2007), to bring its legacy numbering allocations in line with the National Numbering Plan, and in accordance with paragraph (c) of Section 8 (3) of the Telecoms Act. This involves the disruption of a large number of the of the company's existing customers.

NX	ALLOCATION		X								
	ALLOCATION	0	1	2	3	4	5	6	7	8	9
60											
61	Geographie										
62	Geographic										
63											
64	VoIP										
65	VOIF										
66											
67	Geographic										
68	Geographic										
69											
70											
71											
72											
73	Geographic										
74											
75											
76											
77											
78	Mobile										
79											
	LIME Mobile										
	LIME Non-Mobile										
	Competing Carriers										

Table 3.6 Allocation and assignments of the 6XX and 7XX number ranges

**3.14** In seeking to resolve this problem, the Office relied on its interpretation of paragraph (f), as well as on paragraph (b), of Section 8 (3) of the Act. Paragraph (f) provides:

"*(e)* ----

Reserved

- (f) as far as possible and subject to paragraphs (a) to (e), avoid the imposition of costs on customers as a result of changes in the numbering system"
- (g) --- "
- **3.15** Paragraph (f) is often cited as a prohibition against number changes. However, it is the view of the Office that it is not the intent or purpose behind paragraph (f) to impose a partial or conditional prohibition on number changes. Rather, the statute, essentially, obligates the Office, in its development of the National Numbering Plan, initially, and subsequently, to take care that costs or inconvenience to customers are objectively justified and kept to the minimum consistent with meeting demands for numbers and sound management of the Numbering Plan. The paramount aim in paragraphs (b) to (e), undoubtedly, is to ensure that the numbering plan is developed and managed for the overall national good.

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- **3.16** Indeed, it is reasonable to assert here, in the context of the prevailing circumstances, that change is vital to ensure an adequate supply of numbers. To be sure, the Office is cognizant of the fact that the cost of number changes to customers can be substantial; but the cost of running out of numbers is considerably higher.
- **3.17** Therefore, the Office must take whatever steps are necessary and expedient to ensure that sufficient numbers are available for the current and reasonably anticipated future needs of carriers and service providers<sup>8</sup>. In that connection, the Office could also introduce additional number conservation<sup>9</sup> measures, including Thousand Block Pooling to meet that objective.
- **3.18** Based on the foregoing discussion, the options for immediate treatment of the current numbering capacity problem and the imminent exhaustion of the NPA are:
  - 1) Recovery and reallocation of fixed-line resources to meet the significantly greater demand for mobile resources and delay the exhaustion of the NPA
  - 2) Reallocation of CO codes in these 6XX and 7XX blocks to meet the significantly greater demand for mobile resources and delay the exhaustion of the NPA
  - 3) Consideration of NPA exhaustion solely on the basis of the existing unassigned numbering capacity and proceed immediately with NPA relief planning, but retain the expansion of the Mobile range as a contingency measure, and in accordance with paragraphs (b) and (f) of Section 8 (3) of the Telecoms Act.
- **3.19** The Office considers the third option to be the least disruptive and the approach to be adopted. Office further determines that NPA 876 should exhaust by the end of the 4<sup>th</sup> quarter of 2012

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<sup>&</sup>lt;sup>8</sup> Telecommunications Act 2000 – Section 8 (3)(b)

<sup>&</sup>lt;sup>9</sup> Consideration given to the efficient and effective management of a finite numbering resource in order to minimize the cost and need to expand its availability, while at the same time allowing the maximum flexibility in the introduction of new services, capabilities and features.

## 4. NPA CODE RELIEF

**4.1** NPA Code Relief refers to an activity that must be performed when the CO Codes within an NPA are near exhaustion. Providing code relief to such an NPA normally takes the form of assigning a new NPA code for an NPA split or overlay – the two basic NPA relief methods as described in paragraphs 4.7 – 4.8. The Office will determine an NPA code relief alternative based upon industry consensus reached through the NPA Code Relief Planning Process.

### NPA Relief Planning Process

**4.2** In general, the NPA Relief Planning Process, through which NPA code relief is coordinated, includes:

#### **Preliminary Phase**

- Conducting Numbering Resource Utilization and Forecast (NRUF) surveys
- Estimation of the NPA exhaust period
- Request to NANPA for area code reservation

#### Plan development and Implementation Phase

- Industry consultation to examine: alternative methods of providing a new supply of numbers; issues related to subscribers, network operators and service providers; other industry concerns.
- Determination of a specific relief plan by the Office, and formal request to NANPA for assignment of the new NPA.
- Publishing of Planning Letter by NANPA describing the approved relief plan, and announcing the new area code.
- Commencement of the NPA implementation process.
- **4.3** The Office has concluded the preliminary NPA relief activities and has:
  - 1) determined through the use of number utilization information and expected changes to NXX demands in the future, as provided in the NRUF survey results, as well as historical growth data submitted in support of applications for additional numbering resources, that NPA 876 requires NPA Code Relief;
  - 2) established the fourth quarter of 2012 as the expected NPA Exhaust Period;
  - 3) notified the North American Numbering Plan Administrator as follows:

"It is the view of the Office of Utilities Regulation (OUR) that the NPA, 876, assigned to Jamaica will exhaust within 2 - 3 years, based on our most recent NRUF forecast and other indicators. We therefore see the need to begin preparations for the requisite NPA Code Relief..."

- **4.4** The Office's notification was considered sufficient for NANPA to reserve a relief NPA for Jamaica. The reserved code will not be disclosed by NANPA at this stage of the NPA Code Relief Planning Process.
- **4.5** The Code Relief activities of the Plan Development and Implementation Phase of the NPA Code Relief Planning Process will be undertaken by the Office to provide relief to the exhausting 876 NPA. Industry stakeholders will be invited to provide input into the development of a Relief Plan which will seek to minimize end user confusion while balancing multiple objectives including cost effectiveness, minimum customer impact, and long-lasting relief. The OUR will conduct relief planning meetings in a fair and impartial manner, ensuring that all participants have any opportunity to express their opinions, with the goal of reaching industry consensus on the Relief Plan.

#### **Alternative Relief Methods**

**4.6** There are two basic alternative NPA relief methods that may be considered by the industry. The NPA Split Method and the NPA Overlay Method, as illustrated in Figure 1 below. There are variations from the standard implementation strategy for the overlay method which may also be considered.

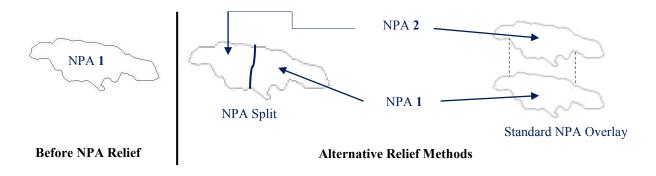


Fig. 1 Alternative NPA Code Relief Methods

**4.7** NPA Split Method - In this method, the exhausting NPA is split into two or more geographic areas and a new NPA code is assigned to one of the areas formed by the split. This method generally recognizes natural or jurisdictional boundaries. The Jamaican National Numbering Plan established fourteen (14) rate centres on the basis of the existing parish boundaries. These, for example, would provide a logical basis for the delineation of NPAs in a 'split' scenario. Telephone number changes are

mandatory for customers who are assigned numbers from NXX codes that are moved to the new NPA. A permissive dialling period<sup>10</sup> is required for changed numbers.

- **4.8 Standard Overlay Method** An NPA overlay takes place when more than one NPA code serves the same geographic area. In an NPA overlay, code relief is generally provided by opening a new NPA code covering the same geographic area as the NPA(s) requiring relief. This method normally requires mandatory 10-digit local dialling between and within the old and new NPAs.
- **4.9** The overlay method eliminates the need for customer number changes as required under the split method. It also allows the option to eliminate the permissive dialling period as part of the implementation.

<sup>&</sup>lt;sup>10</sup> The specified time frame during which a call can be completed with either the old or the new dialling pattern NPA (Area Code) Relief Planning - Initial Phase Industry Notification of NPA 876 Exhaust Period and Relief Code Reservation

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# 5. INDUSTRY NOTIFICATION

- **5.1** In accordance with the foregoing discussions, the Office hereby formally notifies carrier and service providers, and other interested parties, of the expected exhaust of NPA (area code) 876 in the fourth quarter of the year 2012 and the development of plans for the introduction of a new area code to provide relief for the exhausting NPA. The relief of the 876 NPA is necessary to meet the growing demand for and long term availability of adequate supplies of telephone numbers. This notification concludes the initial phase, which is detailed in this document, of the NPA Relief Planning Process.
- **5.2** The Office will publish a second planning document which will outline the activities of the second phase of NPA Relief Planning Process and NPA Relief Implementation exercise. The Relief Planning activities will be carried through joint industry meetings hosted by the Office of Utilities Regulation.
- **5.3** The second planning document will be provided at least four weeks prior to the first industry meeting to allow individual industry members to adequately analyse the alternatives for NPA Relief and the other attendant issues. The document, which will not be considered exhaustive and may be further developed in the meetings, will outline:
  - The schedule of planning meetings
  - Guidelines for planning meetings
  - General Attributes of Some Relief Alternatives
  - Issues to be considered during NPA Relief Planning
  - Issues to be considered during NPA Relief Implementation
  - Technical Considerations
- **5.4** The Office will invite industry members together to address these important issues, openly and cooperatively, and in the best interest of all concerned.

### END OF DOCUMENT