



**UTILITIES REGULATION & COMPETITION AUTHORITY**

Central Office Code

Assignment Guidelines

*May 2010*

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## **1.0 Purpose and Scope**

These Central Office Code Assignment Guidelines (Guidelines) were developed for the administration of Central Office Codes (CO Codes) within The Bahamas. The purpose of these Guidelines is to provide direction to the Administrator, Code Applicants, and Code Holders with respect to the administration, assignment, activation, and use of CO Codes and the numbering resources contained therein.

These Guidelines apply throughout the Bahamas subject to the Electronic Communications Sector Policy of The Bahamas and the Utilities Regulation and Competition Authority (URCA) regulatory regime. URCA is the regulator for the electronic communications sector under the Communications Act 2009 (Comms Act) which authorizes URCA to be the administrator of numbering resources, including but not limited to CO Codes.

The term CO Code refers to digits D-E-F of the 10-digit North American Numbering Plan (NANP) area address. In the NANP, each digit is identified by an alphabetical character in the order ABC-DEF-GHIJ. The NANP structure consists of a 3-digit NPA (ABC), 3-digit CO Code (DEF) and 4-digit Line Number (GHIJ) in the format NXX-NXX-XXXX where: N = 2 to 9 and X = 0 to 9) (e.g., 740 is the CO Code in 242-740-1111). Examples of uses for CO Codes for which these Guidelines apply include plain old telephone service (POTS), Centrex, Direct Inward Dialing (DID), cellular mobile service, pagers, data lines, facsimile, coin phones, and customer owned pay phones.

Costs associated with CO Code administration and assignments are not addressed in these Guidelines.

## **2.0 Assumptions and Constraints**

The development of The Bahamas Central Office Code Assignment Guidelines includes the following assumptions and constraints:

- 2.1 NANP resources, including those covered in these Guidelines, are managed by the NANP Administration (NANPA), The Bahamas National Numbering Plan Administrator (BNA) which is URCA, and numbering resource assignees (e.g., CO Code Holders), based upon administration guidelines under the oversight of the North American regulatory authorities (e.g., URCA, CRTC, FCC).

The NANP resources are considered a public resource and are not owned by the assignees. Consequently, the resources cannot be sold, brokered, bartered, or leased by the assignee for a fee or other consideration except in a manner consistent with URCA's direction. (e.g., an URCA approved tariff)

If a resource is sold, brokered, bartered, or leased for a fee in a manner inconsistent with URCA's direction, the resource is subject to reclamation. In the event that a business or portion of a business is merged with another business or acquired by other means, the

merger or acquisition should not prohibit the transfer of a CO Code to the party acquiring the business or portion of the business. As per section 6.3.2 of these Guidelines, the holder of a CO Code (i.e., the Code Holder) assigned by URCA or acquired by other means such as transfer (i.e., by merger or acquisition) must use the CO Code consistent with these Guidelines. When a CO Code is transferred from one entity (i.e., the original Code Holder) to another, as a result of a business or portion of a business being merged or acquired by another entity, the original Code Holder must advise URCA of the transfer of the CO Code to the entity acquiring the business or portion thereof.

- 2.2 NANP numbering resources shall be assigned to permit the most effective and efficient use of a finite numbering resource in order to prevent premature exhaust of the NANP and delay the need to develop and implement costly new numbering plans. Efficient resource management and Code conservation are necessary due to the impacts of expanding the numbering resource (e.g., NANP expansion from 10 to 11 or more digits).

Impacts include:

- a) Customer impacts (e.g., dialing, changes to advertising and stationery, etc.)
  - b) CPE modifications
  - c) Domestic and international switching and terminal hardware and software modifications
  - d) Operational support systems modifications
  - e) Reprogramming of non-telecommunications data bases that contain telephone numbers
- 2.3 These Guidelines address the assignment and administration of CO Codes including the entry of routing and rating data into the Telcordia Routing Data Base System (RDBS), Business Rating Input Database System (BRIDS) and Line Information Database (LIDB) Access Support System (LASS). The entry of routing and rating data into the Telcordia database systems is required in order to notify the industry via the Telcordia industry notification outputs. Examples of RDBS outputs are the Local Exchange Routing Guide (LERG) and the NPA/NXX Activity Guide (NNAG). Examples of BRIDS outputs are the Terminating Point Master (TPM) and the NPA/NXX Vertical and Horizontal Coordinates Data (VHCD). Implementation of the technical changes in the network and the associated responsibilities required by these assignments is beyond the scope of these Guidelines and is the responsibility of the affected Telecommunications Service Providers and users.

The Code Applicant must be licensed or certified to operate in the area, if required, and must demonstrate, in the manner determined by URCA, that all applicable regulatory authority required to provide the service for which the CO Code is required has been obtained.

- 2.5 These Guidelines should provide the greatest latitude in the provision of telecommunications services while effectively managing a finite resource.

- 2.6 Modifications to these Guidelines may be required to address future number portability and number pooling requirements.
- 2.7 Administrative assignment of the CO Code public resource by an entity does not imply ownership of the resource by the entity performing the administrative function, nor does it imply ownership by the entity to which it is assigned.
- 2.8 Audits may be performed in conjunction with the CO Code assignment process. These audits would be expected to ensure: (a) uniform and consistent application of these Guidelines by URCA to all CO Code requests received; (b) compliance with these Guidelines by Code Applicants, Code Holders and URCA; (c) the efficient and effective use of numbering resources by Code Applicants and Code Holders; and (d) efficient and effective management of numbering resources by URCA.
- 2.9 A Code Applicant is not required to provide any additional explanation or justification of items that he/she has certified. However, certification alone may not provide URCA with sufficient information upon which to make a decision regarding CO Code assignment. Accordingly additional dialog between the Code Applicant and URCA may follow, and URCA is still required to reply to CO Code requests within 14 calendar days of receipt.
- 2.10 Code Applicants and Code Holders must obtain Operating Company Numbers (OCN), Revenue Accounting Office Codes (RAO) and Common Language Location Identifier (CLLI) Codes, and comply with the requirements for the assignment and use of such codes.

### **3.0 Assignment Principles**

The following assignment principles apply to all aspects of The Bahamas Central Office Code Assignment Guidelines:

- 3.1 CO Codes, as part of NANP telephone numbers, are to be assigned only to identify initial destination addresses in the Public Switched Telephone Network (PSTN), not addresses within private networks.
- 3.2 CO Codes are a finite resource that should be used in the most effective and efficient manner possible. All Code Applicants are required to demonstrate that these Guidelines are satisfied.
- 3.3 Information required from the Code Applicants in support of CO Code assignment shall be kept to a minimum, uniform for all “Code Applicants”, treated as proprietary and adequately safeguarded by URCA. Information required for input into the appropriate telecommunications industry routing and rating database systems (e.g., Telcordia RDBS and BRIDS) will become available to the public upon input into those systems.
- 3.4 CO Codes shall be assigned in a fair and impartial manner to any Code Applicant that meets the criteria for assignment as detailed in Section 4.0.

- 3.5 Code Applicants for CO Codes must comply with all applicable Bahamas telecommunications regulations or URCA instructions that apply to the services that they wish to provide.
- 3.6 Any entity that is denied the assignment of one or more CO Codes under these Guidelines has the right to appeal that decision per Section 10.
- 3.7 CO Code assignments for geographic numbering purposes within geographic NPAs may be any 3 digit series in the format NXX (where N is any digit between 2 - 9 and X is any digit between 0 - 9), except for the unassignable codes below:
- any N11 Service Code (i.e., 211, 311, 411, 511, 611, 711, 811, 911);
  - any N00 code (i.e., 200, 300, 400, 500, 600, 700, 800, and 900);
  - projected future home and neighbouring NPAs;
  - any codes in triplicate (222, 333, 444, 555, 666, 777, 888, 999); and
  - any codes allocated or assigned for special purposes such as 555 for information services, 950 Feature Group B Access, 976 for local pay per call services, and Local Plant Test Codes (i.e., 958 and 959).

#### **4.0 Criteria for the Assignment and Reservation of Central Office Codes**

CO Codes shall be assigned and reserved on a first-come, first-served basis. The criteria in the following sections shall be used by URCA in reviewing requests for CO Code assignments and reservations from “Telecommunications Service Providers” for “Initial Codes”, “Additional Codes” and “Plant Test Codes” (see Glossary):

- 4.1 Assignment of an Initial Code will be to the extent required to terminate PSTN traffic as authorized or permitted by URCA, and provided all the criteria in Sections 4.1.1 through 4.1.5 are met.
- 4.1.1 An Initial Code assignment will be based on identification of a new switching entity, physical Point of Interconnection (POI), or unique Exchange Area Rate Center<sup>1</sup> (Island, settlement) consistent with regulatory requirement. Utilization criteria or projection will not be used to justify an Initial Code assignment.
- 4.1.2 The Code Applicant must submit a Request for CO Code Assignment Form (Part 1) certifying that a need exists for a CO Code assignment.
- 4.1.3 The Code Applicant must be licensed or certified to operate in the area and must demonstrate that all applicable regulatory authority required to provide the service for which the CO Code is requested has been obtained. An application for an Initial Code must include documentation demonstrating that the Code Applicant is

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<sup>1</sup> Multiple CO Codes, each associated with a different Exchange Area Rate Center, may be assigned to the same switching entity/POI.

authorized by URCA to receive a CO Code assignment in the area for which it is requesting the Initial Code, unless such documentation has already been provided with a prior Initial Code request in that area.

- 4.1.4 The Code Applicant must submit or have submitted a Central Office Code Utilization Survey (COCUS) to the PUC for the NPA in which the CO Code is being requested.
  - 4.1.5 All information provided on the Bahamas Central Office Code Assignment Request Form will be considered confidential, with selected information made available publicly only for those fields that must be input to the RDBS and BRIDS. The information placed in the RDBS and BRIDS becomes public upon assignment of the new CO Code in the appropriate routing database product.
- 4.2 Assignment of Additional Code(s) will be made for an established POI or switching entity by satisfying one of the criteria in Sections 4.2.1 to 4.2.3. By completing the Bahamas Central Office Code Assignment Request Form, the Code Applicant certifies that their existing resources cannot reasonably meet this requirement.
- 4.2.1 For an Additional Code for Growth, the Code Holder must certify in section 1.6 of the Bahamas Central Office Code Assignment Request Form that existing CO Codes for the switching entity/POI, per service provided by that switching entity or POI, are projected to exhaust within 12 months (i.e., CO Code exhaust) and shall document and provide supporting data (complete Appendix B Months To Exhaust Certification Worksheet).
  - 4.2.2 When an Additional CO Code for a Unique Purpose is necessary for distinct routing, rating or billing purposes (e.g., Calling Party Pays, prepaid), the “Code Applicant” must justify in section 1.7 of the Bahamas Central Office Code Assignment Request Form why an additional CO Code is required and explain why existing resources assigned to that entity cannot satisfy this requirement.
  - 4.2.3 When an Additional CO Code for a Unique Purpose is necessary for other reasons, the “Code Applicant” must justify in section 1.7 of the Bahamas Central Office Code Assignment Request Form why an additional CO Code is required and explain why existing resources assigned to that entity cannot satisfy this requirement.
- 4.3 A CO Code shall only be assigned by URCA to a single Code Holder and shall only be associated with either a single switching entity or POI that is owned or controlled by that Code Holder. In the case where a CO Code is assigned to a POI, the CO Code must be associated with a single switching entity and a single rate center. When a Code Holder’s need for telephone numbers in a single switching entity/POI is less than a complete CO Code (i.e., less than 10,000 telephone numbers) and the Affected Parties agree, the Code Holder may use the unused telephone numbers within its assigned CO Code to provide telecommunications services and network routing arrangements for other carriers (i.e.,

CO Code sharing); however, the Code Holder should ensure that all regulatory, technical, billing, service delivery, and tariff issues are addressed before implementing CO Code sharing. When a CO Code is shared, the Code Holder is responsible for ensuring that regulatory requirements are met. Any required business arrangements are also the responsibility of the Code Holder and are beyond the scope of these Guidelines.

It is noted however that URCA may consider establishing procedures to assign CO Codes in blocks of 1,000 telephone numbers instead of 10,000 in those cases where the service area is small, such that the assignment of a block of 10,000 telephone numbers would be an inefficient use of the resource. In this instance, multiple service providers may be assigned individual blocks of 1,000 telephone numbers with calls being now routed based in the fourth digit.

- 4.4 CO Code reservation is only permitted if the Code Applicant can demonstrate the reservation of a CO Code is essential to accommodate technical or planning constraints or pending regulatory approval of a tariff to provide service. Good faith efforts shall be made to eliminate or to minimize the number of reserved CO Codes.

In order to reserve a CO Code, the Code Applicant must submit a Request for CO Code Assignment Form (Part 1) certifying that a need exists for a CO Code reservation and providing a proposed effective date for CO Code activation that is within twelve months from the date of the initial application. The Code Applicant must subsequently submit a second Part 1 Form to apply for the assignment of the reserved CO Code. See Appendix D for timelines.

- 4.4.1 Upon written request to URCA, one reservation extension of six months will be granted when the proposed effective date for CO Code activation will be missed due to exceptional circumstances beyond the control of the Code Applicant (e.g., hardware, software provision delays, regulatory delays, etc.). See Section 7 “Reclamation Procedures”.
- 4.4.2 No reservation will be made unless the Code Applicant will meet the requirements of CO Code assignment as outlined in Section 4 for Initial Codes or for Additional Codes, dependent upon whether the reserved CO Code is to be an Initial Code or Additional Code.
- 4.4.3 If a reserved CO Code is not placed In-Service by the Code Applicant within eighteen months of the date of the initial reservation application, the CO Code will be released from reservation to the assignment pool.
- 4.4.4 When a reservation was requested due to technical constraints solely, the reservation may be extended beyond the maximum eighteen months period by URCA until the constraint is no longer present, subject to URCA’s discretion.
- 4.5 A CO Code assignment should not be delayed to a Code Applicant who meets all certification and licensing requirements, if any, when all required tariff filings have been

made to provide the service, when approval can be reasonably expected within the established tariff approval time frame, and when the expected tariff approval date will fall on or before the requested effective date for CO Code activation.

- 4.6 The Industry standard Plant Test Codes are 958 and 959. Upon request, URCA may assign additional CO Codes to Code Applicants or Code Holders for testing purposes (i.e. Plant Test Codes) on a temporary basis for a maximum period of six months. These Plant Test Codes are not to be published in the Telcordia RDBS and BRIDS databases. Code Applicants must submit a completed Plant Test Code Application and Response Confirmation Form (see Appendix G). URCA may recover the Plant Test Code within 60 calendar days of notification to the Code Holder at any time during the six-month period. Should the CO Code Holder decide to activate the CO Code, the CO Code Holder must submit a completed Part 1 to URCA requesting a permanent assignment of the CO Code.

## **5.0 Responsibilities of Utilities Regulation and Competition Authority (URCA)**

The CO Code assignment functions of URCA are to:

- 5.1 Provide an URCA web site where copies of the most recently approved Bahamas Central Office Code Assignment Guidelines including forms may be obtained by Code Applicants and Code Holders.
- 5.2 Receive applications for CO Codes in Bahamas
- 5.3 Determine if the CO Code request is in compliance with these Guidelines.
- 5.4 Respond to the Code Applicant within 14 calendar days from the date of receipt of Bahamas Central Office Code Assignment Request Form or the Plant Test Code Application Form by completing URCA's Response/Confirmation Form that is part of these Guidelines. Send a copy of the Response/Confirmation Form to the Code Applicant. (Respond means seek additional required information, assign CO Code or Plant Test Code, reserve CO Code, deny CO Code or Plant Test Code, suspend assignment activity with explanation of CO Code or Plant Test Code, or indicate NPA is in jeopardy). Provide specific reasons for the denial of CO Code and Plant Test Code applications, when appropriate, to the Code Applicant in writing.
- 5.5 When the Code Applicant satisfies all the criteria contained in these Guidelines, select an unassigned CO Code for assignment.
- 5.6 Perform URCA's responsibilities for CO Code conservation as specified in Section 8 Central Office Code Conservation.

- 5.7 Maintain up-to-date records on the status of all geographic CO Codes assignments within each NPA.
- 5.8 Coordinate and manage the Bahamas Central Office Code Utilization Survey (COCUS).
- 5.9 Concurrent with assignment of a CO Code to a Code Applicant, input the NPA, NXX, OCN of the code applicant, effective date, switch/POI CLLI and Rate Center (provided by the Code Applicant on the Part 1 Request for Central Office Code Assignment Form) to the Telcordia Technologies Inc. Business Integrated Routing and Rating Database System (BIRRDS). The input of the above information into BIRRDS will permit the Code Holder and/or its agent to enter the information contained in Part 2 Routing And Rating Information Forms 1 - 8 into RDBS in order to initiate the CO Code activation process (see Code Activation Time Line in Appendix C).
- 5.10 Analyze and help resolve numbering problems related to CO Code assignments.
- 5.11 Ensure that the Code Applicant places the CO Code In-Service within the time frame specified in Sections 6.3.3 and 4.4 of these Guidelines. If the assigned CO Code is not placed In-Service within this time frame, URCA shall request the return of the CO Code for reassignment. Upon receipt of the Part 4 form confirming that a CO Code has been placed in service, URCA will update the ACD screen to indicate that the code has been activated and the effective date of the activation.
- 5.12 Perform the URCA responsibilities for CO Code reclamation functions as specified in Section 7 Reclamation Procedures.
- 5.13 URCA may place certain CO Codes in a reserved pool based the NNP Allocation Table or on a request from a code applicant. If a Code Applicant requests one of the reserved CO Codes, URCA shall advise the Code Applicant in writing that the CO Code has been reserved. Additional appropriate details may be provided and the applicant may be offered another choice. Should the Code Applicant be unwilling to accept any other available CO Code, URCA shall respond to the request with a Part 3 PUC's Response/Confirmation Form marked "Assignment activity suspended by the Administrator." URCA shall complete the "Explanation" section of the Part 3 PUC's Response/Confirmation Form by noting that the CO Code has been reserved. URCA may or may not reveal the identity of the party that reserved the CO Code.
- 5.14 URCA shall prepare information and reports with respect to The Bahamas NPA and CO Codes, that may be made public, taking into account any submissions made by an applicant in support of confidentiality of certain information.

## **6.0 Responsibilities of Code Applicants and Code Holders**

Code Applicants and Code Holders are responsible for obtaining a current copy of the Bahamas Central Office Code Assignment Guidelines from the PUC's web site: [www.urcabahamas.bs](http://www.urcabahamas.bs). Code Applicants and Code Holders are responsible for reading, understanding and acting in accordance with these Guidelines. Before Industry Notification to activate the CO Code throughout the NANP area can commence, the Code Holder must enter, or arrange to have entered, all required routing and rating data into the Telcordia databases using the Part 2 Forms. In order to complete the Part 2 Forms, the Code Holder must make the necessary business arrangements including interconnection (e.g., homing arrangements), billing arrangements, and associated industry requirements (e.g., RAO, OCN and Common Language Location Identifier (CLLI) Codes).

Before a CO Code can be assigned by URCA, Code Applicants must submit a letter to URCA on the organization's official stationary, signed by a corporate officer or other designated individual, that identifies the Code Applicant's Authorized Representative(s), including name, telephone number, e-mail address and geographic address, for signing and submitting CO Code requests and other documentation described in these Guidelines. Code Applicants are responsible for maintaining their list of Authorized Representatives in an accurate state at all times. This authorization serves as a control measure for the protection of both the Code Applicant and URCA. URCA will only process applications submitted by such Authorized Representatives. URCA will maintain a confidential list of Authorized Representatives for all Code Applicants.

Entities requesting new CO Code assignments as well as entities already assigned CO Codes shall comply with the following:

### 6.1 The Application Process

- 6.1.1 Code Applicants for Initial Code and/or Additional Code assignments shall submit their requests to URCA using the Bahamas Central Office Code Assignment Request Form (Part 1). One Request Form is required per CO Code requested. The Code Applicant will complete all required entries on the Bahamas Central Office Code Assignment Request Form as well as sign the Form. For electro-mechanical switches or other special needs, the Code Applicant must perform technical analysis as necessary to determine the appropriate CO Code to be requested. Code Applicants are required to retain a copy of all application forms, appendices and supporting data for five years in the event of an audit.

The Code Applicant is not required to submit the Part 2 Routing and Rating Information Forms to URCA when requesting the assignment of a CO Code. After a CO Code is assigned to the Code Applicant by URCA, the Code Holder is responsible to enter, or to arrange to have entered, the information required in the Part 2 Routing and Rating Information Forms into the appropriate routing and rating databases (e.g., Telcordia RDBS and BRIDS) to notify the telecommunications industry.

- 6.1.2 Requests for CO Code Assignments shall be made at least 66 calendar days prior to, and not more than 6 months before, the requested "Effective Date".

6.1.3 When requesting Additional Codes, Code Applicants shall meet the requirements as described in Section 4.2 and conform to the conditions contained therein.

6.1.4 The Code Applicant shall certify on the Bahamas Central Office Code Assignment Request Form that to the best of his/her knowledge necessary governmental/regulatory authorization has been obtained to provide the service(s) for which the CO Code is being requested.

## 6.2 Information Required for Code Activation

6.2.1 Before a CO Code can become active; all Code Holders are responsible for providing routing information for entry into the RDBS and rating information for entry into BRIDS. In addition, any changes to the requested effective date for CO Code activation and/or Operating Company Number (OCN) need to be provided to the PUC as soon as the changes occur.

6.2.2 Code Applicants should request the Effective Date of CO Code activation to be at least 66 calendar days after the date of receipt of the Part 1 Bahamas Central Office Code Assignment Request Form by URCA (see Appendix C Code Activation Time Line). This minimum 66 calendar day interval is necessary because of the current industry standard of 14 calendar days for CO Code Request Processing by the Numbering Administrator, 7 calendar days for entry of Part 2 Forms data into RDBS and BRIDS by the Code Applicant's Administrative Operating Company (AOC), and 45 calendar days Activation Interval<sup>2</sup> for CO Code activation by the NANP telecommunications industry. Requests for an "Effective Date" of less than 66 calendar days after the date of receipt of the Part 1 Bahamas Central Office Code Assignment Request Form by URCA are not permitted as they would increase the potential for call blocking and/or billing errors. Interconnection arrangements and facilities need to be in place prior to the effective date of CO Code activation. Such arrangements are beyond the scope of these Guidelines.

6.2.3 A Code Holder is responsible to ensure that the CO Code information is input into an appropriate LIDB Access Support System (LASS).

6.2.4 Upon assignment of a CO Code to a Code Applicant, the Code Applicant becomes the Code Holder.

## 6.3 Ongoing Administration

### 6.3.1 Information Changes

The information associated with a CO Code assignment may change over time. Accordingly, it is the responsibility of the Code Holder to arrange

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<sup>2</sup> For more information, refer to ICCF document 92-0726-004, "Recommended Notification Procedures to Industry for Changes in Access Network Architecture." ([www.atis.org](http://www.atis.org))

for the entry of any changes into the RDBS and BRIDS databases, and to inform URCA of any changes that affect the PUC's assignment records by submitting Part 1 of the Bahamas Central Office Code Assignment Request and Confirmation Forms, detailing the appropriate changes, for the affected CO Code. This process includes changes such as, but not limited to, the OCN, switching entity/POI and Rate Center name.

### 6.3.2 Responsibilities of the Code Holder

The Code Holder must use all CO Codes assigned to it in a manner consistent with these Guidelines. Code Holders must participate in the audit process necessary to effectively assess CO Code utilization.

### 6.3.3 Code Use

CO Code assignments are made subject to the criteria listed in Section 4. A CO Code assigned to a Code Holder by URCA must be placed "In Service" within 6 months after the initially published "Effective Date" of CO Code activation. The Code Holder must certify that the CO Code was placed "In Service" within 6 months after the initially published "Effective Date" by completing and submitting Part 4 Bahamas Code Holder's Confirmation of Code In-Service Date Form to URCA. If a Code Holder no longer has need for a CO Code, the Code Holder should return the CO Code to URCA for reassignment. If it is determined through the audit process or other means that a CO Code is not in use 6 months after the "Effective Date", URCA shall request, in writing, the Code Holder to return the CO Code. Upon receipt of written confirmation from the Code Holder that the CO Code is returned, URCA shall return the CO Code to the available pool for future assignment.

- 6.4 All current and potential Code Holders shall provide forecasted CO Code requirements as input to the COCUS to URCA.
- 6.5 All Code Holders agree to abide by the CO Code reclamation procedures in Section 7.
- 6.6 All Code Holders shall assign Location Routing Numbers (LRNs) in accordance with Appendix H of these Guidelines and shall enter LRN data into the Telcordia Technologies RDBS and BRIDS databases in accordance with the requirements for those databases.
- 6.7 All Code Holders shall age telephone numbers in the CO Codes assigned to them in accordance with the Aging guidelines specified in Appendix F of these Guidelines.
- 6.8 All Code Holders are responsible to analyze and resolve numbering problems related to misrouted calls and calls that cannot be completed. Such investigations should be initiated by the Telecommunications Service Provider on whose network the call was

originated.

## **7.0 Reclamation Procedures**

### **7.1 Code Holder Responsibility**

The Code Holder shall return the CO Code to URCA if:

- a) the CO Code is no longer required by the Code Holder for the purpose originally assigned;
- b) the service for which the CO Code was assigned is discontinued;
- c) the CO Code was assigned, but not used in conformance with these Guidelines; or
- d) the CO Code was not placed In-Service within the time frame specified in these Guidelines.

When returning a CO Code to URCA, the Code Holder shall complete Section 1.5 of the Part 1 Form to indicate that the CO Code is being returned for future assignment. URCA will confirm the return of the CO Code by providing the CO Code Holder with a Part 3 Form.

It is the responsibility of the Telecommunications Service Provider returning the CO Code to complete a Part 2 Form and provide it to their AOC to arrange for the disconnection and removal of any records associated with the CO Code from RDBS and BRIDS. The AOC will also contact Telcordia to arrange for the permanent deletion of the records associated with the disconnected code. Once the RDBS and BRIDS records have been removed from the Telcordia databases, the Telecommunications Service Provider returning the CO Code should contact URCA via E-mail to inform them that the data has been removed.

### **7.2 URCA Responsibilities**

7.2.1 URCA shall contact in writing any Code Holder identified as not having returned to URCA for reassignment any CO Code:

- a) assigned but no longer in use by the Code Holder,
- b) assigned to a service that is no longer offered by the Code Holder,
- c) assigned but not placed In-Service within the time frame specified in these Guidelines, or
- d) assigned but not used in conformance with these Guidelines.

In circumstances where the Code Holder voluntarily returns a CO Code to URCA, URCA will acknowledge via an e-mail message receipt of the Part 1 Form from the Code Holder that indicates that a CO Code is being returned. In addition, once

URCA has been informed that the RDBS and BRIDS records associated with the CO Code have been removed from the Telcordia databases, URCA will delete the ACD screen associated with the CO Code. URCA will acknowledge this action by completing a Part 3 Form indicating return of the CO Code from the former CO Code Holder and will provide the former CO Code Holder with a copy of the completed Part 3 Form.

When URCA initiates code reclamation in any of the above four instances, URCA shall seek written clarification from the Code Holder regarding the use of the resource. If the Code Holder provides an explanation satisfactory to URCA in conformance with these Guidelines, the CO Code will remain assigned and no further action will be taken. If the Code Holder does not provide a written explanation that is satisfactory to URCA, URCA shall initiate action to reclaim the CO Code. URCA shall send a registered letter to the Code Holder's address of record requesting that the Code Holder contact URCA within 30 calendar days of the date of the letter regarding the use of the resource. If the letter is returned as non-delivered, or the Code Holder does not respond within 30 calendar days from the date of the letter, URCA will initiate action to reclaim the CO Code. .

URCA shall receive and investigate all referred allegations of non-use or misuse of CO Code resources and take appropriate action.

- 7.2.2 If the Code Holder does not provide URCA with a Part 4 Code Holder's Confirmation of Code In-Service Date form, within 6 months of the Effective Date for activating the code in the PSTN, providing the In-Service date of the CO Code by the Code Holder, URCA shall commence reclamation of the CO Code. In the event that the Code Holder is unable to put the CO Code In-Service within 6 months of the effective date of CO Code activation, the Code Holder may submit a written request to URCA to extend the In-Service date by up to 90 calendar days. This written request must provide evidence that the reason for not putting the CO Code In-Service is not within the control of the Code Holder. URCA shall determine, via review of the Code Holder's written request, whether an extension of up to 90 calendar days is warranted and, accordingly, may extend the In-Service date by up to 90 calendar days.

- 7.2.3 URCA shall not make available for assignment any returned CO Code prior to 66 calendar days after receipt of the Part 1 notification and shall update URCA website accordingly.

## **8.0 Central Office Code Conservation**

Central Office Code resources shall be assigned and administered in accordance with the following objectives:

- a) ensure an adequate supply of CO Codes is available at all times to the Bahamas telecommunications industry,
  - b) efficiently and effectively administer a limited NANP resource through CO Code conservation,
  - c) delay NPA exhaust and the need for NPA relief (e.g., splits/overlays) for as long as possible, and
  - d) delay the eventual exhaust of the NANP (see Section 3.2).
- 8.1 A COCUS study will be conducted by URCA, in accordance with the Central Office Code Utilization Survey Guidelines, to identify Telecommunications Service Provider CO Code requirements for the following 5 years. These studies will utilize actual assignment data and projected demand forecasts provided by current and potential Code Holders. All actual and forecasted information shall be treated on a proprietary basis.
- 8.2 Ongoing CO Code administration practices that foster conservation shall include the following: (See Section 7 for CO Code reclamation procedure)
- a) Assignment of CO Codes for temporary testing purposes should be minimized.
  - b) The PUC shall not assign a CO Code that will result in a change to the dial plan (e.g., a change from 7 digit to 10 digit local dialing) without going through a Public Consultation process.
  - c) Code Protection (See Glossary) arrangements should be avoided unless such arrangements are directed by URCA, or are required to maintain existing dial plan arrangements. URCA shall maintain and make available a record of protected CO Codes and the rationale for such protection.
- 8.3 When it is determined by URCA that an NPA requires NPA Code Relief, based on COCUS results and projected demand forecasts, URCA will implement NPA Code Relief activities (see the NPA Relief Planning Guidelines).
- 8.4 When an NPA is declared by URCA to be in a Jeopardy Condition, URCA will assign CO Codes based upon the provisions contained in the NPA Relief Planning Guidelines.

## **9.0 Maintenance of these Guidelines**

It may be necessary to modify these Guidelines periodically to meet changing and unforeseen circumstances. Questions regarding these Guidelines should be directed to URCA. Requests for changes to these Guidelines should also be made to URCA.

## 11.0 Glossary

Active Code	A CO Code implemented in the PSTN for specific routing or rating requirements.
Additional CO Code Assignment for Growth	A CO Code assigned to a switching entity or POI subsequent to the assignment of the first CO Code (See Initial Code), for the same purpose as a CO Code that was previously assigned to the same switching entity or POI. An Additional Code for Growth is requested when the line numbers available for assignment in a previously assigned CO Code will not meet expected demand. See section 4.2.1.
Additional CO Code For A Unique Purpose	A CO Code assigned to a switching entity or POI subsequent to the assignment of the first CO Code (See Initial Code), due to a distinct routing, rating, billing or other requirement that is different from the use of any CO Code(s) that were previously assigned to the same switching entity or POI. See sections 4.2.2 and 4.2.3.
Affected Parties	Affected Parties are those entities that have applied for and/or received CO Code assignments or reservations within the NPA per Section 4.0 of these Guidelines (i.e., Code Holders in the NPA).
AOC	Administrative Operating Company is an organization that has access to input and update data contained in the Traffic Routing Administration (TRA) and other Telcordia databases. An AOC may, under contract to other entities, provide a data input service to those databases. –Inquiries regarding AOC designation and access to TRA databases should be directed to the TRA at 732-699-6700 or visit their website at <a href="http://www.trainfo.com">www.trainfo.com</a> .
AOCN	Administrative Operating Company Number designated numeric or alphanumeric code assigned by TRA at identifies an Administrative Operating Company.
Authorized Representative of Code Applicant	The person from the Code Applicant’s organization or its agent that has the legal authority to take action on behalf of that Code Applicant.
BIRRDS	See Business Integrated Routing and Rating Database System
BRIDS	The Telcordia Business Rating Input Data Base System (BRIDS) contains data for the rating of calls. The data in BRIDS supports all CO Codes administered under the Bahamas Central Office Code Assignment Guidelines, as well as all Numbering Plan Areas (NPAs) administered under the North American Numbering Plan (NANP). BRIDS is a database system that contains North American Numbering Plan (NANP) rating data for Canada, the United States and the Caribbean nations as well as Mexico due to its proximity even though Mexico is not a participant in the NANP. This System

Business Integrated Routing and Rating Database System (BIRRDS)	generates the Terminating Point Master for billing purposes. BIRRDS is the TRA integrated systems environment database that is used by Administrative Operating Company Number (AOCN) companies for the creation and modification of routing and rating database records for assigned CO Codes. The BIRRDS system includes other TRA database systems such as RDBS, BRIDS, LASS and CNSS.
Central Office Code	The D-E-F digits of the 10 digit NANP number in a telephone number. Central Office Codes (CO Codes) are in the format “NXX”, where N is a number from 2 to 9 and X is a number from 0 to 9.
CLLI™	Common Language Location Identifier® ™ is an eleven-character descriptor of a switch or network element (e.g., switch, POI).
CO Code Exhaust	A point in time at which the quantity of TN’s within existing CO Codes which are “Available for Assignment” equals zero within a switching entity/POI or, conversely, when the quantities of “Working Telephone Numbers” plus “TN’s Unavailable for Assignment” equal 10,000 times the quantity of existing CO Codes assigned to a switching entity/POI. Where CO Code sharing occurs or partial CO Codes are assigned to a switching entity/POI, the latter number should be adjusted accordingly.
Central Office Code Utilization Survey (COCUS)	Study conducted by the PUC as required as one of the methods for identifying NPA Exhaust.
CLEC	Competitive Local Exchange Carrier
COCUS	See Central Office Code Utilization Survey.
Code Applicant	The entity which has applied for the assignment of a CO Code in accordance with these Guidelines.
Code Holder	The entity to which a CO Code has been assigned in accordance with these Guidelines for use at a Switching Entity or POI it owns or controls.
Code Protection	Code protection is an arrangement whereby a Central Office Code is designated as not available for assignment in an adjacent exchange in an adjacent NPA. This is done to allow 7-digit dialing across the boundary between the adjacent exchanges in the adjacent NPAs.
Conservation	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.
Effective Date	The date that a CO Code or supporting data changes (e.g., routing and rating) is/are to become effective within the NANP area PSTN network. The effective date may be: (1) the date the CO Code is to become active (i.e., can first be routed to), or (2)

	subsequent dates when pertinent supporting data will be modified (e.g., an active CO Code is associated with a switching entity/POI replacement) or, (3) the date a CO Code will be disconnected (most often CO Codes associated with the “old” NPA side of an NPA “split”).
Exchange Area	As defined by the Commission in its Glossary released coincident with Decision 97-8, an Exchange is “The basic unit for the administration and provision of telephone service by an ILEC, which normally encompasses a city, town or village and adjacent areas. Within an exchange and to other exchanges that have extended area service (EAS) or similar services with that exchange, all subscribers may place an unlimited number of calls of any duration to all other subscribers without incurring long distance toll charges. Exchanges for which EAS or similar services have been established continue, nevertheless to be separate and distinct exchanges.”
ILEC	Incumbent Local Exchange Carriers
INC	Industry Numbering Committee. The INC is a standing committee of the Carrier Liaison Committee (CLC) that is sponsored by the Alliance for Telecommunications Industry Solutions (ATIS). The INC provides an open forum to address and resolve industry-wide issues associated with the planning, administration, allocation, assignment and use of resources and related dialing considerations for public telecommunications within the North American Numbering Plan (NANP) area.
Initial Code	The first geographic Central Office Code assigned to a Code Holder based on identification of a new switching entity, physical POI, or a unique Rate Center Exchange Area or Parish.
In-Service	An active CO Code in which specific subscribers or services are utilizing assigned telephone numbers.
Jeopardy Contingency Plan	It is a contingency plan for the conservation and assignment of CO Codes, that is a part of the NPA Relief Implementation Plan, and would be implemented in the event of a Jeopardy NPA condition being declared by the PUC.
Jeopardy NPA Condition	A jeopardy condition exists when the forecast and/or actual demand for CO Codes exceeds the quantity of CO Codes available for assignment within the NPA before it is expected that relief can be implemented.
LEC	Local Exchange Carrier (includes Competitive Local Exchange Carriers and Incumbent Local Exchange Carriers)
LERG	Local Exchange Routing Guide: contains information about the local routing data obtained from the Routing Database System (RDBS). This information reflects the current network configuration and scheduled network changes for all entities originating or terminating PSTN calls within the NANP area.
Major Vertical Coordinate	A five-digit number used with the Horizontal Coordinates to

	<p>identify the location of a Rate Center or a switch/POI. The Vertical and Horizontal Coordinates can be used to calculate mileage measurements between two Rate Centers or switches/POIs that are used to determine the appropriate mileage rates in determining the charges for various services. Vertical and Horizontal Coordinates are derived from the latitude, longitude system.</p>
Major Horizontal Coordinate	<p>A five-digit number used with the Vertical Coordinates to pinpoint the location of a Rate Center or a switch/POI. The Vertical and Horizontal Coordinates can be used to calculate mileage measurements between two Rate Centers or switches/POIs that are used to determine the appropriate mileage rates in determining the charges for various services. Vertical and Horizontal Coordinates are derived from the latitude, longitude system.</p>
NANP	<p>The North American Numbering Plan is a numbering architecture in which every station in the NANP Area is identified by a unique ten-digit address consisting of a three-digit NPA Code, a three digit Central Office Code of the form NXX, and a four-digit line number of the form XXXX. The NANP Administration (NANP-A) is responsible for administration of the North American Numbering Plan and associated addressing resources.</p>
National Exchange Carriers Association (NECA)	<p>The NECA assigns Company Codes that are used as Operating Company Numbers (OCNs) in the Telcordia routing and rating databases. Companies with no OCN assignment may contact NECA at 973 884-8355 to obtain a Company Code. The NECA web site is <a href="http://www.neca.org">www.neca.org</a>. The web page to obtain information on Company Codes is: <a href="http://www.neca.org/comcode.htm">www.neca.org/comcode.htm</a></p>
National Numbering Plan Administrator (NNA)	<p>The entity responsible for the administration of Bahamas numbering resources including CO Codes within Bahamas geographic NPA.</p>
NPA	<p>Numbering Plan Area (also called Area Code). An NPA is the 3-digit code that occupies the A, B, and C positions in the 10-digit NANP format that applies throughout the NANP serving area. NPAs are of the format NXX, where N represents the digits 2-9 and X represents any digit 0-9. In the NANP, NPAs are classified as either geographic or non-geographic.</p> <p>a)Geographic NPAs are NPAs that correspond to discrete geographic areas within the NANP serving area.</p> <p>b)Non-geographic NPAs are NPAs that do not correspond to discrete geographic areas, but which are instead assigned for services with attributes, functions, or requirements that transcend specific geographic boundaries. The common examples are NPAs in the N00 format, e.g., 800, 900.</p>

NPA Exhaust	A point in time at which the quantity of CO Codes within the NPA which are available for assignment equals zero.
NPA Relief	NPA Relief refers to an activity that must be performed when an NPA nears exhaust of its CO Code capacity.
OCN	See Operating Company Number
Operating Company Number (OCN)	An Operating Company Number (OCN) is a code used to uniquely identify and associate a company with certain records in Telcordia's databases and in related output products (e.g. LERG, V&H coordinates data). Specific to these Guidelines, the OCN is intended to uniquely identify the Code Holder. OCNs are used in various telecommunications industry processes primarily as a means to identify local service providers. Telcordia lists Operating Companies in various "categories" (see the Telcordia Traffic Routing Administration internet site at <a href="http://www.trainfo.com">www.trainfo.com</a> ). Companies that do not have an OCN may contact the National Exchange Carriers Association (NECA) to request the assignment of a NECA Company Code(s) that can be used as the basis for numeric OCNs in the Telcordia databases. NECA Company Codes are assigned based on different types of services. Companies with existing OCNs should direct questions regarding appropriate OCN usage to NECA at 973 884-8355 or via the internet at <a href="http://www.neca.org">www.neca.org</a> .
Plant Test Codes	There are two standard Plant Test Codes (i.e., 958 and 959) that may be used by any entity for testing within its network. In addition, CO Codes may be assigned by the PUC on a temporary basis to Code Applicants or Code Holders. See Section 4.6.
Point of Interconnection (POI)	The physical location where two carriers' facilities interconnect for the purpose of interchanging traffic on the PSTN.
Protected Code	See Code Protection.
PSTN	Public Switched Telephone Network. The PSTN is composed of all transmission and switching facilities and signal processors supplied and operated by all telecommunications common carriers for use by the public. Every station on the PSTN is capable of being accessed from every other station on the PSTN via the use of NANP numbers.
RAO Code	See Revenue Accounting Office Code.
Rate Center	A specific geographic point used for determining distance dependent rates for PSTN calls.
Reassignment	Refers to the transfer of a working or assigned CO Code from one switching entity/POI to another.
Reserved CO Codes	A CO Code that has been identified and set aside by the PUC for some specific use or purpose, such as for a Code Applicant.
Revenue Accounting Office	Revenue Accounting Office (RAO) Codes are a component in

## Bahamas Central Office Code Assignment Guidelines

Code	the Central Office Code Assignment process. The RAO Code Guidelines, prepared by the RAO Administrator (Telcordia Technologies, Inc.), includes background information on RAOs and describes the means of requesting an RAO assignment (see the Telcordia Traffic Routing Administration internet site at <a href="http://www.trainfo.com">www.trainfo.com</a> ).
Switching Entity	A network element system used to connect lines to lines, lines to trunks, or trunks to trunks for the purpose of originating/terminating PSTN calls. A single switching system entity may be assigned several CO Codes.
Telcordia Technologies Inc.	Telcordia Technologies Inc. provides various services to the North American telecommunications industry, including but not limited to Traffic Routing Administration (TRA). The TRA operates routing, rating, and other databases that are used by the telecommunications industry. Additional information may be obtained from TRA at 732-699-6700 or at web site: <a href="http://www.trainfo.com">www.trainfo.com</a>
Telecommunications Service Providers	Any entity that is authorized, as appropriate, by the appropriate regulatory authority to provide telecommunications services to the public.
Terminating Point Master	The TPM contains all the active NPA and CO Code combinations in the NANP and for each of these points the following is provided: Major Vertical and Horizontal coordinates, Local Access Transport Area (LATA)/LATA-like code, LATA subzone code, RAO code, place and state, province or country name abbreviation, and time zone indicator..
TN's (Telephone Numbers) Available for Assignment	The quantity of telephone numbers within existing CO Codes which are immediately available for assignment to subscriber access lines or their equivalents within a switching entity/POI.
TN's (Telephone Numbers) Unavailable for Assignment	The quantity of telephone numbers within existing CO Codes which are not immediately available for assignment to subscriber access lines or their equivalents within a switching entity/POI. Examples include numbers required for maintenance testing, numbers reserved for specific customers or specific services, disconnected numbers on intercept, pending connects or disconnects.
Traffic Routing Administration (TRA)	Traffic Routing Administration - See Telcordia Technologies Inc.
Working Telephone Numbers (WTNs)	The quantity of telephone numbers within existing CO Codes which are assigned to working subscriber access lines or their equivalents, e.g., direct inward dialing trunks, paging numbers, special services, temporary local directory numbers (TLDNs), etc., within a switching entity/POI.
WSP	Wireless Service Provider (e.g Cellular)

**Appendices:**

*A. Audit*

*B. Months To Exhaust Certification Worksheet*

*C. Time Lines*

*D. Plant Test Code Application and URCA Response/Confirmation Form*

*E. Location Routing Number (LRN) Selection Criteria*

*F. Aging And Administration Of Disconnected Telephone Numbers*

**Central Office Code Assignment Request and Confirmation Forms:**

*Part 1 - Bahamas Central Office Code Assignment Request Form*

*Part 2 - Routing and Rating Information Forms 1 – 8*

*Part 3 - URCA's Response/Confirmation Form*

*Part 4 - Code Holder's Confirmation of Code In-Service Date Form*