

# Wireless Number Portability

## Fourth Quarterly Report to the CRTC



filed by:  
Canadian Wireless Telecommunications  
Association

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## **1.0 Introduction**

In Telecom Decision CRTC 2005-72, *Implementation of wireless number portability* (Decision 2005-72), the Commission directed the Canadian Wireless Telecommunications Association (CWTA) to “file quarterly reports in order to inform the Commission of the wireless industry’s progress in implementing WNP”.

This update is submitted on behalf of Aliant Mobility, Bell Mobility, Bell Nordiq, KMTS, MTS Mobility, Rogers Wireless, SaskTel, TBayTel Mobility and TELUS Mobility and covers the period between August 1, 2006 and October 31, 2006.

Since the filing of the last report, the Canadian telecommunications industry has continued towards implementation of WNP and has devoted significant time and resources to the task.

## **2.0 Key Industry Activities between August 1, 2006 and October 31, 2006**

- CWTA has continued program management activities for WNP implementation. The Association maintains a WNP Implementation Task Force (WNPITF) and operates a Project Management Office (PMO) devoted to successful implementation of the program.
- The PMO, in conjunction with the wireless carriers, continues to fine-tune the implementation plan to include any new tasks, changes to deadlines, etc. as they become evident. To date, the industry has been able to adjust the work plans to maintain the March 14, 2007 implementation date established in Decision 2005-72.
- The industry continues to assess and rank risks to the WNP implementation plan and consumer experience, as well as to identify strategies to mitigate these risks.
- Under the coordination of the PMO, individual work stream teams have continued working on the various implementation tasks. As the project has evolved and work has progressed, the work streams have adjusted themselves accordingly. Most of the following eleven work streams, and their sub working groups, meet weekly, or more often as required:
  - Canadian WNP Guide (CWNPNG)
    - Industry Fall Out Management/Coordination sub working group
  - Industry Clearinghouse
  - CLNPC/NeuStar
  - Shared NXX
    - LRN Testing sub working group
    - Bulk Porting Pilot sub working group
  - Mobile Identification Number (MIN) Block Identifiers (MBI) Management
  - Inter-Carrier Testing
  - Marketing Communications
  - Legal

- Regulatory
- PMO
- Short Message Service (SMS)/Multi-media Messaging Service (MMS)
- In addition to the 11 work streams noted above, a new work stream has been formed to identify and address Network Implementation issues. The work stream meets on an 'as needed' basis and includes wireline participants.
- WNPITF members have also been attending meetings of broader industry groups:
  - CISC BPWG
  - CISC NTWG
  - CISC ESWG
  - Canadian Steering Committee on Numbering (CSCN)
  - CLNPC NPAC Ops
  - Canadian Numbering Administration Consortium (CNAC)
- Activities of the above groups included work on the following three reports mandated in Telecom Decision CRTC 2006-28:
  - NTWG developing a roll-out schedule for non-portable exchanges;
  - CSCN modifying the LRN Assignment Guidelines; and
  - BPWG developing a bulk number porting process.
- The ESWG WNP Sub-committee has provided finalized testing scenarios to the Inter-carrier Testing work stream. Negotiations continue between the Public Safety Answering Points (PSAPs) and carriers concerning implementation of the 9-1-1 WNP test plans. The ESWG continues to express concern with the aggressive schedule the wireless industry is required to follow in order to launch WNP on March 14, 2007.
- Discussions have continued between CLNPC and the WNPITF regarding overall NeuStar requirements and the timing of implementation of new wireless features.
- CISC and CRTC have approved the MBI Assignment Guidelines.
- Work has continued between the WNPITF and BPWG regarding the Bulk Porting exercise, as well as clearinghouse requirements that will be reflected in CLOG 6.
- Work has continued with the industry porting Clearinghouse vendor to ensure it can meet the requirements of the Canadian industry.
  - The WNPITF has created a Defect Management and Prioritization sub-working group of the Industry Clearinghouse work stream and engaged an industry professional to manage this critical activity.
- Wireless carriers' internal development teams continue to work on the planning, development and testing of internal systems and processes.

### **3.0 Key Risks to the Implementation Schedule and Customer Experience**

As in previous reports, the WNPITF is of the view that there are several key risks that will and are negatively impacting the implementation schedule and customer experience. These risks, which are further explained below, include:

1. The implementation timeline and quality of deliverables provided by the Clearinghouse vendor continue to pose a risk to successful delivery of WNP in March 2007. This includes the delivery of French character support that will not

- occur until January 2007, yielding little time for system testing and for problem resolution.
2. The limited amount of time made available for testing, the timing of testing during the peak 4<sup>th</sup> Quarter sales period and the absence of any buffer between the conclusion of testing and the WNP launch date.
  3. Shared NXX/Bulk Porting: the industry is working to understand all impacts where bulk porting is used as a solution to the Shared NXX problem, including processes, timing, costs and network readiness issues (e.g. first port notifications, LRN testing, network translations and upgrades, LERG updates, LRN routing) that need to be resolved in advance of bulk porting. In addition, bulk porting has a dependency on the CRTC to provide approval on reports that have been submitted regarding processes and roll-out schedules.
  4. Remaining unresolved regulatory issues.

The risks, likelihood of occurring, and impact are summarized in the following table:

<u>Risk</u>	<u>Probability of Occurring</u>	<u>Impact if Occurs</u>
1, Clearinghouse Vendor delivery timing or quality issues	High	High
2. Lack of Time for testing and error correction	High	High
3. Unable to complete Shared NXX bulk porting	Medium	Medium
4. Unresolved regulatory issues	Low	High*

\*This risk is high if the Commission's decisions significantly alter the CISC consensus reports.

### **3.1 Clearinghouse**

The industry continues to work to ensure that the Clearinghouse vendor can meet the requirements of the Canadian industry. The task of developing and testing a Wireless to Wireless and Intermodal porting Clearinghouse continues to be an immensely complex endeavour. Both Wireless to Wireless and Intermodal software code has been provided by the vendor and internal carrier testing is underway to identify and resolve any issues prior to acceptance of the solution and before commencement of Inter-carrier testing.

To support the progress of Acceptance Testing and to be ready for Inter-Carrier Testing the Industry Clearinghouse work stream implemented an Industry Defect Management process to mitigate impacts and work with the Clearinghouse vendor to resolve software defects. Carrier technical support personnel have also been located at the vendor site to accelerate the resolution of defects to ensure delivery of stable and consistent code quality, and to ensure releases meet quality and timeliness expectations..

One further element required for the March 2007 launch is the French character component. Unfortunately, carriers are not anticipating delivery of a version of the system that includes this element until January 2007. This software release will also require stringent testing and problem resolution before it can be implemented. Again, software quality and timely delivery are required.

### **3.2 Testing**

Compounding the challenges the carriers face is the Commission's assumption that the carriers will be able to continue testing during the busy fourth quarter and that elements of the pilot testing could be performed concurrently. The WNPITF remains concerned that there is little room in the schedule to redevelop and re-test any element of the program that fails testing in the first pass. This concern is primarily related to the testing of inter-carrier processes, but there are also risks associated with the Acceptance Testing of the industry Clearinghouse and of the bulk porting process for Shared NXXs which are incremental to the original test plan.

Furthermore, current industry Acceptance Testing of the Clearinghouse application is underway for Wireless to Wireless ports while testing the functionality of Intermodal porting has not started. Wireless to Wireless testing represents 80% of the test effort with Intermodal testing 20% of the test effort.

The testing delays are directly related to the vendor performance issues identified in the previous section. With less than half of the test scenarios completed for Wireless porting the current failure rate is higher than expected and is deemed to be less than satisfactory. The industry is implementing an Industry Defect Management process to mitigate impacts and work with the Clearinghouse vendor to resolve software defects. However, if there is continued unacceptable code quality, and releases are not delivered on time with the appropriate fixes, there will be significant impacts to the overall implementation schedule with the most immediate impact being to the timeline to support Inter-Carrier Testing.

### **3.3 Shared NXX/Bulk Porting**

In Telecom Decision CRTC 2006-28 the Commission determined that bulk number porting of leased numbers is only required to be done in those exchanges that are LNP-capable and that the bulk porting need only be completed at the time of WNP launch.

The latest analysis indicates that there are 3.3 million numbers that will need to be bulk ported prior to March 14th (phase 1), and another 2.7 million that will need to be bulk ported post March 14th (phases 2 and 3) as exchanges become LNP, and therefore WNP, capable.

These are only an estimate, as the LNP/WNP roll-out schedule has not been approved and the CLEC and SILEC LNP schemes continue to add new exchanges to the list. Further, the BPWG report on Bulk Porting is also pending Commission approval.

Since the last report, a method to accomplish bulk porting has been chosen. The industry will be using a tool that has been used successfully in the United States but has never been used for this particular type of application. CLNPC is still determining exactly how this will work, timing, how we will handle any problems, etc. A Bulk Porting pilot has been planned to test the process prior to full scale production. It is intended to test the process and highlight any issues before bulk porting starts in January 2007.

Underlying all these concerns is the fact that bulk porting must work seamlessly, as the changes will affect the services of working customers.

### **3.4 Outstanding Regulatory Issues**

CWTA notes that there are still a few items that remain outstanding pending approval of CISC reports by the CRTC. These include: the BPWG Process for Bulk Porting; NTWG WNP/LNP Report on the Roll-out Schedule; and the CSCN LRN Assignment criteria. Until these reports receive Commission approval there remains a certain level of risk to the Information Technology/Information System (IT/IS) and network systems build in particular, as well as to the entire test phase, and the target launch date. The affected teams have been progressing on the assumption that the current version of these reports will be approved. If the Commission orders changes to any of the recommendations contained within these reports there is a risk that the March 14, 2007 implementation will be delayed.

In addition, until the Report on the Roll-out Schedule is approved, the NTWG cannot open a proposed new TIF to establish a procedure for requesting exchanges to be made portable beyond those scheduled in the report.

#### 3.4.1 Impact of SILEC Decision

As previously reported, Telecom Decision CRTC 2006-14 is having an impact on Canada's LNP systems. Requests to implement LNP in SILEC territories have begun and are adding exchanges to the LNP rollout. At present, the industry is unsure of the impact to rollout timelines as there has been no response from the SILECS on their commitments for bulk porting. This issue has implications for the post-March 14 WNP roll-out.

#### 3.4.2 LNP Roll-out Schedule

The Roll-out schedule developed in the NTWG will have an impact on the level of workload imposed on all carriers. For each new additional LNP capable exchange there is added complexity to the project, including additional switching upgrades, additional testing (internal and inter-carrier), increased translation activities, and the likelihood of more numbers to be bulk-porting – all dependant on the same finite resources. The CISC NTWG filed its proposed roll-out schedule August 15, with amendments filed on August 31 and September 29. Until the schedule is approved by the Commission, the workload impact on all carriers will remain uncertain.

### 3.4.3 MBI Administration

In Telecom Decision CRTC 2006-51 the Commission approved TIF Report CNRE060A providing for the administration of MBIs by the Canadian Numbering Administrator. The grandfathering process for existing MIN resources has largely been completed, and CNA has begun assigning new MIN Blocks.

The final issue with respect to the assignment of numbering resources is the approval of the changes to the LRN Assignment criteria submitted by the CSCN.

## **4.0 Conclusion**

The wireless carriers remain committed to a successful launch of WNP with a positive customer experience. The industry is doing everything reasonable within its power to move forward efficiently with this project. Given that WNP will have a significant impact on customers, the industry and the Commission together, must be mindful of our mutual goal of ensuring quick and seamless customer porting experiences. We look forward to continuing the work with other stakeholders to ensure a smooth and efficient porting process for the benefit of Canadian customers.

Nevertheless, as stated in the concerns noted above, any delays in resolving the outstanding issues identified in this Report could materially impact the systems and processes that are being developed. Further, delays or problems encountered in any one of a number of individual tasks could place the March 2007 launch date in jeopardy and has the potential to negatively impact the customer porting experience.

The industry remains concerned that the tight timelines and relatively short buffers resulting from the mandated implementation date of March 14, 2007 have left the industry with very little margin for error. At this time, CWTA believes that successful launch will rest on 1) the successful delivery of the Clearinghouse solution; 2) the successful completion of testing, 3) successful bulk porting of the shared NXXs and 4) approval of outstanding CISC reports with no changes.