

10 June 2009

Mr. David Archbold  
Managing Director  
Information and Communication Technology Authority  
3rd Floor Alissta Towers  
P.O. Box 2502  
Grand Cayman, KY1-1104

Dear Mr. Archbold:

**Re: Report of the Chair of the LNP Consortium**

Further to paragraph 86 of ICT Decision 2008-05, “Decision and Further Process on Local Number Portability”, 18 December 2009 (“**Decision 2008-05**”), I am submitting the following as the Chair of the LNP Consortium<sup>1</sup> as my report to the Authority on the appropriate method of implementing local (fixed) and mobile number portability (“**NP**”) in the Cayman Islands. This report is without prejudice to the rights of individual members of the LNP Consortium to submit to the Authority their views on the proceedings of the LNP Consortium, where they may differ from mine.

The Consortium has found NP to be an exceedingly complex issue. It is safe to say that every answer obtained by the Technical Committee turned up new questions as well. However, some things were agreed by the Consortium.

The implementation of NP will require the following:

1. A process for the taking a request to port a number;
2. Keeping track of numbers that have been ported;
3. Communicating those ported numbers among the various operators;
4. Routing calls among the various operators.

The Consortium has found that there are solutions to the first three requirements that may be less costly to set up and maintain than the database solution that had been proposed by the first Consortium prior to Decision 2008-05. In particular, without making a recommendation as to the appropriateness or viability of either solution provider, the Consortium investigated the solutions provided by PortingXS out of the Netherlands and

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<sup>1</sup> The LNP Consortium is not actually a legal entity, but is in effect an advisory body to the Authority, whose members are representatives of the telecommunications licensees operating in the Cayman Islands. The Consortium has organized itself into Technical, Business and Legal subcommittees, although due to the mandate from the Authority, the Technical Committee has been the most active.

SIP out of Iceland. Both are currently providing NP-related services, in the Netherlands and the Channel Islands, in the case of the former, and in Iceland, in the case of the latter, and both propose non-database solutions to the process of managing porting requests and keeping track of ported numbers. They both also propose methods for communicating information to the operators that appear suited for smaller markets such as ours. A summary of the investigation of the Technical Committee is attached.

However, the Consortium has been unable to reach a consensus on the appropriate system for routing calls among operators, mostly due to lack of time to further investigate the issue. Once a number has been ported and the fact of the porting communicated to operators, the operators need to implement a solution for routing calls accordingly. Further, that routing solution needs to be agreed among all operators – calls would not be completed properly if different operators were using different methods.

One solution discussed in the Committee was based on updating routing tables in the operators' switches. The originating carrier would look up the information necessary to route a call in that table and route it accordingly. Each carrier receiving the call would need to perform the same operation because each would have to determine whether the call is intended to go elsewhere or to terminate on that carrier's network. In practice, because all operators are connected to LIME, it could be expected that there would be at most three such operations – once by the originating carrier, once by the transiting carrier (LIME), and once by the terminating carrier.

However, the Consortium was not able to determine whether this “routing table” method would function with all types of networks, in particular whether mobile switches are capable of implementing it for both prepaid and postpaid services, and whether related non-voice services such as SMS and MMS would be negatively impacted (i.e., would the routing table method route only voice calls and not route SMS and MMS messages, which are provided by different platforms). If the routing table method is not capable of supporting mobile services, it is not likely to satisfy the Authority's mandate in Decision 2008-05. The Technical Committee would require additional time to determine whether (1) the routing table method is capable of supporting mobile services and (2) there are alternatives that might be feasible

The discussions of the LNP Consortium touched upon a couple of other matters that we believe the Authority will need to address, in particular who will select the “central” element of the NP solution. This question includes matters such as who will draft and issue an RFP, how will the successful vendor be selected, who will contract with that vendor and how will that vendor be paid. As noted above, the LNP Consortium is an advisory committee, not a legal entity, and does not have the capacity to do many if any of these things.

Please note that we have included the attachments in confidence to the Authority. The pricing information in particular should not be provided to the public, unless the vendor in question advises the Authority that it may be made public.

We would be pleased to answer any other questions the Authority may have.

Sincerely yours

Frans Vandendries  
Chair – LNP Consortium

c.c. Members of the LNP Consortium (Blue Sky Wireless, Digicel, LIME,  
TeleCayman, WestTel)

Encl.

## Attachment

### Summary of NP Solutions

	VeriSign	PortingXS	Telecordia	SIP <sup>1</sup>	Neustar
Fixed line porting	Y	Y	Y	Y	Y
Mobile line porting	Y	Y	Y	Y	Y
On island data base	N	Y	Y	Y	Y
Off island data base	Y	Y	Y	Y	Y
Needs dipping data base	Y	N	Y	N	Y
Access control	Y	Y	Y	Y	?
Management of porting on island	N	Y	Y	Y	?
Management of porting off island	Y	Y	Y	Y	?
Signaling access VPN	N			Y	?
Signaling access SS7	Y			N	Y
Porting input	both	both	both	both	
Customer request port via SMS	not know	Y	not know	not know	?
Audit trail	Y	Y	not know	Y	?
Reports on porting activity	Y	not know	not know	not know	?
API for integration with back office systems		Y			
VoIP portability (ENUM?)					
Return of ceased ported numbers		Y			
Setup cost \$US	\$3K per Carrier	\$14K per Carrier	\$0. per Carrier	\$200K	\$1.5m
Monthly running cost \$US	\$1200.00 per Carrier	\$2200.00 per Carrier	\$6000.00 per Carrier	\$300 per Carrier	\$250K
Dipping cost per call \$US	\$0.005	not know	not know		

Notes

1. SIP prices assume servers hosted off-island. On-island hosting would result in higher prices.