

Grand Cayman, 19 July 2010

### **Decision in Determination Request related to Cost Sharing of Local Number Portability Costs**

#### **Overview**

*In this decision, the Authority makes a determination on how to share common industry local number portability system costs. The Authority finds that common industry system costs are to be shared in proportion to the number of NXX's held by each licensee.*

(Note: This overview is provided for the convenience of the reader and does not constitute part of the Decision. For details and reasons for the conclusions, the reader is referred to the various parts of the Decision.)

#### **BACKGROUND**

1. In ICT Decision 2005-1, Interim Decision and Further Process for Local Number Portability, released 29 March 2005, the Information and Communications Technology Authority (“the Authority”) determined that there were significant benefits to Local Number Portability (“LNP”) and that it would be appropriate to further consider the cost of implementing LNP in the Cayman Islands. Accordingly, the Authority established a Local Number Portability Consortium (“LNP Consortium”), consisting of major ICT network licensees with Authority Staff providing administrative support, to identify the most appropriate LNP model for the Cayman Islands and to investigate its costs.
2. The Authority also determined that the fees payable to an outside vendor to host a central clearinghouse should be shared among the licensees. However, it concluded that it was not necessary at the time to make a determination as to the methodology for allocating those costs to the various licensees.
3. In ICT Decision 2008-5, Decision and Further Process on Local Number Portability, the Authority determined, based on the evidence filed, that the benefits likely to arise from the requirement to provide LNP outweigh the likely cost of implementing. The Authority was also satisfied on reasonable grounds that such a requirement would not impose an unfair burden on any licensee. Therefore, in accordance with section 71(3) of the ICTA Law, the Authority directed all operators licensed to provide telephony services (Type 1, 3, 4 and 5 Services) to implement LNP.
4. The Authority understands that the LNP Consortium is currently considering offers from various providers of a centralised database solution for LNP. It is prior to the selection of a vendor that a dispute between the Consortium members

has arisen as to the sharing of the cost of the LNP solution. In a meeting between the parties on 30 June 2010 the Authority invited the parties to file submissions on a cost-sharing methodology and to request a determination from the Authority on this matter.

5. The Authority received submissions from all four LNP Consortium members.

## **SUBMISSIONS**

6. In LIME's view the cost-distribution methodology chosen must satisfy the following criteria: a) it must be simple to administer; b) it must rely on publicly available, or at least non-confidential, information; c) it must be equitable to all operators, ensuring those who benefit from LNP pay for it; and d) it must be based on cost-causation principles, ensuring those who cause a cost incur the cost. Having regard to these criteria, LIME recommended "Equal Division" recovery of the common cost from all operators, where the common costs would be divided by the number of existing telecommunications licensees.
7. According to LIME an equal division of costs is the simplest system to administer and one which would require the least investment of time among the licensees to keep updated. Further, LIME submitted that this approach is the most reasonable since all operators stand to benefit from the introduction of LNP services, especially the smaller operators who benefit from gaining a larger addressable market from a lowering of switching barriers.
8. Digicel, in its comments also favoured an equal payment approach. Digicel submitted that the fairness of this approach is simply illustrated by considering what the situation would have been had the operators chosen to implement a non-centralised database solution. Here each operator would have been expected to meet their own costs and the costs would have been the same for each operator. Further, in Digicel's view a cost sharing methodology other than equal sharing of costs would be fraught with practical administrative difficulties and risk significant relationship problems between the operators.
9. In the event that the Authority is minded to base payment towards LNP on a variable factor such as market shares or revenue, Digicel submitted that its market share or revenues within the mobile market should be taken into account only when considering Digicel's contribution towards the assumed 50% of the central database solution costs designated to providing mobile number portability. Digicel's market share or revenues within the fixed market alone should be considered when determining its share of the assumed 50% of the database costs associated with the provision of fixed number portability.
10. WestTel submitted that all costs for the LNP Central Reference Database ("CRD") system be allocated to each operator based on total revenue derived from fixed and mobile operations. WestTel suggested that the Authority receives

- audited financials from each licensee and that revenues for mobile and fixed telephony are reported separately from other revenue streams.
11. In WestTel's view this is the best choice for cost sharing since: a) licensees with high market share will have a greater opportunity to recoup costs from subscribers and the porting process; b) LNP costs would not create a barrier to new market entrants; c) there would be no requirement for additional data collection; d) the information is verified by an independent third party; and e) costs could be separated out into fixed and mobile pools to fairly distribute costs to licensees who only operate fixed line networks.
  12. TeleCayman submitted that, given the Authority's decision to allow the recovery of LNP costs on a per line basis, the best way to allocate the common LNP costs is on per line basis. TeleCayman submitted that this is the only fair method of distribution of the expenses associated with LNP. In TeleCayman's view all subscribers regardless of their selected carrier of choice, should not be disadvantaged by variations in carrier subscriber bases. Any other method of allocation will eliminate any potential revenue benefit for the smaller licensees.

## **AUTHORITY'S ANALYSIS AND DECISION**

13. In this proceeding, the parties have requested that the Authority issue a determination on the appropriate methodology for the sharing of common LNP system costs. For the purpose of this determination, "common LNP system costs" are defined as costs related to the set-up and maintenance of the LNP system (the "Central Reference Database").
14. The Authority notes that, in previous consultation documents and decisions, these costs were described using various terms, including "Joint and Common Costs" and "Central Clearing House Costs". For clarity, these costs do not include the internal costs related to accessing the common industry system and maintaining local synchronised copies of the central database data, supplied by and within the individual licensees' own network/systems.
15. Common LNP system costs will be incurred irrespective of the number of customers who port their numbers. These costs are therefore not caused by porting customers or by any particular operator. These costs are necessary costs of participating in a competitive telecommunications market in the Cayman Islands for services that rely on numbering resources and for meeting customer demands to take full advantage of the ability to switch between licensees.
16. In ICT Decision 2005-1 and ICT Decision 2008-5, the Authority concluded that the introduction of LNP brings benefits to all consumers, not just those who choose to make use of the facility. The Authority remains of this view.
17. In terms of the principles for cost sharing proposed by the licensees, the Authority is of the view that the cost sharing methodology should:

- recognize that all customers who use services that rely on numbering resources will benefit from the greater competition that results from number portability through improved supplier responsiveness (such as lower prices) regardless of whether or not they actually switch suppliers;
  - be simple and practical by using information that has an unambiguous and clear definition.
  - be transparent by using publicly available data that may be scrutinized and audited by any interested party.
18. The parties have proposed different cost sharing methodologies. LIME and Digicel advocated an approach of equal sharing between licensees, while WestTel preferred a measure based on revenue and TeleCayman proposed a method based on the number of lines.
  19. An equal split of common LNP system costs as suggested by LIME and Digicel is both transparent and simple. However, as common LNP system costs are incurred to enable number portability from which all customers derive benefit and the distribution of customers amongst licensees is not equal, this proposed solution will not align costs with these benefits. In addition, this solution could act as a deterrent for new operators wishing to enter the Cayman Islands telephony market, and therefore undermine competition in this sector.
  20. Basing the cost sharing methodology on the number of active lines, telephone numbers or revenue would better meet the Authority's principles of matching cost contribution to the benefit which customers will derive from LNP. As all three sharing methodologies reflect the relative size of each licensee, they are, arguably, more equitable than a simple equal split as proposed by LIME and Digicel. Moreover, these methodologies could reduce barriers to entry in the telephony market. However, market information on lines, telephone numbers and revenue is provided in confidence to the Authority by individual licensees and is not made publically available. Therefore, the cost sharing formula input values could not be verified by the licensees. Further, the audited financials that the Authority receives from each licensee, contrary to WestTel's assertion, do not necessarily report revenues for mobile and fixed telephony separately from other revenue streams. Finally, the Authority notes that the terms "telephone numbers" and "lines" are open to having several possible meanings or interpretations.
  21. In order to strike a balance between these different suggestions, the Authority considers the use of allocated NXX's as the basis for a cost sharing methodology to be an appropriate solution. Each licensee's stock of NXX's is publicly available information on the Authority's website. The number of allocated NXX's is also simple to count and verify and hence both practical and transparent. In addition, as the number of NXX's to a large extent reflects the market presence and size of each licensee, the Authority considers the number of NXX's to be a reasonable basis on which to share common LNP costs.

22. The following table summarises how each sharing methodology compares to the cost sharing principles.

Principle \ Sharing method	Equal Division	Total Revenue	Telephone numbers	Lines	NXX's
Align benefit and cost	No	Yes	Yes	Yes	Yes
Simple, practical	Yes	Yes	No	No	Yes
Transparent	Yes	No	No	No	Yes

23. Digicel favoured a splitting of the common LNP system costs into a fixed and mobile portion with each bearing 50% of the cost. Digicel referred to this split as “assumed”. Likewise, WestTel submitted that the common LNP system cost can be split into fixed and mobile pools. Since the central database is provided as one system to provide both fixed and mobile number portability, any attempt to split the common LNP system costs into a fixed and mobile portion would be arbitrary. The Authority considers that true “common” LNP system costs (as per the definition in paragraph 14 above) are incurred for a business as a whole and cannot be separated in a clear and transparent manner. In its submission, Digicel does not identify any cost driver that would enable a logical split between fixed and mobile common LNP system costs. Also, Digicel did not provide any evidence to support its assertion that an equal split between fixed and mobile common LNP system costs is reasonable. Further, the Authority notes that the Request for Proposals circulated among potential vendors makes no mention of separate quotes for fixed and mobile system costs. Finally, as previously noted the Authority considers LNP brings benefits to all consumers which includes both mobile and fixed customers and entails an alignment of costs with benefits. By artificially splitting the common LNP system costs this principle may be violated. Accordingly, the Authority considers a single cost sharing methodology to be applied to the costs of LNP to be appropriate.
24. The Authority determines that common LNP system costs should be allocated on the basis of each currently active licensee’s share of NXX’s at the time that the costs are incurred. For example, using the existing number of NXX’s assigned to each currently active licensee from the Authority’s website ([http://www.icta.ky/da\\_numbers.php](http://www.icta.ky/da_numbers.php)), yields a split in the following proportions as shown in the table below.

Licensee*	NXX's	Distribution
Digicel	21	28.77%
LIME/C&W	41	56.16%
TeleCayman	5	6.85%
WestTel	6	8.22%
Total	73	100.00%

\*Infinity is not currently an active licensee.

25. The Authority notes that these percentages may change over time, as NXX’s are requested and/or returned by licensees.