



Consultation Paper

**Consultation on Number Portability in the Fixed and
Mobile Sectors**

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Please note ComReg will publish all respondents submissions
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1. Introduction

Number Portability ('NP') is a facility which allows subscribers to retain their existing fixed or mobile number when moving between network operators. NP was first introduced in the fixed sector in 2000 with the introduction of Non-Geographic Number Portability ('NGNP') and Geographic Number Portability ('GNP'). It was subsequently introduced in the mobile sector with the launch of Mobile Number Portability ('MNP') in 2003.

Number portability is essential to maximise the benefits of a competitive telecommunications market and in particular provides the following benefits;

- it eliminates the cost of informing others of a number change;
- it eliminates the need for callers to consult directory enquires and/or change entries in their address books or computer systems;
- it increases competition, with significant benefits for all users, by lowering the cost to users of switching operator or service provider;
- it facilitates greater choice for consumers;
- it reduces barriers for consumers to switch network providers.

The Commission for Communications Regulation ('ComReg') is responsible for the regulation of the Irish telecommunications sector and included in this remit is the regulation of NP. NP is a regulatory obligation under Regulation 26(1)¹ of the Universal Service Regulations² which is imposed on undertakings providing a publicly available telephone service.

From a pricing perspective two issues arise. Firstly, at the wholesale level, what are operators entitled to charge each other for processing a number port? Second, what, if anything, should retail customers pay to retain their number as they move supplier?

In particular ComReg is now proposing to utilise its power pursuant to Regulation 26(2) of the Universal Service Regulations to specify a particular aspect of the obligation of cost orientation in relation to pricing for interconnection related to the provision of NP. Additionally, ComReg is consulting on the possibility of mandating that retail customers do not have to pay directly to port their numbers if they change supplier.

¹ Regulation 26(1) states that "n undertaking providing a publicly available telephone service, including a mobile service, shall ensure that a subscriber to such service can, upon request, retain his or her number independently of the undertaking providing the service – (a) in the case of geographic numbers, at a specific location, and (b) in the case of non-geographic numbers, at any location'. This paragraph shall not apply to the porting of numbers between networks providing services at a fixed location and mobile networks."

² S.I. No. 308 of 2003 European Communities (Electronic Communications Networks and Services)(Universal Service and Users' Rights) Regulation 2003

2 Background

NP was introduced in the fixed sector in 1999. D1/99³ (ComReg document 99/24) set out NP proposals for the fixed sector in the following areas:

- the forms of number portability to be implemented;
- operator responsibilities for routing calls to ported numbers;
- rules for routing calls to ported numbers;
- rules for the process of porting a number;
- rules for recovering the costs of number portability (Note- D14/03⁴ was subsequently issued in May 2003, which restricted the categories of costs recoverable);
- the requirements for a national number portability database.

D1/99 resulted in the launching of the GNP & NGNP products in the fixed sector.

Included in the European Electronic Communications Legislation introduced in July 2003 was Regulation 26 of the Universal Service Regulations which requires:

“An undertaking providing a publicly available telephone service, including a mobile service, shall ensure that a subscriber to such service can, upon request, retain his or her number independently of the undertaking providing the service-

- (a) in the case of geographic numbers, at a specific location, and
- (b) in the case of non-geographic numbers, at any location.

This paragraph shall not apply to the porting of numbers between networks providing services at a fixed location and mobile networks”.

NP was introduced in the Mobile sector in 2003⁵, following the establishment of the industry Mobile Number Portability Committee (MNPC). This committee was formed in August 2001 to devise and agree a comprehensive work programme to ensure the delivery of MNP. The MNP product was launched in 2003 and since its introduction, there have been over half a million ports of numbers.

In August 2006, a new product was launched in the form of GLUMP which is combined Geographic Number Portability (GNP) and Unbundled Local Metallic Paths (ULMP) products. ComReg also believes that there is a potential for a future increase in the demand for NP facilities arising from the possible introduction of “Home Zone” services and the introduction of Triple Play Services by operators.

³ “Introducing Number Portability in Ireland”, - Decision Notice D1/99, ComReg Doc. No. 99/24.

⁴ “Decision Notice on Fixed Interconnection Charging Mechanisms”- Decision Notice D14/03, ComReg Document No 03/57, Dated 29 May 2003.

⁵ “Implementing Full Mobile Number Portability in Ireland”- ComReg Doc No 01/56.

3. Legal Background

Since July 2003 Regulation 26 of the Universal Service Regulations has been in force and provides that:

“(1) An undertaking providing a publicly available telephone service, including a mobile service, shall ensure that a subscriber to such service can, upon request, retain his or her number independently of the undertaking providing the service

- (a) in the case of geographic numbers, at a specific location, and
- (b) in the case of non-geographic numbers, at any location.

This paragraph shall not apply to the porting of numbers between networks providing services at a fixed location and mobile networks.

(2) The Regulator may specify obligations for compliance by an undertaking to which paragraph (1) relates for the purpose of ensuring that pricing for interconnection related to the provision of number portability as provided for in paragraph (1) is cost oriented and that direct charges to subscribers, if any, do not act as a disincentive for the use of these facilities.

(3) Obligations under paragraph (2) may include a requirement that there shall be no direct charges to subscribers for number portability. Where retail tariffs for porting of numbers are permitted, the Regulator shall ensure that such tariffs may not be imposed in a manner that would distort competition and for this purpose may specify obligations to be complied with by an undertaking.”

Regulation 26 is implementing Article 30 of the Universal Service Directive⁶.

In July 2006, The European Court of Justice (‘ECJ’) in ‘Mobistar’⁷ case provided further clarification on the interpretation of Article 30(2) of the Universal Service Directive (transposed in Ireland by Regulation 26(2) of the Universal Service Regulations).

The key clarification is as follows:

“1. Pricing for interconnection related to the provision of number portability, as referred to in Article 30(2) of Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users’ rights relating to electronic communications networks and services (Universal Service Directive), concerns the traffic costs of numbers ported and the set-up costs

⁶ Directive 2002/22/EC of the European Parliament and the Council of 7 March 2002 on universal service and users’ rights relating to electronic communications networks and services.

⁷ C-438/04, reference for a preliminary ruling under Article 234 EC from the Cour d’appel de Bruxelles (Belgium), made by decision of 14 October 2006, received at the Court on 19 October 2004, in the proceedings Mobistar SA v. Institut belge des services portaux et des telecommunications (IBPT).

incurred by mobile telephone operators to implement requests for number porting.”

2. Article 30(2) of Directive 2002/22 does not preclude the adoption of a national measure laying down the specific method to be used in calculating costs and which fixes in advance and on the basis of an abstract model of the costs maximum prices which may be charged by the donor operator to the recipient operator as set-up costs, provided that the prices are fixed on the basis of the costs in such a way that consumers are not dissuaded from making use of the facility of portability.”

4. Issues in relation to the setting of a wholesale NP charge

4.1 Factors to consider when assessing the charge for number porting

If the charge is at an excessive level, this will have a greater impact on smaller and new entrant operators as they are likely to be net recipients of ports. Excessive charges will distort the market as it will render unprofitable some customer acquisition which would otherwise be profitable. On the other hand, incumbent operators with a large market share are more likely to be net losers of ports and will consequently favour higher NP charges. Incumbent operators who entered the market early when penetration rates were low did not have to pay out number portability charges to the same extent as new entrants, since a greater proportion of their new business would have been with customers who did not already have a mobile phone. Newer entrants do not have this advantage. While the porting charge is only one element of an operator's customer acquisition costs, the charge should be set at a competitive level so as to provide the correct incentive for the use of the facility.

4.2 Interpretation of the Cost orientation Obligation

What categories of costs are relevant in assessing cost orientation of the charge for number portability?

Number portability related costs can be broken out into the following categories:

- **General system provisioning costs:** These are once-off costs in modifying network and support systems to enable the inter-operator product and are independent of operator demand.
- **Per-line enabling/Transaction costs:** These are the operating and administrative costs of implementing number portability facilities.
- **Central Database Reference Costs:** These are costs incurred by operators which require the use of a centralised hub or central reference database. There are 2 types of costs involved- the systems costs in the set up and developing of the database itself and the annual costs of subscribing and maintaining the database. Included are 'IN' Costs and 'Look Up' Costs.
- **Ongoing Routing Costs:** This category of costs includes the cost of adding a routing prefix (the re routing element) and the cost of any additional routing between networks (the conveyance element) that may be required when a call is being routed to a ported number.

In 1999 and 2003 ComReg previously established cost recovery principles for the above categories of costs for fixed telecommunications market and is now proposing to specify the allowable costs for the pricing for the pricing of interconnection

related to the provisions of NP. This specification is for the purpose of ensuring that the pricing for interconnection related to NP is cost orientated.

General system provisioning costs

ComReg considers that these should not form part of the NP charge and that each operator should pay their own costs. In the specific case of eircom, ComReg's view is that these costs should be spread across all network elements used in providing interconnected calls, including eircom's "self-interconnected" calls, such that the costs are recovered from all such network elements.⁸ This is consistent with current requirements. Portability is intrinsic to a fully competitive telecommunications industry and each participant must make its network NP capable as a condition of entry.

Furthermore, to allow these costs to be recovered on a per-transaction basis could introduce a degree of instability in pricing since these costs are, by definition, fixed in the short term while volumes are not. It follows that if volumes fluctuate then so will NP charges. In fact this is precisely what happened in the fixed sector and was a principal reason for the introduction of D14/03.

Per-line enabling/Transaction costs

ComReg has identified three elements of per-line enabling/transaction costs involved in porting an individual number from one operator to another:

- a) The incremental administrative cost to the donor operator of exporting the number;
- b) The incremental administrative cost to the recipient operator of importing the number;
- c) The cost of changing routing data for all operators who carry out re-routing functions.

By 'incremental', ComReg means costs which are short term volume dependent. Costs which are not short term volume dependent should be included in the category General system provisioning costs (above).

ComReg proposes that only the incremental administrative cost to the donor operator (category (a) above) should be recovered against other operators in the form of NP charges and charged on a per event basis. ComReg believes that this approach reflects the principle of cost causation in that a cost is incurred by the donor operator at the point of issuing a port order and the recipient operator who benefits from the transaction should then pay an appropriate charge.

In relation to the incremental administrative cost to the recipient operator, ComReg can see no reason why these should not be borne by the recipient operator.

⁸ As per Decision Notice D14/03- ComReg Document 03/57.

In relation to cost of changing routing data for all operators who carry out re-routing functions (category (c) above), these cost should be excluded from the per line enabling/transaction charge, since correct and efficient routing is the operator's responsibility for calls originating on its own network.

Central Reference Database Costs

ComReg is of the view that the database set up costs should be treated on the same basis as the general system provisioning costs as discussed above. Much the same reasoning as applied to general system provisioning costs (above) also apply here. Stability of pricing is best assured by including only variable volume related costs. In the specific case of eircom, ComReg's view is that these costs should be spread across all network elements used in providing interconnected calls, including eircom's "self-interconnected" calls, such that the costs are recovered from all such network elements⁹ This is consistent with current requirements.

Ongoing Routing Costs

ComReg is of the view that it would be difficult to devise a mechanism to recover these costs as part of an up front charge and that it would be simplest to recover these using normal interconnection charging principles currently in place.

Summary

ComReg is of the view that only the incremental administrative cost element of the per-line enabling/transaction costs should be recovered through wholesale NP charges.

- Q. 1. Do you agree that the above cost categories are appropriate to the development of costing rules for NP? Do you believe that the categories identified above are clear and unambiguous?**
- Q. 2. Are there any other cost categories, which should be considered? Please state the reasons for your response.**
- Q. 3. Do you agree with ComReg's proposed treatment of each of these types of cost? If so please provide reasons. If not please provide reasons and suggest alternatives.**

⁹ As per Decision Notice D14/03- ComReg Document 03/57.

Should the allowable costs be based on those of an efficient operator?

ComReg is of the view that the operators' allowable costs for the purpose of the cost orientation obligation for NP should be based on those of an efficient operator i.e. the charge to be recovered should be based on the assumption that a fully efficient NP processing is in place.

The merit of this approach is that it encourages efficiency, since only efficient operators will recover all their allowable costs. Efficient operators will not be penalised by their inefficient competitors.

ComReg also notes that the European Court of Justice ('ECJ') in the 'Mobistar' case clarified that Article 30(2) of the Universal Service Directive (transposed in Ireland by Regulation 26(2)) did not preclude the use of an abstract model (i.e. an independent, bottom up model) in the determination of cost-orientated NP charges¹⁰.

With regard to the measurement of efficiency, three alternatives present themselves. Firstly an independent "abstract" model of costs could be used. Secondly, the most efficient operator's costs could be used as the basis for all NP charges. Both of these approaches would imply uniformity of tariffs across operators. The third alternative would be to define "efficiency" such that it reflected the scale of the operator in question. This would only make sense if scale effects were significant, which is unlikely if only volume dependent costs are at issue.

Q. 4. Do you agree with ComReg's view that allowable costs for the purpose of the cost orientation obligation for NP should be those based on an efficient operator? Please state the reasons for your response.

Q. 5. Do you agree that it may be appropriate for ComReg to use independent cost models - i.e. bottom up models in the determination of NP charges? Please state the reasons for your response.

Q. 6. Do you believe that a different standard of efficiency should be applied to different operators? Please elaborate on your response.

¹⁰ See Paragraph 36 – "Mobistar" case

Who should pay the Number Portability charges?

Number Portability is a regulatory obligation imposed on undertakings providing a publicly available telephone service. It provides that a subscriber can, upon request, retain his or her number independently of the undertaking providing the service. Such a scenario exists when the customer of one telecommunications network provider moves to another network provider and retains their existing number. When this situation arises, the customer of the new network provider (known as the recipient operator) will have to notify the customer's previous network provider (known as the donor operator) who will in turn then make all the necessary administration and routing arrangements to ensure that all calls by the customer are routed properly on the network. ComReg is of the view that the donor operator should be allowed to levy a charge which recovers its allowable costs from the recipient operator. ComReg's reason for the levying of a charge by the donor operator is that they legitimately incur a cost in the porting of a number and the receiving operator is provided with a benefit or a service.

Q. 7. Do you agree with ComReg's view that the donor operator should be able to levy a NP charge which recovers the incremental administrative cost element of its per-line enabling/transaction costs from the recipient operator? Please state the reasons for your response.

What type of charging structure should be implemented?

ComReg has considered two possible charging methods for NP. One option is a charge based on a simple/single pricing structure for all types of processes, regardless of the level of activity involved or outcome. Another option is to have different charges depending on the outcome (i.e. one charge for a correct type of port and another charge for failed ported etc.).

In the case of a single charge, it is assumed that the overall cost to the operator will even out in the long run, even if particular types of ports over-recover or under-recover individually. The main advantage of this method is its simplicity and while the individual cost of each type of outcome may not be recovered, the overall costs would be.

A detailed charging system based on each type of outcome could be argued to be a more precise approach as it recognises that all processes do not always have the same outcome (i.e. a process can fail) and incentivises both the donor and recipient operator. ComReg also recognises that it is important that cost-based transaction charges apply for porting unallocated numbers to reduce uneconomic churn. For example, if the actual charge for a successful process is significantly lower than that for an unsuccessful process, but the actual charging structure is based on a single charge, there may be little incentive for the recipient operator to ensure it provides accurate information to the donor operator. It could be argued that failed portings are

at a low level and would become close to zero when the process is fully functioning. It could also be argued that a more complex pricing structure is fairer and more efficient in cases where the actual number of failed portings does not rapidly fall to an efficient, low level, because it would reflect the true cost of a transaction.

ComReg recognises that the two possible approaches have both advantages and disadvantages and considers that it would not be appropriate to set precise rules, but will look at the practicalities when it obtains more data.

Q. 8. What are your views on pricing structures for NP? Please state the reasons for your response

5. Retail Number Porting Charges

Regulation 26(3) of the Universal Services Regulation provides that

“obligations under paragraph (2) may include a requirement that there shall be no direct charges to subscribers for number portability. Where retail tariffs for porting of numbers are permitted, the Regulator shall ensure that such tariffs may not be imposed in a manner that would distort competition and for this purpose may specify obligations to be complied with by an undertaking.”

ComReg believes that NP charges to consumers increase the costs of switching operators and reduce competition in the market (contrary to Regulation 26 (3) of the Universal Services Regulation). ComReg proposes that there should be no direct charge to subscribers for NP as they would act as a disincentive for consumers to change networks and would result in the distortion or reduction of competition in the market place.

Q. 9. Do you agree with ComReg’s proposal that that there should be no direct charge to retail subscribers for NP? Please state the reasons for your response

6. Draft specifications

PLEASE NOTE: The draft specifications below are set out for information purposes only. ComReg has set out its preliminary views in relation to the specifications and will consider any views expressed during the consultation by interested parties prior to issuing these specifications.

Statutory powers giving rise to specifications

It is proposed that these specifications will be issued under Regulation 26(2) of the Universal Service Regulations, for the purpose of specifying obligations for compliance by an undertaking to which Regulation 26(1) of the Universal Service Regulations relates for the purpose of ensuring that pricing for interconnection related to the provision of number portability is cost oriented.

This specification is also issued having regard to section 26(3) of the Universal Service Regulations and sections 10 and 12 of the Communications Regulation Act, 2002.

Draft specifications

Specification 1: ComReg hereby specifies that allowable costs for the pricing for interconnection related to the provision of number portability are limited to the incremental (i.e. short term volume dependent) administrative cost to the donor operator of per-line enabling/transaction costs, based on a fully efficient number porting process. This specification is for the purpose of ensuring that pricing for interconnection related to the provision of number portability as provided for in Regulation 26(1) of the Universal Service Regulations is cost oriented.

Specification 2: ComReg hereby specifies that there shall be no direct charges to subscribers for number portability.

7. Regulatory Impact Assessment

(1) Description of policy issue to be addressed and identification of objectives

This consultation has the following purposes:

(a) to set out a clear interpretation of cost orientation in the context of number portability and issue a specification to all relevant undertakings specifying the allowable costs for the pricing of interconnection related to the provision of number portability for the purpose of ensuring that pricing for interconnection related to the provision of number portability as provided for in Regulation 26(1) of the Universal Service Regulations is cost oriented.

(b) to clearly identify who pays the number portability charge, to establish whether retail users should pay a direct charge for NP and issue a specification to all relevant undertakings in relation to this.

(2) Identify and describe the regulatory options & the impact on stakeholders in relation to the interpretation of the cost-orientation obligation on pricing for interconnection related to the provision of number portability.

Option 1- Do not provide further clarification on the cost orientation obligation

One option available to ComReg is not to provide further clarification on the cost orientation obligation (i.e. do nothing). However, given that there is an obligation on operators to provide NP and the recent clarification provided in the “Mobistar” case in relation to cost orientation, ComReg does not consider this option to be optimal. It lacks transparency and could cause confusion in the market place as operators would not be in a position to determine if they were in compliance with their obligations.

Option 2- Set a clear set of principles outlining what costs will be considered in assessing cost-orientation of the pricing for interconnection related to the provision of number portability

ComReg considers this approach to be the most appropriate as it is fully transparent, it facilitates operators in ensuring compliance with the cost orientation obligation and sends the appropriate signals to the marketplace.

(3) Identify and describe the regulatory options & the impact on stakeholders in relation to who should pay the NP Charge?

In determining the impact on stakeholders, ComReg considered the following options:

Option 1- The Donor/Losing Operator pays

- Impact: The donor operator does not receive a benefit and only incurs costs as a result of the porting of a number. As all other parties benefit from the porting of the number and to levy the NP charge on the donor operator would not be in compliance with the distribution of benefits principle.

Option 2 - The Recipient/Gaining Operator pays

- Impact: The recipient operator receives a benefit from the porting of a number and it is therefore appropriate that it share the burden of the costs involved.

Option 3- The Consumer who ports pays

- Impact: ComReg is of the view that to levy a direct charge on the customer would discourage consumers from switching network providers and therefore would have negative effect on competition in the market.

Option 4- All Consumers pay.

- Impact: This would be similar to Approach No 3 above.

Preliminary Conclusion

Having considered the various alternatives above, ComReg considers that it should proceed to issue the draft specifications specifying the allowable costs for the pricing of interconnection related to the provision of NP and a specification that there shall be no direct charges to subscribers for number portability.

ComReg is of the view that its approach will provide greater certainty in the market place, increase levels of transparency in NP charging and be more equitable. It is also of the view that its proposed measures will benefit consumers by ensuring that no direct charged for NP are levied on them and by increasing levels of competition in the market.

Q. 10. Respondents are requested to provide views on whether the proposed specifications are proportionate and justified and offer view on other factors (if any) ComReg should consider in completing its Regulatory Impact Assessment.

8. Submitting Comments & Next Steps

The consultation period will run from 10th April 2007 to 25th May 2007 during which the Commission welcomes written comments on any of the issues raised in this paper.

All comments are welcome; however it would make the task of analysing responses easier if comments were referenced to the relevant question numbers from this document.

Having analysed and considered the comments received, ComReg will make a decision on appropriate charging principles for number portability. If appropriate, ComReg will issue a specification specifying the allowable costs for the pricing of interconnection related to the provision of NP and a specification that there shall be no direct charges to subscribers for number portability. The effect of any Regulation 26(2) specification would be prospective.

On foot of any revised framework, ComReg will formally request operators to justify their existing NP charges. Respondents who are operators are welcome to supply cost data with their submissions which will be treated as confidential.

Please note

ComReg appreciates that many of the issues raised in this paper may require respondents to provide confidential information if their comments are to be meaningful.

As it is ComReg's policy to make all responses available on its web-site and for inspection generally, respondents to consultations are requested to clearly identify confidential material and place confidential material in a separate annex to their response

Such information will be treated subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24.