



Office of the Director of
**Telecommunications
Regulation**

Introducing Carrier Pre-Selection in Ireland

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1 Introduction

The Office of the Director of Telecommunications Regulation (ODTR) believes that a well-defined Carrier Pre-Selection (CPS) scheme is a key enabler for effective competition in the newly liberalised Irish Telecommunications market. With the introduction of CPS, consumers will have more choice of competitive telecommunications services. Such services may be better suited to their specific needs, particularly in terms of price.

The Director of Telecommunications Regulation (the Director) is therefore committed to the introduction of CPS by 1st January 2000. This is in line with the European Commission directive 98/61/EC¹ and the decision by the Minister for Public Enterprise that CPS should be available in Ireland by 1st January 2000.

In order to ensure the implementation of an effective CPS scheme, the ODTR published a consultation document on CPS in March 1999 (ODTR 99/08). The main purpose of the consultation was to assist the ODTR in resolving a range of national regulatory issues raised by the Directive, and to establish a national framework for CPS in Ireland. The document also highlighted the need to develop new inter-operator procedures and consumer protection measures.

Specifically, the consultation document set out proposals in the following areas: -

- Operator obligations to provide CPS facilities
- Operator eligibility to avail of CPS facilities
- The pre-selection scheme for Ireland
- Switching and routing functionality required to support CPS
- The requirement for a CPS Code of Practice
- Cost categories and cost apportionment
- Required inter-operator processes, particularly the order handling process
- An action plan for the introduction of CPS facilities in Ireland

The consultation process was invaluable in helping to determine how CPS should be introduced in Ireland. In this Decision Notice, we present the outcome of the consultation, and the decisions the Director has made following the process. Each section provides a brief outline on each of the issues analysed in the consultation document, summarises the views expressed by respondents, and where appropriate, presents decisions on each of the issues in the light of the consultation.

Fourteen organisations/individuals gave written comments to the consultation document, as listed in Figure 1.1. The Director wishes to thank everybody who contributed. With the exception of those marked as confidential, the responses are available for inspection at the ODTR's office in Dublin. These responses have played a major role in informing the decisions contained in this document.

¹ Directive 98/61/EC of the European Parliament and of the Council, of 24 September 1998, amending Directive 97/33/EC with regard to operator number portability and carrier pre-selection.

Figure 1.1 The List of Respondents

	Respondent	Category
1	Cable & Wireless	Fixed network operator
2	Eircell	Mobile network operator
3	Esat Digifone	Mobile network operator
4	Esat Telecom	Fixed network operator
5	Irish Multichannel	Fixed network operator
6	ITG	Providers of payphone services
7	MCI Worldcom	Fixed network operator
8	Ocean	Fixed network operator
9	Swiftcall	Fixed network operator
10	Telecom Éireann	Fixed network operator
11	Valuetel	Fixed network operator
12	Mr. Richard Barry	Interested individual
13	Mr. Edward Rafferty	Interested individual
14	Mr. Joseph Ryder	Interested individual

In summary, the introduction of CPS was warmly welcomed by respondents, most of whom felt that the target introduction date of 1st January 2000 was achievable. Respondents were also in general agreement that the obligation to provide CPS facilities for other operators should only currently apply to fixed operators with SMP and that all licensed operators should be eligible to provide CPS services to the public, subject to becoming signatories of a Code of Practice for the provision of CPS services. This is discussed further in sections 2 and 3 respectively.

However, respondents differed in their views on certain specific proposals in the consultation document. In particular, there was strong support for the inclusion of local calls in the scheme from the outset. This has been addressed in the CPS scheme, which is detailed in section 4.

Whilst there was general agreement on the mechanisms to provide the CPS facility on PSTN/ISDN lines, several respondents differed in their views on the wider availability of CPS. Taking these responses into consideration, revised switching and routing requirements are detailed in section 5.

Most respondents also agreed with the proposal that the per-operator and per-line enabling costs should be borne by the CPS operators directly. However, there was less agreement on the allocation of the general system provisioning costs. Cost allocation is discussed in section 7.

All respondents agreed that a CPS Code of Practice for the provision of CPS services was required (section 6). In order to develop both this Code of Practice and detailed processes for the provision of CPS services (section 8), the Director will immediately establish a CPS Committee, as detailed in section 9. The Director looks forward to the full commitment from all involved in order to introduce CPS facilities in Ireland by 1st January 2000.

2 Operators to Whom the Obligation Applies

2.1 Fixed Network Operators with Significant Market Power

Directive 98/61/EC requires that operators with Significant Market Power (SMP) in the fixed public telephone network and services sector provide CPS facilities for its PSTN/ISDN customers, to access the switched services of interconnected operators.

In October 1998, following consultation, the Director determined that only Telecom Éireann has SMP in the fixed public telephone network and services sector². In line with Directive 98/61/EC, Telecom Éireann is therefore required to provide CPS facilities.

The Director may review her determination of SMP status at any time. In the future, changes in SMP status would not automatically lead to the removal of obligations originally imposed as a result of an operator's SMP status. In this context, the removal of obligations will be for the consideration of the Director at such time as may be appropriate.

The Director has therefore decided that: -

- *Telecom Éireann is required to provide CPS facilities from 1st January 2000. The facility will allow its customers, including those using ISDN, to access switched services of interconnected providers of publicly available telecommunications services.*
- *Customers must be able to choose these services by means of pre-selection, with a facility to over-ride any pre-selected choice on a call-by-call basis by dialling a short prefix.*

2.2 Fixed Network Operators without Significant Market Power

The consultation paper proposed that it was inappropriate to impose CPS obligations on any other fixed network operators at this stage in the development of a competitive telecommunications market in Ireland.

The majority of respondents agreed with this proposal. Two respondents disagreed on the basis that CPS should be available from all access networks to support increased customer choice. In addition, although most respondents agreed with the concept of a review, several respondents felt that reviewing this decision in 2000 was too early. Others favoured a continuous or annual review.

² 'Significant Market Power in the Irish Telecommunications Sector – Decision Notice D4/98' (Document no. ODTR 98/47)

The ODTR believes that extending the obligation to all access network providers would impose a disproportionate burden on these organisations, and could act as a disincentive to market entry and investment in local infrastructure. The ODTR therefore believes that such an extension of obligations at this time would not ultimately be in the interests of the consumer. However, given the importance of CPS from a consumer point of view, the ODTR believes that the CPS obligation should be re-examined in the year 2000.

If any new operator gains SMP in the access network, then the obligation should be extended. SMP is reviewed on an ongoing basis and changes in SMP status will automatically lead to the consideration of an operator's obligations to provide CPS facilities.

The Director has therefore decided that: -

- *No other fixed network operator will be required to provide CPS facilities for 1st January 2000. The ODTR will re-examine this issue in 2000 to see if a review is required.*
- *The obligation to provide CPS facilities will be extended to any other operator who gains Significant Market Power status in the fixed access network.*

2.3 Mobile Network Operators

The ODTR proposed to investigate the issue of extending carrier selection obligations to mobile networks as a separate task and put forward 2000 as the review time-frame.

Seven respondents agreed that mobile should be investigated, and three of those believe the obligation should be extended to mobile as soon as possible. However, four respondents (including the mobile operators) believed that the mobile market is fundamentally different to the fixed market, and should be treated completely differently. Respondents argued that the Directive does not cover mobile networks. In addition, the network architecture and investment requirement, market profile and growth rates are significantly different for mobile. In particular, they argued strongly against the principle of extending CPS to mobile as a consequence of CPS on the fixed network.

The ODTR accepts that it is difficult to discount some of the arguments made by respondents against providing CPS facilities on mobile networks. However, competition is limited in the mobile market and the ODTR must take into account the benefits that would be brought to consumers by extending the CPS obligation to mobile. In addition, there is a growing trend throughout European countries to require mobile operators to provide CPS facilities.

Any consideration of CPS on mobile networks needs to be in the context of wider developments in the mobile industry. These include spectrum usage and availability, the prospective licensing of a third operator, the introduction of UMTS and the

significant investment that is required to roll-out mobile networks. There are also technical barriers to the introduction of CPS on mobile networks which must be taken into account.

The Director has therefore decided: -

- *Mobile operators will not be required to provide CPS facilities for 1 January 2000*
- *The requirement to provide CPS facilities on mobile networks will be re-examined by the ODTR in 2000, possibly in the context of a broader study of competitiveness in the Irish mobile market.*

3 Operators Eligible to Provide Carrier Pre-Selection Services

The ODTR proposed that operators with either Basic or General Licenses should be eligible to provide CPS services to customers. Further qualification criteria centred on the operator's capability to provide the service and in particular to be able to comply with a Code of Practice for providing CPS services.

Most respondents agreed with the proposed qualification criteria. Three respondents disagreed, and two of those want qualification limited to General Licensees only, believing that General Licensees are more likely to invest in infrastructure. However, the ODTR believes that such a restriction would not optimise the benefits to consumers in terms of competition and choice.

In addition, other respondents were concerned that they had no visibility of any further requirements to be contained in a Code of Practice. However, virtually all respondents agreed that a Code of Practice was required. It should ensure that no unethical business practices occur in the marketing and delivery of services to the public and should not become a barrier to market entry by enforcing onerous criteria on operators.

Two respondents requested that the ODTR clarify the eligibility requirement that an operator must deliver traffic to all destinations implied by a pre-selection. This proposal aimed to avoid a situation where some of a customer's pre-selected calls were not accepted by their CPS operator, perhaps because they are commercially unattractive. This could leave the customer unable to use Telecom Éireann or their CPS operator for certain types of call. This is an issue which can be addressed in the Code of Practice.

Two respondents suggested linking qualification to the level of infrastructure deployment undertaken by an operator. However, at this early stage in the development of a competitive telecommunications market, the ODTR believes that operators should be free to determine the relative economics of infrastructure development versus service provision. In addition, there is flexibility in the CPS scheme to provide services to specific market segments, and in particular for international calling only. Smaller operators with no significant national infrastructure may be very competitive in providing such services.

The Director has decided that operators are eligible to provide a CPS service if they:-

- *hold a Basic or General License*
- *become signatories of a CPS Code of Practice*
- *have a Network to Network Interface with an access network operator who is obligated to provide CPS facilities (currently Telecom Éireann only)*

4 The CPS Scheme

4.1 *The Proposed CPS Scheme for Ireland*

Having presented the factors to consider in determining a CPS scheme, the ODTR proposed to initially provide separate pre-selections for national and international calling, with the addition of a third, 'All-Calls' pre-selection at a later stage. This third pre-selection would include local calling. This scheme was considered as being easy to understand from a consumer perspective, while providing maximum flexibility for service providers. The ODTR believed that there could be significant technical difficulties in providing an 'All-Calls' pre-selection by 1st January 2000.

Separate pre-selections for international and national calls were proposed, since some operators might want to offer only international calling. Such operators could be excluded from offering a CPS service by grouping the two together, thereby reducing consumer choice. Individual pre-selections for call-types other than national and international calls would be difficult and costly to implement and would lead to a complex scheme from a consumer viewpoint.

Requirement for the Inclusion of Local Calls from the Outset

The majority of respondents agreed with the scheme defined in the consultation document, with some qualifications. Two respondents disagreed, mainly on the point that local calls were excluded from the initial scheme. In total, five respondents considered that local calls should be included from the outset and one pointed out that local calling is currently available via carrier-selection based services.

In order to provide a full service to customers, including local calling, they pointed out that routers would have to be installed, or retained if customers already had a service. This added considerably to the cost of providing service, making it less competitive.

The ODTR also accepts that the inclusion of local calls in any pre-selection scheme may lead to routing inefficiencies in some cases, which may lead to higher costs for the CPS operators. However, given the topology of Telecom Éireann's network, this issue is less significant than the ODTR originally understood.

The Early Availability of the 'All-Calls' Pre-Selection

The ODTR therefore believes that the ideal situation would be to retain the proposed scheme of three pre-selections but ensure the availability of the 'All-Calls' pre-selection from the first introduction of CPS on 1st January 2000. The added advantage from the consumer viewpoint is that it avoids the confusion of a two-phased scheme.

The generic CPS functionality which will be available on Telecom Éireann's switches should support separate pre-selections for national and international calls but will not initially support an 'All-Calls' pre-selection. However, the ODTR believes that it will

be possible to provide an 'All-Calls' facility using other methods to meet the 1st January 2000 deadline, although this might require some custom development. This will mean that it may not be possible to initially filter out certain categories of calls such as internet access and emergency calls, with resultant routing inefficiencies and cost implications for CPS operators providing a service based on the 'All-Calls' pre-selection.

Charge-Based Analysis

It was proposed that national calls would be filtered on the basis of a leading '0' in the dialled number, contained in the National Destination Code (NDC). However, one respondent favoured using a charge-based analysis to separate local calls from national calls. Specifically, this could filter out calls to adjacent charge groups which require the addition of an NDC but are charged as local calls. However, the ODTR believes that it will not be possible to provide further analysis to facilitate this within the timeframe. It may transpire that the cost and complexity of adding the extra analysis would outweigh the advantage. At any rate, such calls may be a small proportion of national calls and they may become more profitable as retail and interconnection charges evolve.

Long term Definition of 'All-Calls'

As mentioned, the initial 'All-Calls' facility will mean that it may not be possible to provide a facility to filter out certain categories of calls for 1st January 2000. Longer term, it may be possible to provide more sophisticated analysis. The CPS Committee will therefore address the relative merits of including or excluding calls to certain non-geographic numbers in the longer term, given that some respondents had reservations about the inclusion of some services in the CPS scheme.

However, the ODTR believes that a balance needs to be struck when grouping call types together in the 'All-Calls' pre-selection, so that operators could package less lucrative services which are attractive to customers with more commercially attractive services, such as national and international calling.

Summary

The ODTR believes that it is not in the interests of the consumer or competition to delay CPS until all the required functionality is available in Telecom Éireann's network. Three pre-selections, based on limited analysis, will therefore be available from 1st January 2000. These are : - 1) International Calls only, 2) National Calls only and 3) 'All Calls'. A customer can select any option individually, or a combination of the first two, with either the same operator or different ones. The 'All-Calls' option cannot be combined with any other option. Since all three pre-selections will be available from the outset, this will benefit the consumer in the presentation of the CPS concept and the added choice.

The Director has therefore decided that: -

- The consumer can be offered the following options in a CPS scheme to be available from 1st January 2000: -

Option 1 - International Calls only. This option enables customers to pre-select a carrier other than Telecom Éireann for all their international calls only. An international call is defined as a call requiring the dialling of the '00' international prefix.

and/or

Option 2 - National calls only. This option enables customers to pre-select a carrier other than Telecom Éireann for all their national calls only. National calls in the context of a CPS scheme are defined in Section 4.2

or

Option 3 - All calls. This option enables customers to pre-select an operator other than Telecom Éireann to carry all of their calls.

- Options 1 and 2 may be combined so that the customer has pre-selections for both national and international calls. The pre-selected operator may be the same or different for each call type.
- Selecting Option 3 precludes the additional selection of Options 1 or 2 and replaces previously selected Options.
- Calls for which the customer does not pre-select an operator would continue to be routed by Telecom Éireann.
- Customers must be able to 'override' their pre-selections for individual calls on a call-by-call-basis by dialling a carrier selection/carrier access code, having made arrangements to do so with alternative operators (including Telecom Éireann).
- Call-by-call carrier selection and carrier access services will continue to be available from Telecom Éireann.

4.2 Definition of National Calls in the CPS Scheme

The ODTR proposed that for the purposes of a CPS scheme, a National call to a geographic number should be defined by the presence of a National Destination Code (NDC) in the called number. In effect, a national call to a geographic number is defined by the presence of a single leading '0' in the dialled number.

This provided Telecom Éireann a practical means of separating National calls by simple dialled number analysis in their exchanges. It is also simple to understand from a consumer point of view.

Option 2 – National Calls – would therefore effectively include all calls that had a leading zero, including calls to mobiles, paging and personal numbers but would exclude calls to other non-geographic numbers. However, the ‘All-Calls’ pre-selection would include all of the customer’s calls to international, national, local, mobile, paging, personal and non-geographic numbers.

Most respondents agreed with the definition. Three respondents disagreed on the basis that local calls and possibly internet access calls should be included. The ODTR has presented its views on the inclusion of local calls in the scheme in the previous section.

One respondent considered that calls to personal numbering service (0700), universal access(0818), paging (082) and other new services should be filtered out. Using the simple analysis of detecting a leading zero, these calls would be included within the National Calls option. The ODTR proposes to retain this arrangement, given that the proportion of calls to these services will be small compared to the overall number of national calls.

The ODTR therefore retains the following definition for the ‘National Calls only’ pre-selection: -

Option 2 – National Calls Only	
Includes:-	Excludes:-
<ul style="list-style-type: none"> • <i>Calls to geographic numbers which include a National Destination Code in the dialled number (i.e. the presence of a single leading ‘0’)</i> • <i>Calls to mobile phones (i.e. 08X prefix)</i> • <i>Calls to Northern Ireland using the ‘048’ prefix</i> • <i>Calls to Personal Numbers (0700)</i> • <i>Calls to Universal Access Numbers (0818)</i> • <i>Calls to pagers (082X)</i> 	<ul style="list-style-type: none"> • <i>Calls to specially tariffed services (e.g. 18XX, 15XX)</i> • <i>Internet access calls (1891)</i> • <i>Calls to geographic numbers without an NDC (i.e. local calls)</i> • <i>Calls to numbers requiring a ‘00’ international dialling prefix</i> • <i>Operator-specific short code services, e.g. directory enquiries</i> • <i>Operator controlled calls</i> • <i>Calls to emergency services, i.e. 999, 112</i>

5 Switching and Routing Requirements

5.1 General Requirements

The consultation paper proposed general switching and routing requirements which would apply to Telecom Éireann. In particular, the use of a 'CPS routing code' for onward routing of calls was proposed.

Most respondents broadly agreed with the proposals in the consultation paper, and stated that no further limitations should apply. However, several respondents identified issues relating to the interworking of call management services with CPS. These should be dealt with as soon as possible by the CPS Committee.

Five respondents specifically requested that payphones should not be excluded from the CPS obligation. They pointed out that the payphone provider should be able to choose between alternative operators. The ODTR is persuaded by these arguments and therefore extends the obligation to provide CPS to payphone lines. This may be subject to specific commercial arrangements between payphone operators, new operators and Telecom Éireann. In particular, the ODTR understands that some additional development work may be required to facilitate CPS on payphone lines.

Respondents had mixed views on the use of the 'CPS Routing Code'. Some respondents agreed that the carrier selection (13XXX) codes could be used. However, one respondent requested that a carrier's CPS code should be different from their carrier selection code, while another suggested that different codes could be used for different call types. The ODTR understands that some operators would like to separate out CPS calls from carrier selection calls for billing and statistical purposes. The final form for the routing code will be decided by the ODTR after consultation with the CPS Committee.

The ODTR does not foresee practical limitations on the number of CPS operators that can be supported, given the current number of licensed operators in Ireland.

Taking account of the above responses, the Director has therefore decided that:-

- *Telecom Éireann is required to provide CPS facilities to all customers, on direct exchange lines and ISDN lines from 1st January 2000.*
- *Telecom Éireann is required to provide CPS facilities on exchange lines which are used to provide payphone service.*
- *Telecom Éireann is required to provide CPS capability to all qualifying operators who request the service.*
- *Telecom Éireann will route calls which are subject to pre-selection to a point of interconnection as agreed between the customer's selected CPS operator and Telecom Éireann.*

- *All calls subject to a CPS mechanism will be routed without alteration to the digit string dialled by the customer. Calling Line Identification (CLI) will also be passed through for billing purposes.*
- *Calls not subject to a pre-selection will continue to be routed by Telecom Éireann.*
- *Calls made using carrier access/carrier selection codes will over-ride the customer's CPS options and route to the operator identified by that code.*
- *Where a call is to be routed by CPS, Telecom Éireann will prefix the customer's dialled digits with a 'CPS Routing Code' to facilitate routing through their network to the appropriate point of interconnection.*
- *Operators can request a CPS Routing Code from the ODTR.*
- *The form of the CPS Routing Code will be decided by the ODTR after consultation with the CPS Committee.*
- *Existing facilities on the customer's line, such as call management services should not be affected by the addition of the CPS facility.*
- *The process of initially enabling CPS on a customer's line must also support continuity of primary telephone service for the customer during the switchover.*
- *There should be no noticeable degradation in service quality by the addition of CPS, e.g. in call set-up time.*
- *CPS will be on Telecom Éireann's list of standard carrier services, which should be part of Telecom Éireann's Reference Interconnection Offer.*

5.2 Multi-line and Virtual Private Network Customers

CPS can be provided to multi-line customers and customers with PABX installations. Conceptually, it could also be provided to Virtual Private Network (VPN) customers. The ODTR sought views on what limitations might apply to the provision of CPS services in these situations.

In general, most respondents recommended that limitations on CPS availability for multi-line customers should not extend beyond those imposed by technical constraints. Some respondents pointed out that in a multi-line installation, the CPS set-up has to be specified for each line. As a general rule, each individual network-provided CLI should be configurable with an individual CPS scheme. In practice, some multi-line configurations may impose further limitations on CPS. This can be discussed by the CPS Committee and accounted for in detailed CPS provisioning processes.

Two respondents pointed out that VPN is a value-added service and pricing arrangements for the service reflect this. The ODTR agrees that it is difficult to see how CPS would operate in a VPN environment. In addition, there may be technical constraints. The ODTR will not therefore require the provision of CPS on lines that are part of a VPN.

Taking account of responses, the Director has decided:-

- *CPS shall be available for multi-line customers. The CPS Committee will consider the impact of specific technical limitations on the provision of CPS facilities for typical configurations.*
- *Not to mandate the provision of CPS on lines that are part of a VPN.*

6 A Code of Practice

As stated in the consultation paper, the ODTR wishes to ensure that operators develop adequate customer information and consumer protection procedures to assist the public in understanding the choices they will have, and how the new services will work.

In addition, measures will need to be in place to protect customers from potential operator misuse of the CPS facility, most notably 'slamming'. Slamming is not a practice in which reputable operators engage but nevertheless safeguards do need to be put in place. This will require the development of a Code of Practice.

Almost all respondents agreed that a Code of Practice for CPS was required. In addition to the issues listed in the consultation paper, some respondents felt that the Code should address customer billing, fraud and bad debt. The Code of Practice will be developed by the CPS Committee and adopted by the ODTR. Consumer groups will be involved in the work of the committee to ensure that any consumer protection measures introduced into Ireland have their support.

Seven respondents believed there should be some control on win-back activities. Three of those respondents felt that the Committee should also address win-back activities in formulating the Code of Practice. Another felt that an independent watchdog should be appointed to prevent the misuse of information sharing between the retail arm of Telecom Éireann and provisioning staff, but recognised that it would be extremely difficult to police. Four respondents believe that it is simply not possible or practical to control win-back activities and advocate a free market. They believe that such activities form a natural part of the marketplace and may ultimately benefit the consumer.

The Committee will be requested to consider including provisions for the control of win-back in the Code of Practice, but this will not replace the ODTR's role in relation to abuse of an advantaged position or breach in licensing conditions. In particular, it is essential that information obtained as part of the CPS provisioning process is not used within Telecom Éireann to assist its retail arm. Abuse of such information is prohibited under Condition 20 of the General Telecommunications License.

A separate Code of Practice is required of Telecom Éireann detailing how it implements Condition 20. This Code of Practice will establish the broad principles which apply to the use of customer information and win-back activities. The CPS Code of Practice will need to be consistent with this, and additionally will cover specific aspects that relate to the provision of CPS.

The Director has decided that a CPS committee, with representatives from the operators, consumer groups and the ODTR, should develop a CPS Code of Practice, which will be adopted by the ODTR. The Code will address, inter-alia: -

- *customer contracts*
- *use of customer information and win-back activities*

- *promotion of CPS*
- *the order handling process*
- *billing and bill payment*
- *fraud and bad debt*
- *complaint and inquiry handling*

7 Cost Allocation

7.1 Cost Categories

There are once-off and recurring costs associated with the provision of CPS. Directive 98/61/EC requires that pricing for interconnection relating to the provision of CPS must be cost oriented and direct charges to consumers, if any, must not act as a disincentive for use of the CPS facility.

The consultation paper identified three broad cost categories associated with the provision of CPS: -

- a) *General system provisioning costs:* These are once-off costs mainly incurred by the incumbent operator in modifying network and support systems to enable CPS. System provisioning costs are independent of operator demand.
- b) *Operator-specific enabling costs:* These are the costs of enabling CPS for any individual operator, including the setting up of commercial arrangements for the electronic transfer of customer orders.
- c) *Per-line enabling costs:* These are the mainly administrative costs of implementing CPS for individual customer lines.

All respondents who expressed a view (eleven in total) agreed with these cost categories.

Costs Associated with Increases in Network Capacity

Telecom Éireann indicated that additional investment in network capacity may also be required to support CPS services, but for all call types and not just the inclusion of local calls in the CPS scheme. Given the Telecom Éireann network topology, the inclusion of local calls in the CPS scheme is not as significant as originally understood by the ODTR. Specifically, Telecom Éireann does not, in general, utilise the local/tandem distinction adopted in many larger networks.

The ODTR believes however, that increases in traffic volumes that result from new operators providing CPS services should not be treated differently from existing interconnection traffic, e.g. carrier selection services. Normal interconnection tariffs should apply and several respondents made this point. If volumes increase, so do Telecom Éireann revenues. In addition, other operators are free to negotiate extra points of interconnection with Telecom Éireann to make these calls more profitable for themselves.

However, given that capacity needs to be in place prior to service provision, there may be a requirement for new operators to provide some forecast of traffic volumes as part of the provisioning process. This can be examined by the CPS Committee.

7.2 **Allocating Per-Line and Operator-Specific Enabling costs**

Six guiding principles (Appendix 1) for cost apportionment were used to determine the ODTR's initial proposals for apportioning the three costs. Applying cost causation as the primary principle is generally sound, on the grounds that economic efficiency is enhanced by requiring parties to pay for costs which they directly cause to be incurred. This initial assessment may be modified somewhat after subsequent consideration of the other principles.

Using the guiding principles, the ODTR proposed that per-line and operator-specific enabling costs should be recovered from CPS operators. This ties in with the cost causation principle, which is generally straightforward to apply and normally the key factor in cost allocation. When the other principles were considered, an alternative solution did not suggest itself. The CPS operators individually cause Telecom Éireann to incur the operator-specific enabling costs by requiring that the facility be enabled for them on the Telecom Éireann network. They also cause per-line costs by signing up new customers. If a customer changes pre-selections to re-select Telecom Éireann, then Telecom Éireann would also incur per-line charges. In addition, the general consensus which has emerged from other countries is that these charges should be recovered from CPS operators.

The ODTR further proposed that these costs should be recovered from CPS operators directly, not through conveyance charges. CPS operators are free to pass the per-line cost on to their customer directly or to recover it in some other way.

Eight respondents agreed with this analysis. Two respondents believed that the costs should be absorbed by Telecom Éireann for competitive neutrality, as Telecom Éireann will not face such charges to retain customers. One respondent believed that the costs should be spread over all interconnection minutes. However, the ODTR disagrees with these views. Enabling CPS operators and individual lines will cause direct costs to Telecom Éireann and Telecom Éireann should be able to recover these costs. The ODTR therefore believes that neither argument was sufficiently persuasive as to why these costs should not be recovered from CPS operators, in accordance with the principle of cost causation.

The Director has therefore decided: -

- *Per-line and operator-specific enabling costs can be recovered from CPS operators directly.*
- *The operators are free to pay the per-line enabling cost on behalf of the consumer, and recover it in some way other than by a direct charge to the consumer. This is a commercial decision for each CPS operator.*
- *Per-line and operator-specific charges shall include only the costs of an efficient operator using an efficient technical solution.*

7.3 Applying the Principles to General System Provisioning Costs

In the consultation document, the ODTR explained that general system provisioning costs were difficult to assign. In particular, the cost causation principle does not give a clear indication of how these costs should be recovered.

After initial consideration, the ODTR suggested that the burden of general system provisioning costs could be shared between Telecom Éireann and the CPS operators. This was mainly justified on the basis of effective competition and distribution of benefits, given that all customers, including Telecom Éireann's, will benefit from the increased competition brought about by CPS. Arguments about practicability and cost minimisation tend to support the same conclusion.

The ODTR felt that to the extent that Telecom Éireann should contribute to the costs of CPS, it should be able to recover these costs from its customers, given that Telecom Éireann customers receive benefit from CPS through general price reductions resulting from increased competition.

Responses

The majority of respondents agreed with the ODTR proposal, although several issues were raised. One respondent wanted the cost recovery mechanism to be in line with 'best international practice'. Another felt that if an operator chooses not to participate in the CPS scheme, they or their customers should not bear any of the costs.

Practical difficulties were also indicated. Three respondents were concerned about the cost basis used to establish the true general system provisioning costs and it was suggested that it would be difficult to benchmark the Telecom Éireann solution against an efficient technical solution.

In addition, two respondents suggested difficulties with identifying relevant call minutes, in particular separating CPS minutes from carrier selection minutes. They pointed to the need for separate routing codes for carrier selection and CPS calls to be able to identify CPS minutes.

Two respondents disagreed that Telecom Éireann should be entitled to recover its set-up costs, on the basis that it is meeting a legal obligation which was meant to ultimately benefit consumers. Another respondent felt that the overall market growth as a result of competition would more than compensate Telecom Éireann. Finally, one respondent believed that the issue was complex and should be deferred, subject to further consultation with the industry.

One respondent's view was that the general system set-up costs should be recovered from the CPS operators, through a surcharge applied to CPS minutes.

Further Analysis

The ODTR believes there is merit in some of the points raised and that the issue requires further consideration. As indicated by the EU, charges for CPS must not act as a disincentive to the use of the facility. The scale of the costs should be reviewed to avoid setting up any system which is complex to operate, and disproportionate to the cost involved.

The final decision will take account of any developments in international practice and any EC guidance that may become available. In terms of international practice, the ODTR believes that two trends are emerging. Of those countries who have indicated how they are going to allocate general system provisioning costs, well over half have indicated that they will allocate these costs to the local access network operator in full. The majority of the remaining countries indicated that these costs would be shared between all operators, in a ratio determined by the National Regulatory Authority (NRA).

The ODTR also believes that DG XIII of the European Commission is currently considering CPS cost issues and may provide some additional guidance on cost allocation in the near future.

The ODTR will therefore allocate general system provisioning costs after further consideration, taking account of any European Commission guidance and international practice. The Director expects to make a decision on this issue in July.

8 New Operational Processes for Providing CPS Services

The introduction of CPS will impact on several existing operational processes, and introduce new operational processes which require an interface between operators. The consultation paper identified the main inter-operator processes which would need to be developed or modified to support CPS. These were: -

- Order Handling and Provisioning
- Complaint and Fault Handling
- Inter-Operator Billing
- Management Information Statistics

An outline for a proposed order handling process was presented for further consideration. In the proposed process, the customer contacted the CPS operator directly to sign up for service. The industry could decide whether a physical data-capture form was required and if so, a part of the form would be forwarded to Telecom Éireann. Installation orders and acknowledgements were to be exchanged by electronic means. Guidelines for agreed reasons to reject an order should be formulated by the CPS Committee. The deadline for completion of activation was to be 5 working days from receipt of electronic order.

All respondents agreed that the processes were correctly identified. One respondent indicated that a further area which will require consideration was the agreement of routing and the preparation of networks, including forecasting for CPS services. New inter-operator processes must also support agreed consumer protection measures.

In addition, most respondents were in general agreement with the outlined CPS order handling and provisioning process. One respondent felt that the proposed processing times were too ambitious while two respondents felt that the time-scales could be improved upon by using electronic data transfer. One respondent felt that the industry required a Service Level Agreement to address the provisioning process. It was also indicated that the detailed process may need to take re-configuration issues into account, where the customer already has a service provided via an auto-dialler. Respondents recognised that further detailed work would have to be undertaken by an industry committee.

The proposed processes will therefore serve as a starting point for further more detailed process development by the CPS Committee.

9 Implementing CPS in Ireland

9.1 Proposed timetable

Most respondents felt that the timetable proposed by the ODTR for the introduction of CPS was ambitious but achievable. The ODTR therefore retains the proposal to introduce CPS by 1st January 2000. This is in accordance with the requirements of the Minister for Public Enterprise.

Three respondents believed that the earlier stages should be compressed to give more time for the later tasks. However, some respondents misunderstood that the dates simply indicated the latest possible date for completion of a task, rather than the time allocated to the task. For example, tasks such as the upgrading of Telecom Éireann's exchanges are ongoing, but would have to be completed by November at the latest to allow for testing.

The ODTR therefore proposes the timetable in Figure 9.1 as a high level guide to the tasks which need completion. When formed, the CPS Committee can produce a detailed project implementation plan. This should include milestones for Telecom Éireann in the upgrade of their exchanges and support systems. Given the tight time-scale, the ODTR also intends to set strict deadlines for the CPS committee to produce their deliverables. Given that CPS has been implemented elsewhere, the Committee can build on previous work, particularly on process development.

9.2 Arrangements for a CPS Committee

The ODTR proposed that the specification of the inter-operator processes and a CPS Code of Practice should be produced by a committee which included representatives from all the major operators, business and consumer interest groups and the ODTR. Such a committee would be a more effective forum than many bilateral discussions.

The ODTR recommended the formation of one committee with core members. Specialists can attend as required, to address specific issues. Specifications and drafting can be produced by project teams within the committee, with one person in the project team responsible for producing the documents, to ensure consistency.

There was unanimous support for the formation of a CPS committee from those who responded. Some respondents recommended sub-groups to consider specific issues, specifically separating out consumer issues and industry process development, for example. This will be addressed at an initial Committee meeting when the terms of reference for the Committee and allocation of work packages will be agreed.

The Director has decided that a CPS Committee should be formed immediately. The main activities of the committee will be to: -

- *Develop the CPS Code of Practice and recommend how the Code of Practice would be enforced.*
- *Develop specifications for the customer handling processes and inter-operator processes to support CPS, in accordance with the ODTR Decision Notice and the Code of Practice.*
- *Discuss and resolve practical implementation problems as they occur.*
- *Produce a project implementation plan, including milestones.*
- *Consider practical issues in relation to the implementation of CPS, including the form of the CPS routing code.*

Figure 8.1 Major Tasks to Introduce CPS

TASK	Responsible	Completed by: -
Analyse and follow up on consultation responses	ODTR	4-99
Prepare and publish Decision Notice	ODTR	5-99
Establish a CPS committee	ODTR	5-99
Develop CPS service specification and cost estimates	Telecom Éireann	6-99
Provide CPS cost estimates to ODTR	Telecom Éireann	6-99
Verify Telecom Éireann cost estimates	ODTR	7-99
Prepare and publish a Decision Notice on CPS cost allocation and recovery	ODTR	7-99
Develop CPS inter-operator processes	CPS committee (ODTR approval)	7-99
Develop a CPS Code of Practice.	CPS committee (ODTR approval)	8-99
Upgrade switches to support CPS	Telecom Éireann	11-99
Modify existing support systems for CPS	Telecom Éireann	11-99
Implement inter-operator CPS order handling system	TE and OLOs	11-99
Implement operator-specific CPS support systems	TE and OLOs	11-99
Develop internal and inter-operator test plan	TE and OLOs	11-99
Staff briefing and training	TE and OLOs	11-99
Test internal and inter-operator procedures	TE and OLOs	12-99
Introduce commercial CPS solution	TE and OLOs	1-2000

Appendix 1

Guiding principles for determining CPS cost allocation

1. *Cost causation*: the party responsible for causing costs should help to bear the costs.
2. *Distribution of benefits*: the party(ies) benefiting from the process should help to bear the costs.
3. *Effective competition*: the cost allocation mechanism should inherently encourage competition.
4. *Cost minimisation*: the cost allocation mechanism should encourage operators to minimise costs and in particular to adopt technically efficient solutions.
5. *Reciprocity*: Charges between operators should be equal for the same service (generally applicable to a service like number portability only, as only Telecom Éireann is currently mandated to offer CPS).
6. *Practicability*: the allocation mechanism should be practical to implement.