



Office of the Director of
**Telecommunications
Regulation**

Introducing Carrier Pre-Selection in Ireland

Consultation Paper

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1. Introduction

1.1 *Context*

One of the basic prerequisites for the growth of competition in the newly liberalised Irish telecommunications market is that consumers should be able to freely choose the services of an alternative operator. Carrier Pre-Selection (CPS) is one mechanism that facilitates this.

CPS is the facility that permits a consumer to decide in advance to use an alternative operator to carry certain pre-defined classes of call (e.g. all international calls). The consumer does not have to dial a routing prefix or follow any other procedure to evoke such routing. CPS can be over-ridden on a call-by-call basis by dialling the carrier access/carrier selection code of another operator. Call categories not included in a pre-selection scheme are still connected by the consumer's local access provider (e.g. 112/999).

A well defined carrier pre-selection scheme is a key enabler for effective competition in a liberalised telecommunications environment. CPS enables consumers to avail of telecommunications services best suited to their specific needs, particularly in terms of price. The existence of such services also brings pressure on the incumbent operator to lower prices, reduce their cost base and introduce new services more quickly, thus bringing the benefits of competition to all consumers.

The European Commission Directive 98/61/EC requires that carrier pre-selection should be available to consumers in Ireland by January 2000. Although Ireland has the option of seeking a derogation, the Minister for Public Enterprise has stated that Ireland will not make use of this additional period.

The Director of Telecommunications Regulation is committed to the introduction of CPS by the year 2000. There is a range of regulatory issues raised by the Directive relating to CPS which must be resolved at a national level. The purpose of this consultation is to assist the Director in resolving these issues and to ensure the implementation of an effective CPS scheme within the time-scale.

1.2 *Consultation Procedure and Timetable*

The Director invites views from interested parties on this consultative document. Comments should be submitted in writing before 5pm on Monday, **29th March** to: -

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All comments are welcome, but it would make the task of analysing responses easier if comments reference the relevant question numbers from this document. Unless marked confidential, the ODTR will make copies of the comments available for public inspection at its offices.

The ODTR will analyse your comments, take them into consideration in its review of the modalities for CPS and issue a Decision Notice before the end of April 1999.

This consultative document is not a legal document and does not constitute legal, commercial or technical advice. The Director is not bound by it. The consultation is without prejudice to the legal position of the Director or her rights and duties under the relevant legislation.

1.3 Structure of the Paper

This paper is structured into a number of main sections, as follows: -

- Section 2 identifies which operators are obliged to provide CPS facilities and considers whether the obligation should be extended.
- Section 3 outlines what qualification criteria will apply to determine which operators will be eligible to provide CPS services to the public.
- Section 4 discusses the factors to be considered when determining what call categories should be included in a pre-selection scheme and how many pre-selections should be available. The section proposes a CPS scheme for Ireland.
- Section 5 describes the switching and routing functionality which will be required to support the CPS service.
- Section 6 considers consumer issues, whether a CPS Code of Practice is required and what issues the Code should address.

- Section 7 outlines the costs involved in providing CPS and considers how these costs should be apportioned and recovered.
- Section 8 summarises the main inter-operator operational processes required to support CPS and considers the order handling process in detail.
- Section 9 provides a timetable for CPS implementation and discusses the requirement for a CPS committee.

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 carrier pre-selection. This allows their customers, including those using ISDN, to access the 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.

In October 1998, following consultation, the Director determined that only Telecom Éireann has SMP in the fixed public telephone network and services sector¹. The Director can review her determination of SMP status at any time.

According to the requirements of the Directive, Telecom Éireann must be prepared to offer a CPS service from 1.1.2000. In the future, changes in SMP status would not automatically lead to the removal of obligations originally imposed as a result of the 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.

Telecom Éireann will be required to provide CPS facilities from 1.1.2000.

2.2 Fixed Network Operators Without Significant Market Power

The Directive empowers National Regulatory Authorities (NRA) to extend the obligation to provide carrier pre-selection with call-by-call over-ride to organisations operating public telecommunications networks without SMP, where this does not impose a disproportionate burden on such organisations or create a barrier to entry in the market for new operators. Such an extension of obligations should be made by the NRA by taking account of specific national market conditions and be in the interests of the consumer.

It may be inappropriate to impose CPS obligations on any other fixed network operators at this stage in the development of a competitive telecommunications market in Ireland, since it could act as a disincentive to market entry and investment in local infrastructure.

¹ 'Significant Market Power in the Irish Telecommunications Sector – Decision Notice D4/98' (Document no. ODTR 98/47)

The ODTR proposes that no other fixed network operator will be required to provide CPS facilities for 1.1.2000. The ODTR intends to review this decision in 2000.

2.3 Mobile Network Operators

Mobile network operators are not specifically covered by the CPS obligation in the Directive, and the ODTR must decide if and when it is appropriate for carrier selection or CPS services to be applied to them.

Mobile operators have traditionally argued that CPS is not necessary, as there is already intense competition between operators in the mobile market, and that the cost of switching between operators is less significant than on the fixed network. Mobile operators also argue against the CPS obligation on the basis that substantial investment is required to roll-out mobile networks, and this would be undermined by the introduction of CPS. There are also technical barriers to the introduction of CPS on mobile networks that must be taken into account.

Although the mobile market in Ireland is growing rapidly, there would appear to be considerable ground to be made up when compared with other EU countries in terms of penetration and tariffs. The growing trend throughout EU countries is to require mobile operators to provide CPS. The ODTR must also take into account the benefits that would be brought to consumers by the extending the CPS obligation to mobile.

Taking the above into account, the ODTR proposes to investigate the issue of extending carrier selection obligations to mobile networks as a separate task. This work will begin in 2000, and will examine both call-by-call and pre-selection.

Questions

Q2.1: Do you agree that the ODTR should not consider imposing CPS obligations on fixed network operators other than Telecom Éireann at this time?

Q2.2: Do you agree with the review timeframe? Are there any specific developments which might prompt an earlier review?

Q2.3: Do you agree with the proposal to separately investigate extending carrier selection obligations to mobile networks, and the time-scale for the investigation? What factors do you think should be taken into account in this investigation?

3. Operators Eligible for Carrier Pre-Selection

Operator eligibility in other countries where CPS is in operation is generally dependent on their licensing scheme. Some countries, however, also require that an operator has significant network infrastructure deployment before being considered for a CPS scheme.

The ODTR believes that CPS should be available to all operators having Annex II² status, and proposes that operators with either Basic or General Licenses should be eligible to provide CPS services to customers. New and existing licensees will be required to justify their requirement for CPS facilities by reference to the provision of telecommunications services to the public, in addition to meeting the normal licensing criteria. In particular, operators must to be able to deliver traffic to all destinations implied by a particular pre-selection.

In addition, the ODTR may require that a consumer Code of Practice for CPS be established (see Section 6.2). If so, operators must be in a position to accept and comply with that Code of Practice. Breaches of the Code could lead to suspension of CPS service.

In summary, the ODTR proposes 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 Telecom Éireann*
- *can deliver calls to all destinations implied by a pre-selection*

The ODTR intends to review this proposal in 2000.

Questions

Q3.1: Do you agree with the proposal that both Basic and General license holders should be eligible to provide CPS services?

Q3.2: Do you agree with the further qualification criteria? Should there be tighter restrictions on which operators can avail of CPS facilities?

² Annex II of Directive 97/33EC – The Interconnection Directive.

4. The CPS Scheme

4.1 Factors to Consider in Determining a CPS Scheme

The CPS service envisaged by the Directive is not limited to any specific type of calling. There is thus a reasonable expectation that all call types, including local calls, could ultimately be included in a CPS scheme.

In determining the number and type of services which can initially be pre-selected, the ODTR believes that introducing a complex pre-selection scheme would not be in the best interests of either the consumer or competition. Ease of use is therefore a prerequisite for any initial pre-selection scheme.

In the context of this requirement for simplicity, requiring individual pre-selections for each different type of calling is likely to prove unattractive to consumers. Individual pre-selects would also add to the costs and time-scales of introducing the service, with few counterbalancing benefits. In addition, given that the margins are narrower on certain types of calling, it is unlikely that an operator would choose to enter markets based on individual pre-selects for those call types.

However, there is a case for treating international and national calls as separate options. This would increase customer choice, since some operators may only offer international calling. Such operators could be excluded from offering a CPS service by grouping the two together. The benefit to competition of having separate pre-selections for national and international calling has to be balanced against the increased complexity of the scheme from a consumer perspective and the additional implementation effort and costs.

Another consideration is the degree of operator competition for a particular call type and the related margins. Clearly, competing operators will wish only to implement schemes in which pre-selections are limited to call types that are commercially viable for their particular business.

The ODTR therefore considers that the best approach to implementing a pre-selection scheme which includes all call types would be on a phased basis, as discussed in Section 4.3. This would allow for the introduction of a simpler pre-selection scheme initially, with the addition of more call types as consumer requirements develop and interconnection and retail tariffs evolve.

4.2 The Proposed CPS Scheme for Ireland

Taking account of the above criteria, the ODTR believes that the initial introduction of a relatively simple pre-selection scheme will facilitate

implementation by 1.1.2000 and encourage consumer acceptance of the concept.

The ODTR therefore proposes that the consumer should be offered the following options in a CPS scheme: -

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 4.4.*

Options 1 and 2 may be combined so that the customer has pre-selects for both national and international calls. The pre-selected operator may be the same or different for each call type.

Telecom Éireann would continue to provide the line to the customer's premises and would be responsible for billing line rental. Calls for which the customer does not pre-select an operator would continue to be routed by Telecom Éireann. Therefore, if a customer had pre-selected an operator for both options, Telecom Éireann would continue to route local calls, calls to non-geographic numbers, short code calls such as directory enquiries and emergency calls.

In addition, customers should be able to suspend, or '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).

Finally, customers who wish to continue to take all of their call services from Telecom Éireann will not need to do anything. The provision of their calls will be unaffected by the introduction of the CPS service. Likewise, existing call-by-call carrier selection services will continue to be available from Telecom Éireann.

4.3 Future CPS Schemes

The ODTR believes that in the interests of competition and the consumer, all call types, including local calls, calls to non-geographic numbers, etc. should ultimately be catered for in a CPS scheme.

The ODTR suggests that one approach for including these call types could be by the subsequent addition of an 'All Calls' pre-selection, enabling a customer to pre-select an operator other than Telecom Éireann to carry *all* of their calls.

Therefore, a future CPS scheme could retain separate pre-selections for National and International calls as before, but would introduce this third, 'All Calls' pre-selection. Selecting the 'All Calls' pre-selection would replace any previous pre-selections for national and/or international calling.

With an 'All Calls' pre-selection, all of the customer's calls to international, national, local, mobile, non-geographic, paging and personal numbers would be routed to the pre-selected operator. Telecom Éireann would continue to deliver short code calls and emergency calls. Telecom Éireann would also continue to provide the line to the customer's premises and would be responsible for billing line rental.

Any option which includes local calls may not currently be commercially viable for all of the competing carriers. In addition, consideration would need to be given to the impact of routing local calls to CPS operators³, which might vary from operator to operator. Routing local calls to competing operators could also have network dimensioning implications for Telecom Éireann. Such issues should be considered in-depth, prior to the introduction of a pre-selection option which includes local calls.

The ODTR proposes to review the CPS Scheme in 2000 to consider how additional call types could be incorporated. The Office invites comments on the practicalities of the addition of an 'All Calls' pre-selection, its impact on any existing pre-selection options and a suitable time-scale for introduction.

4.4 Definition of National Calls in the CPS Scheme

The ODTR proposes 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.

The ODTR believes that this number-based definition provides the only practical means of separating National calls by dialled number analysis in Telecom Éireann's exchanges. It is also simple to understand from a consumer point of view.

³ The CPS operator is the operator which the customer pre-selects to provide national and/or international calling, etc. This term is used in the remainder of the document.

An alternative, charge-based definition of a National call to a geographic number could exclude those calls which require a National Destination Code (NDC) but are charged at local rate. Such calls may offer low margins or be unprofitable to deliver. However, the mechanism for separating calls based on what charge applies may not be practical or possible, particularly in the required time-scale.

The following table summarises the ODTR proposal for which call types will be included and excluded in 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>

The ODTR proposes to review this definition of a National call in the CPS scheme in 2000 to take account of possible developments in both the marketplace and the National Numbering Plan.

Questions

Q4.1: Do you agree with the proposed CPS scheme and in particular, the requirement for separate pre-selections for national and international calls? Why?

Q4.2: What are your views on the definition of national calls in the context of the proposed CPS scheme?

Q4.3: Do you agree with the proposal for the phased introduction of a pre-selection scheme to include all call types? Why?

Q4.4: Do you agree that individual pre-selects for local calls, calls to specially tariffed services, etc., are inappropriate, and if these call types are to be

considered, that they should be accommodated in some other way, e.g. the suggested 'All-Calls' option?

Q4.5: Are there other issues which prevent competing operators from offering the full range of calling services, as proposed in the 'All Calls' selection? What call types should be excluded from the 'All-Calls' selection or any pre-selection scheme?

Q4.6: What are the implementation implications of 'All-Calls' service, particularly considering the routing implications of including local calls and non-geographic services?

Q4.7: Assuming a scheme which ultimately includes an 'All Calls' pre-selection, does this impact on what should be included/excluded in the 'National Calls' pre-selection?

Q4.8: Are there specific services currently considered for inclusion in an "All Calls" pre-selection which should be treated separately? For what reasons?

5. Switching and Routing Requirements

5.1 General Requirements

The ODTR proposes that the following switching and routing requirements apply to Telecom Éireann: -

- *Telecom Éireann must be in a position to provide CPS facilities to all customers, on direct exchange lines and ISDN lines from 1.1.2000.*
- *CPS will not be provided on public or managed payphone lines.*
- *Telecom Éireann will route calls which are subject to pre-selection to an agreed point of interconnection, according to the customer's selected CPS operator.*
- *All calls subject to a CPS mechanism will be routed without alteration to the digit string dialled by the customer. Calling Line Identity (CLI) will also be passed through for billing purposes.*
- *Calls not subject to a pre-selection, calls to emergency services and short code calls will continue to be routed by Telecom Éireann (See section 4.4).*
- *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 5 digit 'CPS Routing Code' to facilitate routing through their network to the appropriate point of interconnection*
- *Operators who have already been assigned carrier selection codes will use that code for their 'CPS Routing Code'. Therefore the 'CPS Routing Code' will be of the form 13XXX.*
- *Operators who have not been assigned a carrier selection code can request one in the normal way. One code will be allocated to each operator.*
- *However, if after consultation, the ODTR considers that there are good reasons for having the 'CPS Routing Code' different to the operator's diallable carrier selection code, then there are two options: -*
 - 1) *Use spare codes within the 13XXX range.*
 - 2) *Use the code 175AB, where A cannot be 9. This is the preferred option.*

- *Existing facilities on the customer's line, such as call management services, (e.g. Call Waiting) 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 will be provided to multi-line customers and customers with PABX installations. However it might not be possible to provide different selection schemes to individual extensions on a PBX, e.g. where a PBX is supplied by a 30 channel ISDN Primary Rate circuit, then a single CPS scheme might have to be applied to all 30 channels, and would be available to all extensions on the PBX.

CPS could also be provided to Virtual Private Network (VPN) customers. VPN on-net calls do not need CPS capability, but Telecom Éireann could provide VPN subscribers with the capability of directing specific types of off-net traffic to CPS operators.

The ODTR seeks views on what limitations may appropriately apply to the provision of CPS services to multi-line and VPN customers.

Questions

Q5.1: Are there further limitations on CPS availability on PSTN and ISDN lines or could availability be expanded in any way?

Q5.2: Do you agree with the mechanism for providing CPS facilities? In particular, do you agree with a routing implementation using a 'CPS Routing Code' and the proposed form for the code?

Q5.3: What is a reasonable upper limit for the number of CPS operators that Telecom Éireann's switches will be required to support?

Q5.4: What practical limitations should apply to the provision of CPS services for multi-line and VPN customers?

6. Consumer Issues

6.1 General

Network operators must develop adequate customer information and consumer protection procedures to assist the public to understand the choices they will have, and how the new services will work. In particular, consumers should fully understand that CPS will be different from carrier selection/carrier access in the automatic nature of CPS, the types of calls covered by the CPS scheme and the impact on other services that they are to retain.

6.2 Requirement for a Code of Practice

As experience in other countries has shown, measures will need to be in place to protect customers from operator misuse of the CPS facility. The most notable form of misuse is often referred to as 'slamming'. Slamming is the implementation of pre-selection without the full, conscious consent of the customer. Slamming is not a practice in which reputable operators engage but nevertheless safeguards do need to be put in place. This may require the development of a Code of Practice. A Code of Practice would set out the rules and procedures that operators wishing to offer CPS services in Ireland would follow.

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 Code of Practice is required of Telecom Éireann detailing how it implements Condition 20 and the specific issues relating to CPS will be covered by this Code.

The Code of Practice for all operators could be developed by a CPS committee (Section 9.2). Consumer groups may need to be involved in the work of the committee to ensure that any consumer protection measures introduced into Ireland have their support.

A CPS committee, with representatives from the operators, consumer groups and the ODTR, should develop a CPS Code of Practice which addresses: -

- *customer contracts*
- *use of customer information*
- *promotion of CPS*
- *the order handling process*
- *bill payment*
- *complaint and inquiry handling*

- *tariff presentation*

6.3 Consumer Billing

Billing is a critical issue for operators, since it is key to revenues and relationships between operators and consumers. Responsibility for billing the calling customer using CPS usually rests with the CPS operator. The consumer is not directly charged for accessing the CPS operator's switch by Telecom Éireann. This is charged between operators as part of an interconnection agreement. Telecom Éireann is responsible for billing calls not subject to a pre-selection and for line rental.

The introduction of CPS is likely to result in the customer now receiving two or more bills for one telephone line. However, the industry trend is to simplify billing for consumers as much as possible. The ideal situation is one bill for all services.

Billing arrangements should be discussed and agreed upon between operators as part of interconnection negotiations.

Questions

Q 6.1: Do you agree that a Code of Practice is required? If so, what additional issues might be addressed?

Q 6.2: What are your views on the most appropriate and practical approach to control win-back activities?

7. Cost Apportionment

7.1 Introduction

This section considers the costs associated with the provision of CPS and examines the proposed rules for allocating these costs. There are once-off and recurring costs associated with the provision of CPS. 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.

7.2 Cost Categories

Costs associated with the provision of CPS may be broken down into broad categories as follows: -

- 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. It should be possible to isolate individual operator enabling costs as a sub-set of the overall provisioning cost.
- c) *Per-line enabling costs*: These are the mainly administrative costs of implementing CPS for individual customer lines.

These three costs have been identified by other administrations. In addition, it may be necessary to consider another cost, if local calling is included in the future as part of the pre-selection scheme. In this case, local calls which would previously have remained in the network at local exchange level, would have to be carried along the incumbent operator's network to the relevant point of interconnection. This could result in a possible need to invest in extra network capacity. This requirement for extra capacity and the cost allocation rules that would apply would need to be investigated further at that time.

7.3 Principles for Cost Apportionment

The ODTR must determine how the costs identified in Section 7.2 should be apportioned. A number of guiding principles have been identified which have been used by both regulators and consultants as a basis for determining CPS cost allocation: -

- a) *Cost causation*: the party responsible for causing costs should help to bear the costs.
- b) *Distribution of benefits*: the party(ies) benefiting from the process should help to bear the costs.
- c) *Effective competition*: the cost allocation mechanism should inherently encourage competition.
- d) *Cost minimisation*: the cost allocation mechanism should encourage operators to minimise costs and in particular to adopt technically efficient solutions.
- e) *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).
- f) *Practicability*: the allocation mechanism should be practical to implement.

7.4 Applying the Principles to Per-line and to Operator-Specific Enabling costs

The general consensus which has emerged from other countries is that per-line and operator-specific enabling costs should be recovered from CPS operators. This ties in with the cost causation principle (see Section 7.3), which is generally straightforward to apply and normally the key factor in cost allocation.

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. When the other principles in Section 7.3 are considered, an alternative solution does not suggest itself.

The ODTR therefore proposes that: -

- *per-line and operator-specific enabling costs will be recovered from CPS operators directly, not through interconnection charges.*
- *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 recover only the costs of an efficient operator using an efficient technical solution.*

7.5 Applying the Principles to General System Provisioning Costs

General system provisioning costs are more difficult to assign and the cost causation principle does not give a clear indication of how these costs should be recovered. This is because Telecom Éireann's general system provisioning costs are caused by compliance with a legislative obligation rather than a voluntary activity. Similarly, it is likely that arguments can be made in several ways on the application of the other principles (Section 7.3).

No clear trend has emerged from other countries on how to allocate the general system provisioning costs. Of the countries that have decided on cost allocation, either the general system provisioning costs have been allocated entirely to the incumbent or the cost has been shared between all operators, with the shares determined by the Regulator.

The ODTR suggests that the burden of general system provisioning costs could be shared between Telecom Éireann and the CPS operators.

However, certain cost allocation scenarios can be ruled out on practicality grounds. For example, requiring some of the general system provisioning costs to be borne up-front by early adopters of CPS would be an incentive for operators to stay out of the market temporarily to avoid paying any costs. It would also create practical problems in recovering costs from operators who enter the market at a later stage.

After considering cost recovery methods in other countries, the ODTR believes the general system provisioning costs could be spread over all *relevant originating call minutes*⁴.

Consideration of the 'distribution of benefits' principle supports the supposition that reductions in call costs are ultimately spread across all customers, including Telecom Éireann's, and therefore a supplement should apply to all originating relevant call minutes, rather than just *CPS call minutes*⁵.

The use of actual or projected relevant originating call minutes would allow a more robust calculation of the charges. The future amount of CPS minutes is difficult to predict. Therefore, their use in the calculation of charges is ruled out on practicality grounds.

The use of all relevant originating call minutes ties in with the cost minimisation principle. Under this proposal, Telecom Éireann would bear a good proportion of the costs of CPS. This provides an incentive for Telecom

⁴ Relevant originating call minutes are call minutes of a type available under the CPS scheme (i.e. international and national calls in the proposed scheme) that are carried by CPS operators *and* Telecom Éireann.

⁵ CPS call minutes are call minutes of a type available under the CPS scheme that are carried by the CPS operators only.

Éireann to minimise the costs which it incurs. Telecom Éireann would have little incentive to do this if it was able to recover all of its costs from other operators.

The ODTR seeks views on the best way to allocate general system provisioning costs.

However, the ODTR suggests that if general system provisioning costs are to be shared between Telecom Éireann and the operators, then: -

- *this could be achieved by charging a supplement for all relevant originating call minutes.*
- *relevant call minutes are all calls of a type available under the CPS scheme.*
- *the recovery of the costs could take the form of a supplemental charge to normal (call origination) interconnection charges.*
- *the charge would recover only the costs of an efficient operator using an efficient technical solution.*

Questions

Q7.1: Do you agree with the defined CPS cost categories?

Q7.2: Do you agree that additional costs may be incurred as a result of including local calls in a CPS scheme?

Q7.3: Do you agree with the proposed cost allocation and recovery rules for per-line and per-operator enabling costs?

Q7.4: Should Telecom Éireann be entitled to recover some or all of the general system provisioning costs? If so, do you agree with the proposed recovery mechanism?

Q7.5: Do you foresee any practical problems in implementing any of the proposed cost allocation and recovery rules?

8. New Operational Processes for Providing CPS Services

8.1 Background

The introduction of CPS will impact on several existing operational processes such as billing, order handling, service provisioning and fault handling. Modifications or additions to operators' existing operational support systems will be required to support CPS. CPS will also introduce new operational processes which require an interface between operators.

In designing the processes to support CPS, consideration should be given to the ease of serving a customer's request. The process by which a customer's CPS options are registered must be neither complex nor cumbersome. The processes must be adequate to give consumers confidence that their interests are being protected.

Detailed inter-operator processes need to be developed by the operators to support CPS. The ODTR believes that a single multilateral forum would be more efficient than many separate bi-lateral discussions. A committee arrangement would also provide an open forum to ensure non-discrimination and knowledge sharing between established players and new entrants. Consumer interests could also be represented on the committee, offering them visibility of developments and the opportunity to ensure their point of view on this key customer service is taken into consideration.

This committee would be formed shortly after the consultation process has been completed. The committee's main tasks will be to formulate inter-operator processes and establish a Code of Practice for providing CPS services (see Section 9.2).

8.2 The Main Inter-Operator Processes

The ODTR believes that there are four main inter-operator processes to be developed or modified:-

- 1) *Order Handling and Provisioning*: The process for the exchange of orders to allow the setting up, changing and removal of the CPS service on a customer's line. This includes the identification of invalid orders.
- 2) *Complaint and Fault Handling*: The changes required to existing processes to recognise CPS customers and to appropriately respond to reported faults based on this. It may also include the passing over of faults between operators when appropriate.

- 3) *Inter-Operator Billing*: The changes required to existing inter-operator billing processes to cater for the addition, changing and removing of CPS services on customers' lines. The recovery of CPS costs (Section 7) may be part of any inter-operator billing requirement, depending on how these costs are allocated and recovered.
- 4) *Management Information Statistics*: Provision of management information statistics to measure inter-company performance and to demonstrate achievement of agreed industry service levels.

8.3 Order Handling and Provisioning Process

The development of the order handling and provisioning process is likely to be a demanding task. In order to speed the work of the CPS committee, the ODTR proposes an outline order handling process for further consideration: -

- 1) When a customer decides to use a CPS service, he/she should contact the CPS operator directly. A customer contacting Telecom Éireann requiring CPS services should be redirected to the appropriate CPS operator.
- 2) If the industry requires a physical data capture form to be completed by the customer, the CPS operator will request a signature on a part of the form which instructs Telecom Éireann to program the customer's CPS options. The absence of a signed authorisation form could have implications for Telecom Éireann's existing contracts with customers.
- 3) On receipt of the signed form, the chosen CPS operator will then contact Telecom Éireann about the new arrangement for the customer. This installation order should be sent by electronic means on the day of receipt of the form. The CPS operator also sets up the service internally.
- 4) On receipt of the electronic installation order, Telecom Éireann will return a positive acknowledgement for every order which can be fulfilled. If an order cannot be accepted, the reason for rejecting the order is returned. This positive/negative acknowledgement should be returned within one working day. Guidelines for agreed reasons to reject an order should be formulated by the committee.
- 5) If receipt of a customer's signature to authorise Telecom Éireann to install CPS facilities is a requirement and it could not be sent as part of step 3, then the signature should be received by Telecom Éireann no later than 3 working days after the electronic installation order.
- 6) Telecom Éireann then programs the customer's local exchange to route appropriate calls through to the CPS operator's network. The deadline for completion of activation is 5 working days from receipt of electronic order. This assumes that a longer 'cooling-off' period is not a consumer protection requirement.

- 7) Telecom Éireann confirms to the CPS operator that CPS has been activated on the customer's line.

The finally agreed process must also take account of:-

- The options available in the pre-selection scheme
- Customers subsequently changing their pre-selected operator
- Customers reverting to Telecom Éireann
- Cancellation of CPS orders in progress
- Multi-line customers
- Change of customer's telephone number
- Customer ceasing service completely with Telecom Éireann

An order handling system designed to cater for an agreed volume of orders needs to be put in place to handle this process efficiently and accurately. An electronic order handling system would allow for greater volumes of CPS orders to be processed and creates an audit trail. A solution which utilises e-mail might be a reasonable interface initially.

New inter-operator processes must also support agreed consumer protection measures. A Code of Practice will also be developed by the CPS committee.

Successful process development and implementation is reliant on all operators involved in CPS, not just Telecom Éireann. A sufficient commitment of resources and a willingness to develop sustainable processes is required from all participants.

Questions

Q8.1: Are the required inter-operator processes correctly identified?

Q8.2: Do you agree with the CPS order handling and provisioning process outlined above? How could it be improved?

9. Implementing CPS in Ireland

9.1 *Proposed timetable*

The following table outlines the proposed schedule for the introduction of CPS in Ireland. To meet this timetable, the industry will need to move quickly at the end of the consultation to agree and implement the processes required to support CPS.

TASK	Responsible	By when?
Publish Consultation document	ODTR	3-99
Analyse and follow up on consultation responses	ODTR	4-99
Prepare and publish Decision Notice	ODTR	4-99
Establish a CPS committee	ODTR	5-99
Develop CPS service specification and cost estimates	Telecom Éireann	5-99
Provide CPS cost estimates to ODTR	Telecom Éireann	5-99
Verify Telecom Éireann cost estimates	ODTR	6-99
Prepare and publish a Decision Notice on CPS cost allocation and recovery	ODTR	7-99
Develop a CPS Code of Practice.	CPS committee (ODTR approval)	7-99
Develop CPS inter-operator processes	CPS committee (ODTR approval)	7-99
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

9.2 Arrangements for a CPS Committee

The ODTR believes that the specification of the inter-operator processes required to support CPS and a CPS Code of Practice should be produced by a committee which includes 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.

There will be technical, process and commercial issues to resolve. Since it is unlikely that sufficient staff resources would be available in every organisation to support several committees, the ODTR proposes one committee with core members. Specialists can attend as required, to address specific issues. Specifications can be produced by project teams within the committee, with one person in the project team responsible for writing the specification, to ensure consistency.

The ODTR proposes that the CPS committee should be formed within two weeks of the Publication of the Decision Notice on CPS.

The main activities of the committee will be to: -

- *Develop a Code of Practice on the marketing of CPS to consumers 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.*
- *Contribute to the discussion on the allocation of benefit of CPS and consequent allocation of costs.*

Questions

Q9.1: Is the proposed timetable realistic? How, if at all, should it be modified?

Q9.2: Do you agree with the proposed committee arrangements?