



Office of the Director of  
**Telecommunications  
Regulation**

## **Introducing Carrier Pre-Selection in Ireland: Switching and Routing Requirements for Local Calls**

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**Decision Notice D13/99**

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# CONTENTS

	Page
<b>1. Introduction</b>	<b>3</b>
<b>2. Background</b>	<b>4</b>
2.1 Legislative background	4
<b>3. Alternative solutions to identify the Local Call Area</b>	<b>5</b>
3.1 The full dialled number solution	5
3.2 The Calling Line Identification (CLI) solution	6
3.3 The NDC Code insertion solution	8

## 1. Introduction

The Director of Telecommunications Regulation (“the Director”) is responsible for the regulation of the Irish telecommunications sector in accordance with National and EU legislation.

The Director published Decision Notice D2/99 on the “Introduction of Carrier Pre-Selection in Ireland” in May 1999. With regard to the implementation of Carrier Pre-Selection, an issue has arisen concerning the identification of the National Destination Code (NDC) area in the case of pre-selected local calls.

In October 1999, the Director set out the alternative solutions and sought comments and views from interested parties in the consultation document No. ODTR 99/58<sup>1</sup>.

The Director would like to thank the organisations that responded to the consultation paper. The comments received have provided valuable input into the Director’s consideration of the alternative solutions presented in the consultation. The responses received to the consultation paper can be viewed in this Office.

Responses were received from:

- ALTO
- Cable & Wireless Communications
- Eircom
- Esat Telecommunications
- GTS Ireland
- Interoute
- Irish Multichannel
- MCI Worldcom
- Ocean
- Swiftcall

In this paper, the Director sets out the report on the consultation process, together with the decisions she has made with regard to the preferred solution for the identification of the NDC area in the case of pre-selected local calls, and for the routing of the digits to the appropriate points of interconnection. The Director arrived at these decisions after consideration of the representations of all the above respondents.

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<sup>1</sup> Introducing Carrier Pre-Selection in Ireland, Switching and Routing Requirements for Local Calls: Document No. ODTR 99/58, October 1999.

## 2. Background

Following the publication of a consultation document (ODTR document no. 99/08<sup>2</sup>) in March 1999 and the careful consideration of the responses received, the ODTR published Decision Notice D2/99 – “Introducing Carrier Pre-Selection in Ireland” in May 1999.

The Carrier Pre-Selection (CPS) scheme set out in the Decision Notice made provision for three options to be offered to the consumer from 1<sup>st</sup> January 2000:

International Calls only; *and/or*  
National calls only; *or*  
‘All Calls’

With respect to switching and routing requirements, the Director, taking account of the responses received, decided that, inter alia,

*“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.”*

It subsequently emerged during implementation planning by the licensed operators, that for “All Calls” CPS cases where the local number only was dialled and the call routed to an Eircom-OLO (Other Licensed Operator) interconnection point, further origin identification would be required. In particular, further information would be required where the interconnection between networks carried such calls from more than one NDC area.

Three alternative solutions, which were identified and discussed by the CPS Committee (established under section 9.2 of Decision Notice D2/99), were set out in the Consultation Paper and respondents were invited to comment on each solution.

### 2.1 Legislative background

With regard to CPS and its implementation, the Director is operating in the context of the obligations imposed by the harmonising legislation of the European Union, in particular, the European Communities (Interconnection in Telecommunications) Regulations, 1998 (SI 15 of 1998), as amended by the European Communities (Interconnection in Telecommunications)(Amendment) Regulations, 1999 (SI 249 of 1999).

The Director, therefore, in exercise of her functions under the Telecommunications (Miscellaneous Provisions) Act, 1996 herein sets out her decisions concerning the identification of local call areas for pre-selected local calls and for the routing of the digits to the appropriate points of interconnection.

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<sup>2</sup> Introducing Carrier Pre-Selection in Ireland –Consultation Paper, Document No. ODTR 99/08, March 1999.

### 3. Alternative solutions to identify the Local Call Area

Three alternative solutions were proposed in Consultation Paper 99/58:

1. The caller dials “0”+NDC+local number, i.e., the full number;
2. The receiving operator analyses the CLI message to determine the NDC code;
3. The access operator (Eircom) inserts the NDC code (or “0” + NDC Code).

For each solution, respondents were invited to comment on the implementation work required in their networks and the timescales. Respondents were also invited to indicate their first and second preferred solutions with supporting reasons.

In addition, in the event of a decision in favour of the NDC code insertion solution, respondents were invited to indicate their preference regarding the digits to be inserted and the supporting reasons.

#### 3.1 The full dialled number solution

This solution requires the caller to dial the full number, i.e., “0” +NDC+local number instead of the local number only.

Nine of the ten respondents stated that this was not an acceptable solution. The supporting reasons included:

- the risk of customers continuing to dial the local number for a proportion of their local calls
- all users of an access line may not follow the dialling procedure for every local call
- the level of customer education required to ensure customers dial the full number at all times
- this solution would be a barrier to customers selecting carrier pre-selection and would hinder the development of CPS in the market
- this solution conflicts with the principle that for carrier pre-selection, customers should not have to alter their standard dialling practice.
- possible incorrect routing of calls when the STD code is omitted
- possible disputed accounts

A number of respondents made reference to the Consultation Paper - "Introducing Carrier Pre-selection in Ireland" (ODTR 99/08), in particular section 1.1 thereof, where the CPS facility was defined:

*"The customer does not have to dial a routing prefix or follow any other procedure to evoke such routing"*

and argued that this solution conflicts with the principle that, for carrier pre-selection, the customer should not have to alter their standard dialling practice. (Consultation documents, however, are not legal documents and do not constitute legal, commercial or technical advice).

One respondent expressed a preference for the full dialled number solution. The supporting reasons included:

- this solution allows all CPS operators to enter the market on an equal basis
- for the four European countries which will have CPS local calls by January 2000, the customer will be dialling the full number solution<sup>3</sup>
- the Eircom access network will support this solution
- the digits dialled by the customer will not be required to be altered.

*With regard to this solution, taking account of the above responses the Director has decided that:*

- *the full dialled number solution is not a preferred solution to enable CPS operators to identify the local call area destination so that the call can be routed*
- *however, when the calling party uses the national dialling procedure for a local pre-selected call, the networks must support the routing of the call.*

### **3.2 The Calling Line Identification (CLI) solution**

This solution requires the CPS operator to analyse the CLI message to determine the NDC code for the local area where the call both originates and terminates.

Nine out of ten respondents had reservations about this solution and their positions ranged from not acceptable, unworkable and problematic to not preferred but acceptable as a short term solution. A number of respondents stated that they had carried out investigations on non-standard short-term solutions which analyse the CLI message to determine the NDC code for the local area. Other respondents expressed the view that this solution was not feasible. The following are some of the reasons which were advanced by the respondents in support of their positions:

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<sup>3</sup> The countries referred to are Sweden, Switzerland, Denmark (closed numbering) and Norway (closed numbering).

- the solutions offered by switch manufacturers will be non-standard (specific to the Irish market) and expensive to implement
- the onus should not be on CPS operators to change their systems in order to ensure that Eircom customers can opt for CPS
- non-standard solutions may not be supported by switch vendors in time to come and may not be compatible with future development
- some CPS operators may have switches which do not have the capability to support a CLI based solution
- call set-up times could be adversely affected
- the overall cost of introducing 'All Calls' would be increased
- the solution will cause a great deal of complicated switch datafill that could become very difficult to manage and maintain going forward
- it is not a practical solution in the long term
- the solution increases the call processing overhead on an on-going basis
- the solution may restrict service offerings and cause network difficulties in the future.

One respondent supported this solution as a second preference, as they understood that a technical solution was available from at least one switch vendor and similar solutions could be planned and developed by other vendors.

The Director notes that while some operators should be in a position to deploy this solution on an interim basis, the solution will not be feasible for other operators. The Director has also taken into account the fact that this issue of identification only emerged after the consultation on the introduction of CPS was completed, despite the fact that the proposed requirements for routing of digits were explicitly stated in the Consultation Paper (Document No. ODTR 99/08).

*Taking account of the above responses the Director has decided that:*

- *the Calling Line Identification (CLI) solution is not a preferred solution to enable CPS operators to identify the local call area destination so that the call can be routed*
- *however, this solution provides a method to identify the NDC (National Destination Code) area in the short term, until such time as the access operator (Eircom) inserts the STD code (0+NDC Code) for the local call area, between the CPS Routing Code and the dialled digits of the local number.*

### 3.3 The NDC Code insertion solution

This solution requires the access operator (Eircom) to insert the NDC code or alternatively “0” + NDC code.

Nine of the ten respondents stated that this was their preferred solution. The supporting reasons included:

- the access operator should present the dialled digits to the CPS operator in such a way that the destination can be identified and the call can be routed
- this solution allows CPS operators to use standard switch vendor supported functionality and to operate on a level playing pitch
- this solution minimises the barriers to entry for CPS operators
- this solution is the most efficient, cost effective and practical, having regard to the current framework for introducing CPS
- this solution minimises the total industry network implementation and support costs
- this is the solution adopted by Oftel (the UK regulator) for the UK and Northern Ireland where a similar local dialling practice is used.

One of the ten respondents (Eircom) did not support the NDC code insertion solution. They have concluded that their network is currently designed so that CPS-Local Calls can be implemented, either using the full dialled number solution or the CLI solution and on that basis fully complies with Decision Notice D2/99 in terms of timescales and customer dialling procedures.

Eircom has indicated that their network most certainly cannot provide the NDC Code Insertion solution within the timescales required by the Decision Notice D2/99, i.e., 1<sup>st</sup> January 2000. Eircom has also indicated that they have not been in a position to determine fully the scope and timescale for upgrading their network to include for NDC Code Insertion, or the cost of such a solution. Eircom further state that there are no guarantees from their suppliers as to when they can supply this functionality. Eircom state that the next upgrade for their switches by their vendors is planned for 2001. In addition, Eircom states that the NDC Code Insertion Solution does not comply with Decision Notice D2/99 either in terms of dialled digits or timescales and that the only country that is proposing this solution is the UK for implementation in December 2000.

Eight of the ten respondents stated a preference for the insertion of “0” + NDC code rather than the NDC code only. Some respondents pointed out that the NDC code only solution could lead to conflicts between local and non-geographic numbers.



One respondent stated a preference for the insertion of the NDC code only and one respondent offered no preference.

The Director has concluded that the NDC Code insertion solution is the only preferred solution that would enable CPS operators to identify the local call area destination so that the call can be routed. The Director has further concluded that the STD Code (“0” + NDC code) rather than the NDC Code only should be inserted. The Director does not accept that this solution does not comply with Decision Notice D2/99 in terms of dialled digits and, for the avoidance of doubt, is revising the relevant decision point.

The Director accepts that this solution cannot be implemented by Eircom for 1<sup>st</sup> January 2000. The Director believes that 1 year at the outset, is a more than reasonable period for Eircom to implement this solution and after a detailed assessment of the effort required believes that this period can be reduced.

*With regard to this solution, taking account of the above responses, the Director has decided that:*

- *Where a pre-selected call is dialled using the local dialling format, the access operator (Eircom) will insert the STD code (0+NDC Code) for the local call area, between the CPS Routing Code and the dialled digits.*
- *This requirement must be in operation for all local call areas before 1<sup>st</sup> November 2000 at the latest*
- *Eircom will prepare a detailed written assessment of the effort, cost and timescales to implement this requirement using best endeavours to minimise these factors and provide a copy to the Director before the end of January 2000.*
- *The Director will consider this assessment with a view to bringing forward the operational date.*
- *The costs incurred by Eircom in implementing this solution in their network will be treated as General System Provisioning Costs.*

Decision Notice D2/99 – “Introducing Carrier Pre-Selection in Ireland”, section 5.1, 5<sup>th</sup> bullet point decision, stated that:

*“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.”*

The Director has reviewed this decision point in the context of this Decision Notice and for the avoidance of doubt, has revised the wording as follows:

*All calls subject to a CPS mechanism will be routed without alteration to the digit string dialled by the customer subject to the following required exceptions:*

- the insertion of the CPS Routing Code Prefix*
- the insertion of STD Code for the local call area*

*Calling Line Identification (CLI) will also be passed through for billing purposes.*

Subsequent to this consultation, the issue of whether the access operator must set and pass through the Calling Line Identification Restriction (CLIR) and Calling Line Identification Presentation (CLIP) messages in response to the customer instruction digits of '141' and '142' respectively has been the subject of correspondence with this Office and debate at the CPS Committee. The Director has reviewed the position in the light of the views expressed and considers that the following exceptions should also apply:

- the removal of the customer instruction digits "141" when Calling Line Identification Restriction (CLIR) is set and passed through*
- the removal of the customer instruction digits "142" when Calling Line Identification Presentation (CLIP) is set and passed through*

These two additional exceptions will be finally reviewed at the CPS Committee meeting of November 10<sup>th</sup> 1999 and a revised Decision Notice, D2/99R, taking account of the revisions outlined herein will be published immediately thereafter.

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