

Review of Telecom Éireann Reference Interconnection Offer (RIO)

Position paper

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Introduction

On 15 June the Director of Telecommunications Regulation ("the Director") published a paper on the ODTR website on the framework for the liberalisation of the telecommunications market by December 1998¹. The Director welcomed the announcement by the Minister for Public Enterprise, Mrs. Mary O'Rourke T.D., that the Irish telecommunications market will be liberalised by 1 December 1998 and noted the need for her Office ("the ODTR") to move quickly to put in place the regulatory tools to facilitate this. The Director particularly emphasised the need for consultation and input from all relevant interested parties and the ODTR has issued a number of consultative documents in that context. One such consultative document was issued on the Telecom Éireann Reference Interconnection Offer ("RIO") in July 1998.

It is the Director's view that interconnect must be and should remain a commercial matter between operators. However, because the telecommunications market is unbalanced in the initial stages of liberalisation, there is a requirement for the involvement of an independent body to ensure that the dominant operator will not use its bargaining power to impose unfair terms and conditions on new entrants.

The RIO sets out the general terms for interconnection with the incumbent PTO, Telecom Éireann ("TE"). It is an essential document for a new entrant, and impacts on market entry and operational strategy in Ireland. It is therefore critical that the RIO contains the right terms and conditions, that will allow and not hinder the development of a robust telecommunications industry in Ireland.

The ODTR analysed the responses to the consultation and is now issuing a position paper which outlines the recommendations of this Office regarding the content of the RIO. Comments from the following operators/service providers were received and have been considered:.

- Telecom Éireann
- Eircell
- Esat Digifone
- Esat Telecom
- Cable & Wireless
- ITL
- WorldCom
- Stentor
- Valuetel
- Mercury Engineering Ltd
- PostGEM
- Ocean
- TNS
- Kilroys Solicitors for Telenor Ireland Ltd

This document is structured as follows:

¹ "Towards Liberalisation; An agenda for Ireland to achieve an effective competitive market in the provision of telecommunications services" - available on http//www.odtr.ie

- section 1 sets out the regulatory background on which this position paper is based;
- section 2 details the timetable applicable from the publication of the Director's position paper on the content of the RIO to publication and approval of the RIO;
- section 3 provides a summary of the position of the Director as regards the content of the RIO.

This document sets out the Director's current position and may be amended from time to time. This document is without prejudice to the legal position or the rights and duties of the Director to regulate the market generally.

This review does not in any way affect the rights and entitlements of organisations generally and specifically rights and entitlements to negotiate interconnection agreements pursuant to the Interconnection Regulations² and the Interconnection Directive³.

² European Communities (Interconnection in Telecommunications) Regulations, 1998, S.I. No. 15 of 1998.

³ Directive 97/33/EC of the European Parliament and of the Council of 30 June 1997 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (ONP)

Section 1: Background

Under the terms and conditions of the Interconnection Directive and the transposing Interconnection Regulations in Ireland, Telecom Éireann is obliged to publish a Reference Interconnection Offering. The RIO is defined in the Regulations as:

"an offer to provide an interconnection facility that includes a description of the interconnection offerings setting out the particular components according to market needs and all of the terms and conditions for interconnection to be satisfied by a person wishing to enter into an interconnection agreement."⁴

In January 1998, Telecom Éireann publicised the availability of a RIO which can be obtained directly from Telecom Éireann⁵.

On receipt of the RIO, the Director requested justification from Telecom Éireann of the charges set out therein. Telecom Éireann provided material in response to this request and the Director has now engaged consultants to examine this information and the detail of Telecom Éireann's underlying cost accounting system. This exercise will enable the Director to make a determination on the level and structure of the charges set out in the RIO in accordance with its powers and obligations under the Interconnection Directive and the Interconnection Regulations. The examination of Telecom Éireann's costs is expected to be completed during the autumn and the Director intends to make a determination on the rates before full liberalisation on 1 December 1998. The examination of the rates in the RIO is therefore outside the scope of the consultative paper and this position paper.

The consultative process was confined to examining the range and scope of the conditions set out in the RIO, having regard to:

- the requirements of the Interconnection Directive and the Interconnection Regulations,
- best practice elsewhere in Europe and Telecom Éireann's existing interconnection agreements with Eircell and Esat Digifone, and
- comments received from the industry, including Telecom Éireann, on the content of the RIO and the matters raised in the consultative paper.

⁴ Paragraph (17) of Regulation 8 of the European Communities (Interconnection in Telecommunications) Regulations, 1998, S.I. No. 15 of 1998.

⁵ Contact Carrier Services Section, Telecom Éireann, St Stephen's Green West, Dublin 2; (01) 671 4444

Section 2: Timetable

Consultation: The consultation period ran from 3 to 17 July 1998. Comments have been received from 14 operators and service providers.

Finalisation of the
Director'sThe Director has now reviewed the comments received from the
industry. This position paper sets out the amendments that the
Director requires Telecom Éireann make to the RIO.

The Director regards the definition of the interconnect regime as an on-going process that will evolve as market and industry structure change. This document does not, at this stage, deal exhaustively with specific terms and conditions of the RIO that may be needed over time. Approval of the RIO does not preclude the Director from directing further changes should this be regarded as necessary to meet market needs. The Director will review the impact of the RIO on the market and may decide to revisit this document. The first such review will occur within one year but the Director will consider representations for an earlier review.

Section 3: Scope and Range of services which should be included in the RIO

In this section, the Director sets out the range and scope of services which she considers must be included in the Telecom Éireann RIO. In setting out these services, the Director has regard, *inter alia*, to the definition of RIO which is contained in the Interconnection Regulations.

Legal framework

industry

Description: It is important for interconnecting operators to understand the general legal terms and conditions attached to the agreement. This ranges from the description of those organisations to which the RIO applies to the specification of limitation of liability. This certainty about the legal framework is necessary in particular for new entrants to plan and determine their approach to the provision of services and networks.

Position of the *Legal Framework*

All respondents accepted the overall view of the Director that a legal framework should be included in the RIO.

Network -v- Services Interconnection

The responses to the consultation paper raised a distinction between "network" interconnection which involves access to network elements, and "service level" interconnection whereby the interconnecting parties require the provision of full services. Two points of view were put forward:

- Some respondents were of the opinion that the RIO should deal with network interconnection **only** and the services and prices set out in the RIO should only be available to operators with interconnecting networks.
- Other respondents were of the view that full services should be made available to interconnecting parties rather than just the access to network elements.

List of Services for Inclusion

Differing opinions were put forward on the specific list of services to be included in the RIO. These views ranged from the position that all services listed as suggestions in the consultation document should be provided as part of interconnection, to the view that only services where there is a bottleneck in supply should be included in the RIO.

Director's Legal Framework

Position: The RIO should be extended to clearly specify the legal framework in which the Offering applies. The following non exhaustive list of conditions should be addressed in the RIO:

- Governing law
- Limitation of liability/force majeure;
- Duration of the agreement, breach, suspension and termination: it is proposed that no fixed duration of the agreement is specified in the RIO but that clauses for breach, suspension and termination are included.
- Right to review the agreement: there are a number of situations (that may or may not be dependent on the operators) that could require a review of the agreement, including when the agreement (or part of it) has ceased to be reasonable;
- A clause on severability should be included;

Network – *v* – *Services Interconnection* The Interconnection Regulations⁶ state:

"Subject to regulation 2(8), an organisation in any of the classes specified in paragraph (2)(a) which has been designated by the Director as having significant market power in accordance with regulation 5 shall, when requested by an organisation authorised to provide a public telecommunications service, have an obligation to negotiate an interconnection agreement with that organisation"⁷⁷, and

"Paragraph (8) shall not apply unless the organisation authorised to provide a public telecommunications service is providing a public telecommunications service at the time it seeks to enter into an interconnection agreement."⁸.

It is recognised that service level interconnection raises a wide range of issues which have not yet been fully explored. In order to progress the publication of the RIO as quickly as possible, the Director considers it appropriate to concentrate on network interconnection while specifying a limited set of full services which should be made available to interconnecting parties. The Director will consult further on the issue of service interconnection.

Services to be included

Having considered the comments of the various parties, the Director has concluded that the RIO should, in accordance with the statutory requirement, include those services which meet market needs. On this basis and having regard to the comments received, there have been some amendments to the list of services in this document.

⁶ the European Communities (Interconnection in Telecommunications) Regulations, 1998, SI No 15 of 1998

⁷ Paragraph (8) of Regulation 4.

⁸ Paragraph (9) of Regulation 4.

The Director will consider additional services for inclusion in the RIO on a case by case basis.

At this stage, the RIO should contain, at a minimum the following principal services⁹:

- basic telephony services,
- access to freefone and premium rate services, and
- leased circuits used for interconnect purposes.
- Ancillary services which may be availed of as part of an interconnection agreement but which need not form part of the agreement if they are not required by the interconnecting party;
- Provision of Calling Line Identification: The purposes for which CLI can be used by each party, e.g. routing calls or bill compilation must be clearly specified to ensure customer and data protection. CLI shall not be used for any other purpose than those stated in this section.
- Emergency services, should be included in the RIO and calls should not be billed to other operators. This service is a USO service and its funding will be dealt with accordingly. The Director intends to cost USO independently and will determine an appropriate and separate funding mechanism for USO services.
- International outgoing services, national transit, national and international operator assisted services and national and international DQ services. It should be noted that the Director is aware of some competition in these services but is of the opinion that they are appropriate for inclusion in the RIO at this time due to the early stage of liberalisation and the continuing strong position of TE in the market. The inclusion of these services will be kept under review.

Transfer charge calls: this is a service that is used by customers and requires co-operation between operators. It therefore should be part of the RIO.

Rates and Billing

Description:

To reflect efficiency gains, it is crucial that the RIO provides for the new entrants' right to request and obtain re-negotiation of the rates. The RIO should also provide for escalation procedures where one

party wishes to re-negotiate the charges and the other does not.

In accordance with European and Irish legislation, and having regard to best practices in Europe, interconnect rates should be costoriented, transparent, non-discriminatory and based on a price level closely linked to the long-run incremental cost (LRIC)¹⁰.

Position of the Respondents emphasised that both conveyance and equipment charges should be included in the RIO. The principle of cost-orientation should apply and rates should be regularly reviewed.

A number of respondents were concerned that if reviews were allowed on a bi-lateral basis, there may be a risk of discrimination between service providers/operators.

A number of respondents sought to ensure that provisions for regular review would not affect the determination procedures which might be used by the Director.

Some respondents commented on the level and structure of interconnect charges. It is not the purpose of this paper to address this matter which will be the subject of a separate determination by the Director following the completion of the current examination of Telecom Éireann's cost and cost accounting system in the autumn. Therefore, the Director will make no recommendation on this issue in this paper.

Director'sThe RIO should be amended to include top level clauses dealing
with:

- The review and re-negotiation of rates, including timing and duration of re-negotiation. An annual review should occur with provision for interim reviews should circumstances dictate. If Telecom Éireann and a second party agree on new rates, these should be made available to all operators at the same time and published no later than one week after the agreement has been reached.
- escalation procedures in the event of the timing of review not being agreed: typically, if discussions between representatives of both organisations fail, then the matter should be referred to a higher level within both organisations.
- procedures for referring any dispute to the ODTR in the event of failure to agree on rates, including timetable;
- procedures in the event of a dispute on bill accuracy;
- details may then be negotiated on a case by case basis between

operators.

Rates should be calculated on a LRIC basis.

Network Management and Planning

Description:	For new entrants to efficiently plan for interconnection with an incumbent operator, some indication of the network design and the planning and management of the network to network connection is necessary. Without this information, the new entrant is at a disadvantage with regard to the incumbent in negotiating terms and conditions.
Position of the industry	A number of respondents stated that a detailed description of TE's network should be included in the RIO and updated regularly. The plan should notably include information regarding the location of switches.
	An alternative view is that the detailed network information should be confidential between the two parties concerned.
	Differing positions were put forward on the introduction of penalties sanctioning repetitive inaccurate forecasts or missed deadlines. On the one hand there was support for such structures, while the opposing view was that penalties would impede interconnect agreements and that the fact that operators engage to act in good faith is a sufficient guarantee to ensure targets are adequately met.
Director's Position:	The RIO should explicitly address planning and operations procedures, including but not limited to:
	 routing principles for both national and international traffic;
	• procedures, including timetable, for capacity forecast and provision of capacity;
	• timetable for provisioning additional capacity;
	• procedures to ensure accurate forecasts and timely responses;
	• network design, alterations, safety and protection (including timetables).
	Detailed procedures for traffic measurement may be agreed bi-laterally. However a general description of the procedures, including a list of key measures that TE proposes to use, should be included in the RIO.
	A top level description of the network should be included in the RIO. The description should provide information on the location of the switches but not necessarily their capacity. More detailed information will be provided on a bi-lateral basis to an operator who has expressed its intention to negotiate an interconnect agreement with TE. This information should be subject to appropriate confidentiality clauses.
	The issue of penalties is covered in section on Quality of service and

dispute resolution below.

Network Interconnect

Description: When interconnecting two networks, the operators need to agree on the number and location of the Points of Interconnect (PoI) as well as who should supply the interconnect equipment. These are the fundamental building blocks of physical interconnection between two networks. Information on the available offering is of critical importance to new entrants.

Level of connection permitted

Interconnect charges are based on the extent to which the call originating from one network is carried over the other party's network. An incumbent operator could, in specifying the points in its network where other operators may interconnect, include only switches that are relatively high in the network switching hierarchy. As a result, new entrants would be obliged to use more of the incumbent's network (and incur charges for doing so). If interconnect occurs at the level of the national switch, the interconnecting operator would have to pay a national interconnect rate, if the connection occurs at the level of the local switch, a local rate only would be charged.

Co-location

Co-location becomes an issue when operators need to decide where to house interconnect equipment. Operators can reduce costs by sharing a single site where each will install and run telecommunications equipment and where they will connect their networks.

The right to co-locate gives the new entrants the choice to rent part of the interconnect equipment to the other operator or build its own infrastructure. The new entrant can enjoy the freedom of choosing the least costly solution. It also allows the new entrant to control and maintain the vital link between its network and the other operator's network.

Position of the *Level of connection permitted*

industry:

Second operators commented that access to all exchanges is necessary and all services should be accessible at those exchangesIf this is not possible for technical reasons, the provision of alternative TE has commented that solutions at same tariff is required. interconnection will be provided to a sufficient number of TE switches to allow interconnecting operators to deliver traffic to all customers connected to the TE network at the lowest possible interconnect rate.

Co-location

All parties agree that the benefits of co-location should be available. In particular, second operators wish to be able to choose between deploying their own infrastructure or leasing it from Telecom Éireann. One method of achieving this which was specifically commented on is by implementing "in-span" interconnection. Each operator would be able to choose to provide or lease the link to the box that would be located close to the interconnect node. The links will be used for delivery of the traffic in both directions and financial compensation would be agreed between the parties for use of each others' portion of the interconnect link.

Director's Level of connection permitted

Position: The RIO should explicitly state that operators are free to request PoIs at any Telecom Éireann primary, tandem and tertiary switch. When connection is not feasible for technical reasons, Telecom Éireann should guarantee that it would provide an alternative solution at the same price.

Co-location

The Director considers that the benefits of co-location should be made available to interconnecting parties. It appears from the consultation process that Virtual or In-Span co-location is a satisfactory solution for both the incumbent and alternative operators.

The availability of this service should be included in the RIO.

Quality of Service and Dispute Resolution

Description: Interconnect not only drives the prices that a new entrant can offer its subscribers but also the quality of service. Given the importance of quality to a new entrant, this must be carefully covered within an interconnect agreement.

The framework for this co-operation should typically be described in a detailed service level agreement as a sub-section of the overall interconnection agreement. Both parties should be bound by their contractual obligations and sanctions should form part of the agreement.

Position of the *Quality of Service and Dispute Resolution*

industry All parties agree on the importance of Quality of service and nondiscrimination between operators, including TE's own retail arm. There is similarly an acknowledgement of the importance of procedures and timetable for dispute resolution, including provision for referral to the ODTR. There are differing opinions on whether such issues should be included explicitly in the RIO or left to individual bi-lateral negotiations between the parties.

Penalties

There are opposing views on this matter. On the one hand many respondents favour the inclusion of specific penalty clauses in the RIO. On the other hand, it is argued that interconnection between operators is a matter of mutual importance and the requirement for both parties to have interoperability between networks should be a sufficient incentive to ensure effective interconnection. Therefore penalties are not necessary.

Director's Non discrimination

Position:

The RIO should include a clause which clearly expresses TE's commitment to provide the same service level to all interconnect traffic, including its own.;

Service Level Agreements / Penalties

The RIO should ultimately include a template Service Level Agreement or Operations and Maintenance Manual. It is considered appropriate that this matter be addressed by the relevant industry players, including TE and be included in the RIO on finalisation.

The Manual should set out all Quality of Service parameters, including compensations and/or sanctions, for example for late delivery or failure to repair in time. The Director suggests that agreement on the detailed clauses of the Manual should be reached before 30 November 1998. The Director will review progress at this point and will consider the need to impose a framework Manual. She will, during this review, take due account of the progress made and will assume that the level of progress achieved reflects the industry's need and desire for a framework Manual. Considering that interconnect is a reciprocal service, the Director trusts that a suitable agreement meeting the needs of all players will be reached. It is the Director's view that this document should be published with the RIO.

The Director understands that certain elements regarding quality of service may differ according to the nature of operators. The template shall be used as a generic framework on the basis of which a party may negotiate a bi-lateral arrangement with TE as part of their interconnect agreement. To ensure that these are non-discriminatory, the Director will ask to be given a copy of the Quality schedules agreed with TE. These will be available for inspection by all interested parties.

Dispute Resolution Procedures

A general framework and timetable for escalation should be included in the RIO. Ultimate referral to the Director should be provided for in the RIO.

Introduction of New Services

- **Description:** For new operators to compete with the incumbent operator, they must have rapid access to new services. Otherwise the incumbent operator will have a competitive advantage in lead-time to market which will cause an imbalance between the players.
- **Position of the industry:** Views on this issue range from the opinion that new services should be made available to all operators no later than TE launch date or, if requested by another operator, within a short defined timeframe, to the position that new services should only be mandatory where there is a bottleneck in accessing these services.
- **Director's** The RIO should be expanded to:

Position :

- Include provisions for operators to request that an interconnect agreement be extended to include new services
- Provide that if agreement is reached with one operator to extend its interconnection agreement to include a new service, this service be notified and made available on similar terms to other operators.
- Provide detailed procedures from request to provision of the new service, including timetable and escalation procedures if agreement cannot be reached.

Confidentiality and Publication of Information

Description: An interconnection agreement is a contract signed between two parties and involves the exchange of commercially sensitive information. Strict confidentiality rules should apply limiting publication of the information, and also the use of the information within interconnecting organisations for any purpose other than

effecting interconnect.

Industry position: All parties acknowledge the importance of this matter, with new entrants being particularly concerned that sensitive information given to TE during interconnection negotiations are kept confidential.

Director'sThe RIO should be expanded to include a clause covering
confidentiality. The clause should include, but need not be limited
to:

- prohibition to use confidential information to gain commercial advantage on the retail side;
- conditions for disclosure of confidential information to third parties;
- list of information to be kept confidential (such as certain network information or capacity forecasts) may be agreed on bi-lateral basis.

Annex 1 - Indicative list of services to be included in Telecom Éireann RIO

- 1. National Interconnection Links (up to 34Mbits or higher to be agreed)
- 2. Fixed termination rates¹¹
- **3.** Indirect access calls to the operator's system
- **4.** International outgoing calls to overseas systems including Northern Ireland via Telecom Éireann's system
- 5. National transit via Telecom Éireann's system
- 6. Access to Premium rate services
- 7. Access to Freefone service
- 8. Access to Special local call (LoCall) rate (01850) and national call rate
- 9. Reverse charge call via operator
- 10. Packet services access
- **11.** Paging services access
- **12.** National operator assistance service
- 13. International operator assistance service
- **14.** Directory enquiry service
- 15. International directory enquiry service
- 16. Emergency service