



Office of the Director of
**Telecommunications
Regulation**

Local Loop Unbundling – *eircom's* Access Reference Offer (ARO)

Decision Notice D8/01

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Oifig an Stiúirthóra Rialála Teileachumarsáide

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. Foreword

Local Loop Unbundling is an important service to enable the development of advanced telecommunications services in Ireland for businesses and residential users. The adoption of an EU Regulation in the space of a few months last year underlines the importance attached to the facilitation of this service in the Community market where Ireland seeks to play a leading role, given the key importance of telecoms to its economic development.

While there has been an LLU Reference Access Offer available from *eircom* since the due date of 31 December last, this was incomplete and non compliant in several respects. Two broad areas gave rise to concerns – pricing and range of services/supporting processes. No loop has yet been unbundled in Ireland.

Much work has been done in the intervening months on the range of services/processes, with the ODTR providing additional support and shaping a practical focus of the work on immediately needed arrangements in line with likely initial market requirements. There may be other issues to be dealt with in the future and this Decision Notice also contains a request for proposals on any other matters which interested parties wish to have considered.

These service and process issues are close to finalisation and the LLU Forum is focused on finalising and achieving formal sign-off of outstanding work items. I expect the process manuals to be fully complete by 4th May. My office will also undertake a review of Service Level Agreements with a view to determining appropriate timescales and compensation, if appropriate, for failure to meet these timescales, by 18th May.

On pricing, some progress has been made, but there are still very substantial gaps indicating non-compliance in the material provided by *eircom*, despite repeated requests and the clear direction of 30th April as the date by which these would be finalised. In the circumstances, I consider that I must act to determine pricing and my conclusions are set out in Section 6 of this Decision Notice.

Arrangements are now in place to support the implementation of Local Loop Unbundling. I appreciate the change in market conditions, but I believe that pilot projects currently being adopted provide a good basis to get started and will rapidly prove their value in encouraging the extension of broadband in Ireland.

Etain Doyle
Director of Telecommunications Regulation

• Introduction

The “local loop” is the copper pair connecting an individual telephone subscriber to the nearest point of interconnection with the main telephone network at the local exchange. This “last mile” of network is accepted to be the most difficult for new entrants to replicate. “Local Loop Unbundling” implies that the network owner is required to provide access to this copper pair, so that new entrants can offer their services across the local loop. This allows new entrants to provide a full range of services directly to the customer. In particular, new entrants can offer the new range of broadband services (such as high-speed Internet access) even if the incumbent operator has not chosen to offer such services. As a result, Local Loop Unbundling has the potential to increase significantly the range of competitive services available to businesses and consumers.

At the Lisbon summit of March 2000, it was agreed that Local Loop Unbundling was required as a matter of urgency in order for Europe to reap the full benefits of the Internet and electronic commerce. In under nine months, the European Parliament and Council had adopted Regulation 2887/2000 on unbundled access to the local loop, the “LLU Regulation.” The speed of this reaction underlines the importance of Local Loop Unbundling at EU level: the same policy reasons also mean that Local Loop Unbundling must not be delayed in Ireland.

Amongst other provisions set out in Section 3 of this paper, the LLU Regulation required *eircom* to publish a Reference Offer on unbundled access to the local loop and related facilities by 31st December 2000. This was done, but it was not complete or fully compliant. Requirements and progress are outlined in

- ODTR 00/99 of 22nd December 2000¹ – Information Notice on work to that date and initial commentary on the draft Reference Access Offer.
- ODTR 01/01 of 31st January 2001² – Information Notice outlining changes to be made to the ARO and the work programme to complete tasks by end February.
- ODTR 01/15 of 9th March 2001³ – Information Notice outlining progress and seeking a more focused approach to remaining items – new timetables to finish by end April
- ODTR 01/21 of 2nd April 2001⁴ – Decision Notice D5/01 – directing changes to the ARO on supply of information and detailing timetables to finish work by end April.

¹ ODTR 00/99 ‘Implementation of Local Loop Unbundling in Ireland – 1st January 2001’

² ODTR document 01/01 ‘Implementation of Local Loop Unbundling in Ireland – *eircom* Reference Access Offer’

³ ODTR document 01/15 ‘Implementation of Local Loop Unbundling in Ireland – Status Report’

⁴ ODTR document 01/21 ‘D5/01 Provision of Information – Local Loop Unbundling’

In this document, the Director sets out the results of the steps announced in Information Notice 01/15 and makes directions, exercising her powers under Article 4 of the LLU Regulation, to *eircom*. The ODTR is intervening so as to ensure that there is an adequate Access Reference Offer (ARO)⁵ to support unbundling as required under the Regulation.

This intervention includes:

- Pricing - The Director considers that the level of response and co-operation from *eircom* is not acceptable. However in order to ensure that consumers are in a position to derive the benefits that LLU can bring the Director sets out prices in Section 6 of this document.
- Process Development - The process manuals to support the ARO have been agreed by *eircom* and the industry as sufficient to support the commencement of Local Loop Unbundling and *eircom* is directed to publish these as part of their ARO by 10th May, following agreement at industry scheduled for 4th May.
- Service Level Agreements - *eircom* are directed to insert their proposals for SLAs in the ARO. However, the Director will be conducting analysis of these proposals and access seekers requirements, together with benchmarking. The Director will determine on appropriate SLAs, including compensation for failure to meet these timescales if appropriate, by 18th May.
- Further directions requiring textual and other amendments to the ARO are set out in Section 5.
- The Director also sets out a process for submission of any further issues which interested parties consider require her intervention in Section 7.

The Director considers that these directions are necessary to rectify a situation where the ARO has not met the obligations required by regulation on 31 December last and not a single loop has yet been unbundled in Ireland. We can then move to a situation where Local Loop Unbundling can develop as envisaged by the European Community in adopting the Regulation.

In addition to the measures set out in this paper, the Director welcomes the fast track project submitted to *eircom* by an access seeker on 23rd April 2001. She expects *eircom* to respond constructively and with speed to this fast track proposal, and will be closely monitoring its compliance with the Regulation. *eircom* is reminded that it must deal with reasonable requests, whether currently forming part of an ARO or not.

• The Legal Framework

Regulation 2887/2000 of the European Parliament and of the Council on unbundled access to the local loop ('the LLU Regulation') was published in OJL 336 of 30th December 2000.

eircom, as the operator designated by the Director as having significant market power in the provision of fixed public telephone networks and services under Annex 1, Part I, of Directive 97/33/EC, is a notified operator within the meaning giving to that term in Article 2(a) of the LLU Regulation.

⁵ Reference to the ARO in this document is taken to mean the latest version of *eircom*'s Reference Access Offer (ARO) on their website www.eircom.ie, currently Version 1.2

A “beneficiary” is defined in Article 2(b) of the LLU Regulation as a third party duly authorised in accordance with Directive 97/13 EC or entitled to provide communications services under national legislation, and which is eligible for unbundled access to a local loop.

Article 3(1) of the LLU Regulation requires *eircom* (as the notified operator) to publish from 31st December 2000, and keep updated, a reference offer for unbundled access to their local loops and related facilities. Charges are to be set on the basis of cost orientation. The Annex to the LLU Regulation includes a minimum list of items to be included in such a reference offer, under the following headings: conditions for unbundled access to the local loop, collocation services, information systems, and supply conditions.

Additionally, Article 3(2) of the LLU Regulation requires *eircom*, from 31st December 2000, to meet reasonable requests from beneficiaries for unbundled access to their local loops and related facilities under transparent, fair and non discriminatory conditions. Requests may only be refused on the basis of objective criteria, relating to technical feasibility or the need to maintain network integrity.

The LLU Regulation also obliges the National Regulatory Authority (NRA), under Article 4 (1), to ensure that charging for unbundled access to the local loop fosters fair and sustainable competition. In the case of Ireland, the ODTR is the NRA. Furthermore, Article 4 (2) (a) provides that the NRA shall have the power to impose changes on the Reference Offer, including prices, where such changes are justified; and under Article 4 (2) (b) require notified operators to supply information relevant for the implementation of the Regulation. Under Article 4 (3) the NRA may intervene on its own initiative in order to ensure non-discrimination, fair competition, economic efficiency and maximum benefit for users.

As a result, the scheme of the Regulation is that the duty to provide a Reference Offer rests with *eircom*. Although the ODTR can intervene to require changes to that offer, this power of intervention does not relieve *eircom* of its duty to publish a compliant Reference Offer and to keep that Reference Offer updated.

• **Developments since 31st December 2000**

• **Previous ODTR publications on *eircom*'s ARO**

The ODTR asked *eircom* in September 2000 to provide a draft Reference Offer for unbundled access to the local loop and related facilities. *eircom* did not submit a text until 8th December 2000. That text was not a complete offer: more information was provided on 15th December 2000 and some only on 22nd December. The Director, in Information Notice 00/99 issued on 22 December 2000, set out that the *eircom* Reference Access Offer provided to her in draft form, had been provided too late to allow proper scrutiny. She noted that prices seemed high in relation to indicative results of ODTR cost analysis and international benchmarking. She also set out three initial areas of concern to her

which were resolved as indicated in Information Notice 01/01, following submissions from the LLU working group members. These allowed for a wider definition of space available for collocation than that proposed by *eircom*, for sharing of collocation space, and removal of certain restrictions in respect of equipment that can be collocated.

In March 2001, the Director issued Information Notice 01/15 setting out key areas required for resolution before an initial framework for Local Loop Unbundling could be operational, without prejudice to *eircom*'s obligations under the LLU Regulation to meet requests. She also announced an examination of the area of information provision on her own initiative, and requested a focus on the key items needed to start unbundling. The issue of information provision and other matters were completed by Decision Notice 05/01 in April 2001, which issued directions to *eircom* imposing changes on the ARO. It also set a detailed timetable for the completion of work on services/process, and on parallel work on pricing. Both the above documents made it clear that the deadline for a complete ARO was the end of April.

• **Focus of work programme**

Activity over the last months has concentrated on resolving the following to support initial implementation:

- Provision of Information -the process on information supply set out by *eircom* had not proved effective. The Director intervened and in Decision Notice D05/01 directed *eircom* to provide additional information, support additional processes to make a distinction between provision of generic and specific information, and remove certain linkages
- Process Development -the ODTR has engaged specialist consultancy support to work with the industry to develop new process documentation to support, for example ordering, maintenance for collocation, ULMP⁶ and line sharing products. *eircom* and the industry have, on 27th April 2001, agreed detailed processes to support the commencement of Local Loop Unbundling. The Director wishes to thank the industry working groups for their commitment to this work.
- Other issues
 - Fast-tracking: The Director asked for fast track proposals in Information Notice 15/01. A pilot project was received from one access seeker on 23rd April and submitted to *eircom*.
 - Bitstream LLU: The Director was disappointed to note that bitstream unbundling was delayed beyond April as originally mandated by D6/00⁷ which was based on the non-discrimination principle, that *eircom* may not offer services through its downstream arm that are not also available to its competitors. However, she respects *eircom*'s entitlement to review its business plans and equipment purchase. She is pleased to note that *eircom* has now decided on an alternative approach and work on the implementation of bitstream LLU has recommenced. She reminds *eircom* of their non-discrimination obligations.

⁶ ULMP: Unbundled Local Metallic Path

⁷ ODTR document 00/30 'D6/00: Report on the Consultation on Local Loop Unbundling'

- **Pricing**

Information Notice 00/99 noted that the prices proposed by *eircom* seemed high in relation to preliminary results of ODTR cost analysis and international benchmarking. Over the past nine months, information has been sought from *eircom* to complete the ODTR assessment. A full account of this is set out in Section 6. Most recently, Decision Notice D5/01 directed *eircom* to work in parallel with the industry expert process working group and factor in developments in processes which may affect costing elements in draft ULMP, line sharing and collocation process manuals, in their latest submission due 20th April 2001. *eircom* failed to comply with this direction, and so the Director sets out in Section 6, her direction on prices.

- **LLU working groups**

LLU working groups have been meeting since May 2000, initially under the auspices of the mechanisms established under D6/00, tasked with agreeing arrangements for implementation of bitstream LLU. Once the LLU Regulation became known their scope was broadened and the Director wishes to thank the Chairman and the members of the fora for their efforts. The Director now tasks these groups with rapid finalisation of remaining items as set out in Section 7. The groups will be disbanded, to be replaced by an LLU Review Forum which will meet quarterly as required.

- **Submissions from access seekers**

In making directions in this document, the Director has also taken into account documented submissions from access seekers dated 13th February 2001, and 2nd March 2001 (commenting on versions 1.1 and 1.2 of *eircom*'s Reference Access Offer respectively) and the fast track proposal of 23rd April 2001 insofar as these relate to the ARO. Going forward, the Director welcomes from interested parties any further proposals for development which may need her intervention and Section 7 sets out details on how to make a submission.

- **Code of Practice**

eircom and access seekers have indicated some interest in agreeing a Code of Practice for Local Loop Unbundling. The Director notes that *eircom* is subject to a Code of Practice governing selling practices as a condition of its licence. Should the industry wish to agree a Code of Practice specific to interoperator Local Loop Unbundling issues, the Director considers development of this to be a matter for the industry.

- **Changes to ARO text**

The Director considers that *eircom*'s proposals currently fall short of meeting the LLU regulation in the areas outlined below. This is without prejudice to her entitlement to intervene on such or other matters in the future as necessary.

- **Change Control**

The LLU Regulation requires *eircom* not only to publish but to keep updated a Reference Offer for unbundled access to the local loop and related facilities.

eircom have issued version 1.1 and 1.2 (on 7th February 2001) since publication of version 1.0. However access seekers have made the point that they are not informed when an updated version is available, but also that changes are not made apparent in the new version. The Director is of the view that immediately at publication of an updated Reference Access Offer, *eircom* should notify the ODTR and at a minimum, any beneficiaries who have registered for generic information of the existence of an updated version of the ARO.

Decision 5.1.1

Pursuant to Article 4 (2) (a) and (b) of the LLU Regulation, the Director directs that, immediately at publication of an updated Reference Access Offer, *eircom* should notify the ODTR and at a minimum, any beneficiaries who have registered for generic information of the existence of an updated version of the ARO.

In addition, the Director believes that any updated Reference Access Offer should contain a change control process, including but not limited to, the new version number, date of publication, together with a table indicating changed sections, including prices, for reference.

Decision 5.1.2

Pursuant to Article 4 (2) (a) of the LLU Regulation, the Director directs that any updated Reference Access Offer should contain a change control process, including but not limited to, the new version number, date of publication, together with a table indicating changed sections, including prices, for reference

• Process Development

The Director notes that the ARO makes reference to an O&M manual. However this has not been provided by *eircom*.

The industry working groups have agreed two process manuals for implementation of Local Loop Unbundling: one for ULMP and Line Sharing and one for collocation. The Director is aware of some minor issues which the industry is scheduled to complete by 4th May 2001. The Director believes that the process manuals agreed by industry should replace the O&M manual referred to in the ARO. The Director requires that the process manuals are published together with the ARO on *eircom*'s website within 3 working days from completion of the process work, i.e. by 10th May 2001.

These should also be referenced in the appropriate Service Management sections of the product descriptions appended to the Service Schedules in Annex C. These are Section 5 of Service Schedule 101 product description, Section 6 of Service Schedule 102 product description and Section 6 of Service Schedule 103 product description.

Decision 5.2.1

Pursuant to Article 4(2) (a) of the LLU Regulation, the Director directs that, within 3 working days of completion of process work i.e. by 10th May 2001, the process manuals agreed by industry should:

- replace the O&M manual referred to in the ARO

- be published together with the ARO on *eircom*'s website
- be referenced in the appropriate Service Management sections of the product descriptions appended to the Service Schedules in Annex C. These are Section 5 of Service Schedule 101 product description, Section 6 of Service Schedule 102 product description and Section 6 of Service Schedule 103 product description

The Director further directs that the industry agreed process manuals and their references in the Service Management piece of Service Schedules are to be subject to the same change control procedures set out at Decision 5.1.1 and Decision 5.1.2

Decision 5.2.2

Pursuant to Article 4 (2) (a) of the LLU Regulation, the Director directs that the industry agreed process manuals and their references in the Service Management piece of Service Schedules are to be subject to the same change control procedures set out at Decision 5.1.1 and Decision 5.1.2

• **Other products and services**

The Director welcomes the preamble inserted by *eircom* into the ARO stating that 'this Access Reference Offer does not purport to be exhaustive of all services *eircom* will provide and does not in any way diminish the rights of beneficiaries to seek additional services or the obligation on *eircom* to provide additional services under applicable law', and the Director stresses that *eircom* must meet all reasonable requests for unbundled loops and related facilities.

A request may only be refused on the basis of the criteria set out in the LLU Regulation which are network integrity and technical feasibility. Therefore should a request be outside the ARO's Service Schedules 101, 102, 103, this is not by itself a reason for refusal. Nor is there a need for access seekers to demonstrate any firm business plans to *eircom*.

Additionally, it is not a prerequisite to progression of a request that a service schedule covering the request form part of any Reference Access Offer. For example, the Director notes that, under the fast track process, a request for a 'cabin' option, which is essentially a request for space plus a subset of facilities laid out in Service Schedule 101, has been made. Insofar as any part of this or other requests fall within the definition of 'unbundled loops and related facilities' *eircom* is required to deal with all reasonable requests. As services are supplied which it appears likely will be requested in future, it is appropriate that *eircom* should include these in the Reference Access Offer. It must under the Regulation be willing to meet all reasonable requests and may not discriminate between access seekers in respect of any service.

The Director also notes the current products for ULMP and Line Sharing as set out in the ARO exclude lines on which Carrier Pre Select and/or wholesale bitstream are existent. Any such requests cannot be refused on the grounds that they are outside the Service Schedules 101, 102 and 103 in the ARO nor delayed on the grounds that it needs to be in the ARO or subject to development by the working groups.

• Linkages between products

The ARO currently links provision of services, for example a ULMP or Line Sharing service is only made available in conjunction with collocation. Whilst this may be required in order to deliver service, it is not reasonable to tie provision of a loop (whether conforming to the current product descriptions for ULMP, Line Sharing, or not) with provision of any form of collocation (whether or not within the scope of Service Schedule 101). Given that access seekers can request differing forms of products and services than those set out in the ARO and the fact that there is no requirement for that linkage under the LLU regulation, these links are inappropriate.

The Director is of the view that the mandatory linkage between products as set out in Clause 3.1.1. of Service Schedule 101, Clause 3.1.4 of Service Schedule 102 and Clause 3.15 of Service Schedule 103 shall be removed.

Decision 5.4.1

Pursuant to Article 4 (2) (a) of the LLU Regulation, the Director directs that the mandatory linkage between products as set out in Clause 3.1.1. of Service Schedule 101, Clause 3.1.4 of Service Schedule 102 and Clause 3.15 of Service Schedule 103 shall be

• Service Level Agreements

eircom has not put forward a complete Service Level Agreement at this time – that is timescales for attributes (order acknowledgement etc.) up to and including the delivery process itself and penalties that may be payable to OLOs in the event of non compliance with these – at Annex E in the ARO.

In the first instance, the Director, by 3rd May 2001, requires *eircom* to include interim Service Level Agreements in the Reference Access Offer which are based on the *eircom* standard timescales. These have been set out by *eircom* in the industry process working groups and documented in documents ODT/775/8/2.0 and ODT/775/9/1.

Decision 5.5.1

Pursuant to Article 4 (2) (a) of the LLU Regulation, the Director directs *eircom* to include interim Service Level Agreements in the Reference Access Offer, by 3rd May 2001, which are based on the *eircom* standard timescales

However the Director considers that these timescales may require to be amended. Views of both parties have been documented in the industry working groups, and the Director will undertake a review of such timescales, including a benchmarking exercise, over the next two weeks with a view to issuing a final determination on Service Level Agreements, including where appropriate compensation for failure to meet specified timescales set out therein, by 18th May 2001 .

- **Technical Manual**

Subject to agreement by the industry and any required determination by the Director, the Technical Manual is scheduled for finalisation by May 11th. This should be included in the Reference Access Offer within three working days from finalisation.

- **Spectrum Management Plan**

Subject to agreement by the industry and any required determination by the Director, the Spectrum Management Plan is scheduled for finalisation by May 18th. This should be included in the Reference Access Offer within three working days from finalisation.

- **Requirements of the Annex to the LLU Regulation**

Access seekers have raised a number of detailed concerns with regard to the minimum list of items to be included in a Reference Offer as set out in the Annex to the LLU Regulation which they believe are not covered or are not fully covered by the ARO as it stands.

This list includes, *inter alia*, information containing locations of physical access sites and information on the notified operator's relevant (collocation) sites, ordering and provisioning procedures, equipment characteristics: restrictions if any on equipment which can be collocated, security issues, access conditions, safety standards, rules for the allocation of space where space is limited, inspections conditions, information systems, supply conditions including lead times, Service Level Agreements and fault reporting.

The Director considers that rather than direct changes to the ARO in each of the above categories, the agreed process manuals which will form part of the revised Reference Access Offer as directed in 5.3, will assuage most of the access seekers concerns. She is of the view that any remaining concerns will be dealt with by finalisation of Service Level Agreements, the Technical Manual, and the Spectrum Management plan. Steps to complete these items for inclusion in a Reference Access Offer are set out in Sections 5.5, 5.6, and 5.7.

Should access seekers have any further concerns with the ARO which are not alleviated by completion of these deliverables, they are invited to submit these to the Director for determination or direction through the process set out in Section 7.

- **Changes to ARO prices**

- **Work prior to 31st December 2000**

The ODTR has been engaged, since August 2000, with *eircom* in order to form a detailed understanding of the costs of *eircom*'s access network with a series of bilateral weekly meetings and data requests. Throughout this process the ODTR has experienced significant delays in obtaining sufficiently detailed information from *eircom*. On 22nd September 2000, the ODTR signalled its requirement for *eircom* to provide a Reference Offer for unbundled access to local loops and related facilities. This was followed up with further requests and a template of requirements, but ODTR did not receive pricing for full physical unbundling, together with other parts of the draft Reference Offer until 8th December. Pricing

for collocation and all *eircom*'s cost justifications were delivered on 15th-18th December, albeit omitting much of the detail specified in the ODTR template.

As stated in Information Notice 99/00, many elements of the *eircom* pricing seem high in comparison to preliminary results of ODTR cost analysis and international comparisons. The same Notice also stated that it would be inappropriate for any inefficiencies within *eircom* to be passed on to the industry as a whole by way of regulated prices.

• **Further Work since 1st January 2001**

Under Article 3(1) of the LLU Regulation, *eircom* has a legal obligation to provide a reference offer by 31 December 2000. Although the ODTR has been in discussions with *eircom* and other interested parties since September 2000, much of the relevant costing information requested from *eircom* has not been delivered, hence proper pricing has not yet been set four months after the legal deadline for a Reference Offer.

The Director cannot accept the approach being taken by *eircom* in relation to finalising a Reference Access Offer for Local Loop Unbundling.

eircom had submitted pricing on the basis of a "bottom up" LRIC network model combined with historic operating costs, and the ODTR has been engaged with *eircom* in understanding of their model with detailed discussions having taken place during January and February. As is normal in the adoption of a very new approach in complex accounting, there are some uncertainties inherent in the model.

As indicated in the initial consultation paper 99/21⁸, Decision Notice D6/00 and subsequently, the Director has indicated that there may be merit in adopting a 'glide path approach to access pricing, with prices initially set on an historic basis and moving over time to LRIC. Therefore the ODTR has been engaged with *eircom* in order to fully understand *eircom*'s Access network historic costs since August 2000 in addition to the (LRIC) cost data supplied. In addition *eircom* was required to provide a full Historical Cost Accounting based Reference Access Offer for 16th March 2001. This deadline was extended at *eircom*'s request to 20 April 2001.

The Director had indicated that it is appropriate to set the line rental initially on a HCA basis. However, for some non line rental costs and new services such as collocation she stated that as there is no historic information to draw on, the use of a current cost basis may be appropriate.

Although *eircom* itself put forward the date of 20th April, it did not meet this requirement. On 20th April 2001 *eircom* only provided a HCA based line rental submission. They did not re-submit the other costs for ULMP, Line Sharing or any costs for Collocation. Any costs submitted did not take account of the latest process drafts which they had been repeatedly directed to include. *eircom* also stated that during preparation of the HCA line rental submission they could not divert resources to dealing with ODTR ongoing data requests for relevant LLU costing information.

⁸ ODTR document 99/21 'Consultation Paper – Local Loop Unbundling'

The Director considers that this level of response and co-operation from *eircom* is not acceptable. The offer should have been ready by 31st December 2000 – now, four months later, *eircom*'s offer continues not to be compliant with directions/determinations of the Director.

The Director does not accept the submission of 20th April which is clearly non-compliant with previous ODTR decisions and directions. Specifically *eircom*'s submission:

- Does not provide a fully priced Reference Access Offer as required by the deadline of 20th April. A summary of these directions to do so follows:
On 2nd March *eircom* was required to provide a HCA based Reference Offer for ULMP and Line Sharing for 16th March. This was extended at *eircom*'s request to 20th April. On 30th March *eircom* was again requested to provide HCA based Reference Offer for ULMP and Line Sharing, clearly pointing out that *eircom* was required to factor in the latest draft processes when providing costs, a point made in earlier bilateral meetings with *eircom*. This was reiterated in D5/01 on 2nd April 2001. On 6th April 2001, given progress in working groups, *eircom* was requested to provide a Reference Offer for collocation by 20th April 2001. This was reiterated by direction on 12th April 2001
- The submissions have also ignored previous decisions/directions from the Director in relation to cost of capital, asset lives and exceptional costs⁹
- Includes elements which are not necessary for unbundled access contrary to Article 3(1) of the LLU Regulation.

• **Determination on Pricing**

However in order to ensure that consumers are in a position to derive the benefits that LLU can bring, the Director is directing changes to prices to the *eircom*'s Reference Access Offer in accordance with her powers under Articles 4(1) to 4(3) of the LLU regulation.

As *eircom* has failed to supply very significant elements of the relevant information, the Director has set prices based on information available to her as detailed below. The prices are set on an interim basis, and in approving final prices, the Director will review them in the light of an appropriate and adequately cost justified submission by *eircom*. The Director considers this is a measured and proportionate action, considering the length of time which has passed since the legal deadline of 31st December 2000 and the prospect of further delay had she not intervened. These interim prices will apply from 1st January 2001.

⁹ ODTR document 01/24 '*eircom*'s Reference Interconnection Offer and Accounting Separation and Publication of Financial Information for Telecommunications Operators: Report on the Consultation and Decision Notice D7/01'

Pricing Principles

In D6/00, the Director, while stating that LRIC should form the core of the pricing formula for LLU, recognised that the application of LRIC is new to the Irish market and it will take time to apply LRIC to access network costs, as it has to core network costs. The Director therefore indicated that she might employ other relevant information, including historic cost data, for a period of time.

This approach is still relevant in the new regulatory environment created by the LLU Regulation. Under Article 3(3) of the Regulation, *eircom* is required to set prices on a cost oriented basis and under Article 4(1), the ODTR is tasked with ensuring that prices foster fair and sustainable competition. Other important principles set down in Article 4(3) to guide the determinations of NRAs are non-discrimination, fair competition, economic efficiency and maximum benefit for users.

The Director is not persuaded that moving immediately to a reliance on LRIC costing of the access network is appropriate at this early stage in the development of unbundling. A number of other EU countries have decided to employ historic cost models for initial pricing of unbundled access and move to a LRIC basis over time. The Director considers that this approach has merit, and also provides time for LRIC methods to be fully developed and tested in a local access context before they are used as the sole costing basis. It parallels the development of interconnect pricing in recent years. She also feels that the approach is consistent with developing fair competition, augmenting economic efficiency and providing maximum benefits for users. She notes the views of the European Commission in its guidance notes contained in the Recommendation on unbundled access to the local loop dated 26th April 2000 (OJL 156 of 29.6.2000) to which NRAs are referred in recital 13 of the LLU Regulation.

The Director notes that prices are set on a geographically averaged basis. She believes this is of great importance to users across the country and it is consistent with D6/00 on this subject.

Principles of Costing

In costing processes and activities required to provide the listed services the ODTR has necessarily had to make a number of assumptions. Three of these assumptions may have an effect on costs:

- Timescales for processing and completion of work;
- Quantity of orders;
- Progress reporting and IT systems requirements;

In line with commercial practice of keeping costs to a minimum the timescales for completion of the necessary tasks have been chosen on the basis that *eircom* staff carry out more than one task per MDF visit. This is extremely important since otherwise the time taken in travelling for individual task completion overwhelms the underlying cost of the task itself. The underlying timescales are those which *eircom* employs for its own operations and the provision of its own services. It is expected that, as *eircom's* internal processes improve, these timescales will become significantly reduced.

The quantity of orders expected for each of these services is presently unknown. Early indications are that the services will have a slow initial take-up but that they will increase significantly over time. As a result of the low initial rate of orders an essentially manual system has been costed with the assumption that minimal changes will be required to *eircom's* major IT systems to accommodate this. Initial work on the changes required to *eircom's* systems to permit a more automated system suggest that such an approach is not economically justifiable unless order volumes rise dramatically (to an order of thousands per month).

The manual system costed is based on the interchange of standardised forms by e-mail. The process is assumed to be 'account managed' by *eircom* and compilation of data for progress reporting in the main paper based. In addition fault reporting processes are essentially to *eircom's* existing standards to prevent the cost of a dedicated call centre and associated IT systems being required for an expected low number of fault reports (reflecting the initial slow take up of service). It is expected that alternative systems will be developed as and when required by the volume of business and that the costs (and savings) of these systems will be reflected in prices in due course.

The pricing is based on two methodologies:

- Benchmarking of prices from other European operators, (as was indicated might be appropriate in D6/00);
- Review and analysis of efficient operator costs on the basis of the processes currently agreed, data from *eircom* and, where necessary, expert opinion.

Benchmarking has been used to determine a price for line rental and the associated connection fee for unbundled local metallic paths. The two elements have been approached as a pair as there is potential for different cost boundaries to have been applied in individual countries that would lead to an inappropriate benchmarked price if each element were treated in isolation. Benchmarks have been used principally because of the difficulty of assessing an appropriate price for line rental, at this time, on the basis of the current information available from *eircom*. The ODTR's own analysis is supportive of the levels of these benchmarked prices.

The line rental cost for the line sharing product is set at 50% of that for the unbundled local metallic path. The economic argument for this approach is set out in Appendix 1. In the same way the connection fee for the line sharing product is based on that for the unbundled local metallic path but with additional amounts allowed for the provision of the network terminating unit by *eircom* and the increased jumpering work required.

Other prices have been calculated using information supplied by *eircom* modified with reference to the current processes and timescales. If the processes or timescales are changed in the future any changes in underlying costs will be reflected in the finalised prices for each service, where material and justified.

Where the collocation is effected externally to *eircom's* buildings (for example the 'cabin' option) it is assumed that standard services including the provision of standard AC mains power, water and sewerage services (as applicable) will be provided by the appropriate authority direct to the OLO. If an OLO chooses to

obtain such services from *eircom* instead then *eircom* will provide them at cost (including installation costs as incurred) plus an administration/management fee of 15%.

Benchmarking

Figure 1: ODTR benchmarking of one-off and monthly rental fees (€)¹⁰

Country	One Off Fee	Monthly Rental
Denmark	47.00	8.23
Italy	54.50	11.63
Austria	92.59	12.48
Germany	103.90	12.90
Spain	127.70	12.55
The Netherlands	134.00	12.50
Sweden	107.90	14.50
UK	170.00	15.00
France	138.00	16.00
Belgium	221.69	19.51
<i>Simple Average (euros)</i>	<i>119.73</i>	<i>13.53</i>

Decision 6.3.1

Pursuant to Article 4 (2) (a) of the LLU Regulation, the Director directs *eircom* to charge, as interim prices, the following price listings for ULMP (Figure 2); Line Sharing (Figure 3) and Collocation (Figure 4) set out below.

Price Listing - ULMP

Figure 2: Interim price list for ULMP charges

Charge	IR£	€
Line Rental	10.66	13.53
Connection Order with successful completion	94.29	119.73
Connection Order failing validation	39.90	50.66
Disconnection Charge	0.00	0.00
Line Testing	21.55	27.36
Fault Clearance	46.95	59.61

Price Listing - Line Sharing

Price Listing - Line Sharing

Figure 3: Interim price list for Line Sharing charges

Charge	IR£	€
Line Rental	5.33 ¹¹	6.77
Connection Order with successful completion ¹²	145.50	184.75

¹⁰ This analysis includes all Member States where a Reference Offer has been finalised, with the exception of Finland which employs geographically deaveraged rates.

¹¹ i.e. 50% of ULMP charge – see Appendix I

¹² In the original Decision Notice the price for “Connection Order with successful completion” was given as IR£140.42 and €178.93. This was an error during the preparation of the Decision Notice that has recently come

Connection Order failing validation	39.90	50.66
Disconnection Charge	40.70	51.68
Line Testing	21.55	27.36
Fault Clearance	46.95	59.61

Price Listing - Collocation charges

The prices for the Physical Collocation Service shall be as set out in *eircom's* ARO with the following exceptions:

Figure 4: Interim price list for Collocation charges

Pre-Ordering Charges	
Site Specific Survey Request	IR£50.88 (€64.60) per site
Combined Full Survey and Collocation Site Offer Request	The sum of the appropriate Full Survey charge and Site Offer Charge
Site Preparation	
Installation Services	Installation services shall be provided at cost and detailed in the site offer. <i>eircom</i> will provide tendered contract prices to OLOs on request.
Process Charges	15% of Installation Services charge
Occupancy Charges	
Occupancy Charges	The occupancy charge shall be based on the market rental for functionally similar land or buildings (as applicable) in the locality.
External service provision charge	IR£/€ cost
Process charge	15% of occupancy charges and 15% of external service provision charges e.g. standard AC power, water.
Usage/Attendance Service	
Escorted Visit	Office hours: IR£74.18 (€94.19) (1st hour) IR£44.00 (€55.87) (subsequent hours) Outside hours: IR£108.18 (€137.36) (1st hour) IR£64.00 (€81.26) (subsequent hours)

. Final Steps

This Decision Notice provides the remaining elements to support the introduction of local loop unbundling in Ireland.

The Director will complete benchmarking work on Service Level Agreements and will issue a determination on SLAs, including compensation for failure to meet lead times if appropriate, by 18th May 2001

to the Directors attention.

It is the Director's intention to focus the LLU Forum on a small number of tasks that remain to be completed. These items remaining to be finalised, either by agreement or by determination of the Director, are:

- the Technical Manual – to be completed by 11th May
- the Spectrum Management Plan – to be completed by 18th May
- Process Manuals – to be completed by 4th May

Following completion of these items, the Director intends to bring the LLU working groups, in their current format, to a close and will establish an LLU Review Forum that meets every quarter, as required

Should any interested parties wish to put forward issues on Local Loop Unbundling that require further intervention by the Director please forward them to

Louise Power

Office of the Director of Telecommunications Regulation

Abbey Court

Irish Life Centre

Dublin 1

email: powerl@odtr.ie

Facsimile: + 353 1 8049680

by 5pm on 29th June 2001. The Director will then consider what action is appropriate to resolve these matters.

In any event, the Director will consider a review of Local Loop Unbundling arrangements in the light of experience in the first couple of months.

The Director has set prices based on information available to her as detailed in this document. These prices are interim prices which will apply until further notice. It is *eircom's* responsibility to address the deficiencies noted in Section 6.2 and to make a comprehensive resubmission to the ODTR incorporating finalised agreed service level agreements, process manuals and in conformity with all relevant decision notices. Where such a resubmission is received the ODTR will review the matter and direct changes to the ARO where appropriate.

This is without prejudice to the rights and duties of the Director to regulate the market and to deal with any urgent matters, or to ask parties to deal with issues on a commercial basis as appropriate.

. **Appendix I: Attribution of Local Loop Costs**

Introduction

With the introduction of local loop unbundling, the situation will frequently arise where two different operators share the copper pair from a customer's premises to the MDF. One operator will use the copper pair to provide standard voice services, while the other will use it to provide broadband services via ADSL. Moreover it will be possible to provide the two types of service simultaneously. Under these circumstances the local loop is a common fixed cost. The costs are fixed in the sense that they do not vary with the amount of use made of them. They are also common to the two services in the sense that they would be required in their entirety if just voice services were provided or if just broadband services were required or if both services were required. The question is how such common fixed costs should be attributed between the user services.

Attribution Methods

Ramsey Pricing

One possibility would be to recover the local loop costs in accordance with what the market will bear or, to put it more technically, set prices that are inversely proportional to elasticities of demand (sometimes referred to as "Ramsey prices"). This requires a substantial amount of information, particularly as the impact of one service's price on the demand for other services has to be taken into account. It is also very important that market rather than company elasticities of demand are used to set prices, because otherwise all the shared and common fixed costs end up being recovered from services where there is little or no competition. These practical difficulties of applying Ramsey pricing normally rule out its use.

Efficient Component Pricing

A second possibility is to charge the incremental cost plus the opportunity cost of providing the service concerned.¹³ This is known as efficient component pricing. Although it may have theoretical advantages it suffers from a number of drawbacks:

- it may be difficult to identify the opportunity cost as, if one operator provides another with unbundled access to its local loop, it may not be possible to identify whether this leads to the loss of retail services (and hence profits) by the operator providing unbundled access to its local loop or whether it results in the provision of retail services that would not otherwise have been provided (with a zero opportunity cost);
- it provides little incentive for the operator providing unbundled access to its local loop to become more efficient, as its profits are underwritten. If a competitor wins a customer and takes away profits from the operator, the latter gets the lost profits back in its unbundled local loop charges;
- it is not consistent with static economic efficiency if retail prices are out of line with costs, which is almost invariably the case in telecommunications.

¹³ If one operator provides a service to another, the opportunity cost is the difference between the price and incremental cost of any loss of retail sales that results.

- It is also difficult to measure incremental cost as it depends on whether voice services are regarded as being provided first, in which case the incremental cost of providing the broadband access is zero, or whether broadband services are regarded as being provided first, in which case the incremental cost of providing the broadband access is 100% of the local loop cost.

Co-operative Bargaining Theory

Another possible way of attributing costs is to ask what would happen if the local loop were about to be built and the two operators wishing to use it were seeking to reach an agreement about sharing the costs. In these circumstances, it can be shown that splitting the costs 50:50 would represent the *ex ante* outcome of free bargaining over the cost burden of constructing a new local loop.¹⁴

The intuition behind this result is that if one party were forced to pay more than half, it could decide to cease negotiating, build the local loop line itself and ask the other party for a 50% share of the cost. Since both parties are in a position to do this, they are likely to come to an agreement where costs are shared equally.

Shapley Allocation

There is an approach, based on game theory, which was invented by the American economist Lloyd Shapley. Where a number of services use a common facility, it is assumed that they join the "coalition" in random order and that each service would not be prepared to pay more than the expected value of the incremental cost that it imposes. These expected values are then used as the basis for allocating costs.¹⁵

Where there are two potential members of the coalition, the incremental cost of joining first is the total local loop cost, while the incremental cost of joining second is zero. The expected incremental cost is therefore 50% of the local loop costs and hence the costs are split 50:50.

Share of Total Stand Alone Costs

An alternative is that the allocation of common costs should be such that an individual service's share of common costs is the same as its share of the sum of stand alone costs for all services that share the local loop.¹⁶ Such a system ensures an equitable sharing of economies of scope and guarantees that all services have costs that are below stand alone costs.

The stand alone cost of providing the local loop for voice services is the cost of the local loop. For broadband services, the stand alone cost of providing the local loop is also the cost of the local loop. Hence each service's stand alone cost is 50% of the sum of their stand alone costs. This again therefore points to a 50:50 split.

Conclusion

Ramsey pricing and efficient component pricing are either impractical or problematic. The other methods reviewed all indicate that, where the local loop

¹⁴ This assumes that binding contracts can be written and no investment specificity (there is no 'hold-up problem'). Usually, in game theory, it is some form of surplus that is shared, but we believe that the results can be applied to common costs.

¹⁵ A description of the Shapley allocation can be found in P.Burns, *Discriminatory Pricing and Accounting Method in the UK Regulated Industries*, CRI, 1994.

¹⁶ This form of cost allocation is described in S.Moriarty, "Another Approach to Allocating Joint Costs", *Accounting Review*, 1975, pp 791-5. For an individual service i : allocated cost _{i} = common cost _{i} × (stand alone cost _{i} ÷ sum of stand alone costs of all services sharing the facilities).

is shared by voice and broadband services, each service should bear 50% of the local loop cost.