Consultation on the Introduction of Key Performance Indicators for Regulated Markets

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All responses to this consultation should be clearly marked:-
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Máire Fitzgerald
Commission for Communications Regulation
Irish Life Centre
Abbey Street
Freepost
Dublin 1
Ireland

Ph: +353-1-8049600   Fax: +353-1-804 9680   Email: wholesaleconsult@comreg.ie
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1 Foreword

The Commission for Communications Regulation (ComReg) is responsible for the regulation of the electronic communications sector in accordance with national and EU legislation. Part of its remit is to promote competition and to promote the interests of users within the community. ComReg believes that greater transparency on the performance of regulated wholesale products would contribute to greater competition and would also promote the interests of all users within the community.

Many telecommunications services in Ireland are made available by providers who use wholesale elements supplied by Eircom. Often, these will be regulated services, subject to obligations of non-discrimination and transparency. In the interests both of competition and consumer satisfaction, the wholesale elements supplied to these providers by Eircom must be at least as good as those used by Eircom in its own retail products. ComReg considers that it may be beneficial to all stakeholders to make it demonstrable that this is the case. One way to do this would be to require the regular publication of Key Performance Indicators (KPIs) relating to these elements and facilitating the direct comparison of Eircom's self-supply in relevant markets with what it provides to its wholesale customers.

This consultation proposes the introduction of such KPIs in four regulated markets. These are Retail Narrowband Access, Wholesale Broadband Access, Wholesale Physical Network Infrastructure Access and Terminating Segments of Wholesale Leased Lines. Services are made available by alternative providers in all of these markets and many are based on wholesale elements supplied by Eircom.

ComReg's proposal is to publish all of the proposed KPIs in a single place and this would enable explicit comparisons to be made between retail and wholesale offerings as provided by Eircom. ComReg is of the preliminary view that this could provide an assurance to consumers that the products and related services used by both Eircom and OAOs are of the same standard, that this would be of great value, and that it would further stimulate competition in the Irish telecommunications market. It could also reassure OAOs that no discrimination in respect of Eircom's wholesale services was occurring.

The key stakeholders in this consultation include consumers, OAOs and Eircom. The proposed KPIs, and the information which they provide, would be made available to all of these stakeholders through regular publication. This consultation is aimed at all stakeholders with an interest in the quality of electronic communications services in Ireland.

Alex Chisholm
Chairperson

2 Executive Summary

2.1 ComReg is of the preliminary view that greater transparency on the performance of regulated wholesale products would contribute to greater competition and would also promote the interests of all users within the community. ComReg has launched this consultation on a proposal to implement Key Performance Indicators (KPIs) which would measure the comparative quality of inputs supplied by Eircom across a range of regulated markets. Well-designed KPIs could provide a summary, comparative view of the standard of common or equivalent inputs supplied to OAOs through Eircom's wholesale products versus those used by Eircom itself through self-supply.

2.2 The objective of the consultation is, therefore, to evaluate whether KPIs should be mandated in the manner envisaged. In particular it aims to:

> *2.2.1* seek views from stakeholders as to the appropriateness of using KPIs in the manner proposed in this paper.

> *2.2.2* determine across all relevant markets which KPIs are most useful to deliver the benefits, as defined below.

> *2.2.3* evaluate the benefits of mandating KPIs

> *2.2.4* evaluate if such KPIs would help ensure transparency and non discrimination in relevant wholesale markets.

> *2.2.5* evaluate if such KPIs would ensure a good quality of service across relevant wholesale markets.

> *2.2.6* evaluate if such KPIs would adequately demonstrate comparative indicators of performance between Eircom's wholesale and retail products for the enhancement of transparency.

2.3 The key stakeholders associated with this consultation include OAOs, Consumers and Eircom. The KPIs proposed would be made available to all stakeholders, and the standard against which performance of Eircom's wholesale services would be assessed is by direct comparison with the inputs to Eircom's own equivalent retail services.

2.4 ComReg's preliminary view is that KPIs would be of real benefit to all relevant stakeholders. This is because:

> *2.4.1* Enhanced transparency would provide a good indication of adherence or otherwise to Eircom's obligation of non-discrimination. The consequence would be to ensure that consumers of OAO offerings are in a position to receive services comparable to those supplied to Eircom's end-users/consumers.

> *2.4.2* Service Quality would be underwritten through the publication of comparative measures of the inputs delivered to suppliers using offerings based on Eircom's wholesale products and the equivalent inputs used by Eircom in the supply of its own retail services.

> *2.4.3* For consumers, the publication of KPIs allows for independent verification of the quality of Eircom's inputs to its wholesale services as provided to OAOs against the equivalent inputs supplied through Eircom's own retail offerings.

2.5 To be clear, this consultation is not proposing to set quality of service or performance targets. It seeks instead to rely on existing data already gathered in the relevant markets with the addition of new metrics where appropriate. It would require the presentation of defined KPIs in such a manner as to allow for meaningful comparisons to be made between the wholesale inputs supplied to Eircom's wholesale customers and the equivalent of such inputs as consumed by Eircom in the supply of its own retail offerings.

2.6 The consumer or end-user experience provided by an OAO contains elements which are not controlled by Eircom (e.g. Customer Relation Management, customer care, internal operational issues etc) and for this reason the direct comparison of the retail experience provided by Eircom against that provided by the various OAOs is not the objective of the KPIs covered in this paper. Rather, the purpose is to transparently demonstrate that regulated wholesale inputs are supplied in a non-discriminatory manner and that it is possible for OAOs to supply competitive consumer/end-user services based on those inputs.

2.7 ComReg's proposal is to publish all of the proposed KPIs in a single place and this would enable explicit comparisons to be made between inputs to retail and wholesale offerings as provided by Eircom. ComReg is of the preliminary view that this would provide an assurance to consumers that the common bases of products and related services used by both Eircom and OAOs are of the same standard, that this would be of great value, and that it would further stimulate competition in the Irish telecommunications market.

2.8 ComReg believes that it is of great importance that obligations are not just imposed, but are monitored and that compliance is demonstrated to all interested parties. ComReg believes that there is value in such transparency, in particular where this does not constitute an unreasonable additional burden.

2.9 Through the consultation process ComReg will seek to ensure that the total effort involved in producing the metrics which may be required is properly assessed and compared to the value thereof, in order to minimise the burden associated with the compilation of the relevant metrics for publication.

3 Introduction

3.1 The purpose of this consultation is to consider the possible implementation of KPIs in four regulated markets: (i) Retail Narrowband Access, (ii) Wholesale Broadband Access, (iii) Wholesale Physical Network Infrastructure Access and (iv) Terminating Segments of Wholesale Leased Lines.

3.2 This paper will set out some theoretical considerations in relation to KPIs and then look at how these might apply in an Irish context. A set of underlying principles will also be provided which have guided ComReg's approach to the selection and definition of possible KPIs. The paper will outline a suggested set of KPIs for each of the markets and provide a legal basis for the imposition of KPIs. A draft Decision Instrument is also provided.

3.3 The Consultation is set out as follows: - Section 4 looks at the purpose of KPIs and focuses principally on the idea of enhanced transparency as an assurance of non-discriminatory behaviour in relation to wholesale products. Section 5 looks briefly at European best practice in the area of KPIs and is based on work done by the European Regulators' Group (ERG).[1] Section 6 examines the context in which the proposed KPIs would be imposed and looks at relevant existing standards-oriented metrics existing in the relevant markets in Ireland.

3.4 The principles that have guided ComReg's approach to the KPI proposals are set out in Section 7. A general approach to KPIs is summarised which includes an outline of the comparisons which may be made between wholesale products and services supplied by Eircom and the equivalent inputs used in its self-supplied retail products. Frequency of publication and presentational matters are also addressed.

3.5 Sections 8 to 11 deal with each of the markets individually. Some background on each market is provided as well as detailed definitions of the metrics proposed. A Regulatory Impact Assessment (RIA) is provided in Section 12 while Section 13 contains the Legal Basis both generally and in the specific context of each market. Finally a draft Decision Instrument and a consolidated list of Consultation questions is provided for the convenience and consideration of those responding to this consultation.

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[1] The ERG has since been replaced by the Body of European Regulators for Electronic Communications (BEREC).

4 Purpose of Key Performance Indicators

4.1 KPIs were defined in the recently published ComReg Decision Instrument on Wholesale Physical Network Infrastructure (WPNIA)[2] as "a measure(s) of the standard(s) of Current Generation WPNIA provided by Eircom to OAOs and by Eircom to itself through self-supply." More generally, it is ComReg's initial view that KPIs should provide a summary guide to the relative standards of common or equivalent inputs consumed by OAOs through Eircom's wholesale products and by Eircom itself through self-supply.

4.2 ComReg considers that even the suspicion of superiority in relation to Eircom Limited's ("Eircom") retail products when considered against its wholesale products, in relevant markets, may potentially undermine competition. The proposals in this consultation, therefore, would require Eircom to publish Key Performance Indicators (KPIs) in specific regulated markets. The KPIs are intended to provide objective measures of the most important aspects of the wholesale products and services provided by Eircom.

4.3 The markets in which ComReg is proposing that KPIs may be imposed are:

- Retail Narrowband Access ("RNA") Market

- Wholesale Leased Lines (Terminating Segments) ("WLL[3]") Market

- Wholesale Physical Network Infrastructure Access ("WPNIA") Market

- Wholesale Broadband Access ("WBA") Market

Eircom has been designated as the SMP operator in all of the relevant markets.

4.4 ComReg believes that consumers should be reassured that the quality of inputs to OAO services are comparable with those used in Eircom's own retail services. Therefore, the publication of wholesale performance statistics in isolation would not, on its own, demonstrate and make transparent the absence of discrimination in a particular market.

4.5 ComReg therefore proposes that the publication of KPIs, for both wholesale and equivalent retail inputs, is vital in order to facilitate easy review of information on the relative quality of wholesale and retail services. This is the common practice of other national regulators referred to within this paper.

4.6 The obligation to publish KPIs would be a further specification of Eircom's transparency obligations in the relevant markets, and this enhanced transparency would be intended to demonstrate the degree to which common or equivalent inputs are supplied in accordance with Eircom's obligations of non-discrimination.

4.7 As an example of the scope and purpose of KPIs, the "Revised ERG Common Position on the approach to Appropriate remedies"[4] notes that an *"effective*

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[2] http://www.comreg.ie/_fileupload/publications/ComReg1039.pdf

[3] WLL means all wholesale leased line services offered by Eircom under the Leased Line Reference offer(LLRO)

[4] ERG 06 (33): Revised ERG Common Position on the approach to Appropriate remedies in the ECNS regulatory framework

means of direct verification of non-discrimination is the formulation and publication of appropriate key performance indicators (KPI), describing parameters such as provisioning times, repair times, percentage of circuits which work on installation and so on."

4.8 ComReg is of the preliminary view that such KPIs would be useful for OAOs and other stakeholders as they should demonstrate that end-user products based on wholesale elements supplied by Eircom can be of comparable quality and these inputs are delivered in similar timeframes to Eircom's self–supplied inputs as delivered in Eircom's retail products. Thus stakeholders would have confidence in Eircom's wholesale products and in end-user offerings constructed from them.

4.9 ComReg has reviewed European best practice as implemented by NRAs across Europe and does not believe that targets, as originally envisaged in ComReg Documents D08/103[5] and 08/104[6], have been implemented elsewhere. Therefore, standalone targets (as were introduced for example for USO[7]) are not being considered at this time as ComReg considers that comparative assessment of equivalent inputs is sufficient to establish the adequacy of the inputs to wholesale services supplied by Eircom. However, this does not exclude standalone targets from being considered in future consultations.

Q. 1. Do you agree with ComReg's reasons for implementing KPIs? Please provide reasons for your answer.

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[5] ComReg Decision - *Market Analysis – Leased Lines Market Review Decision Notice and Decision Instrument,* dated 22 December 2008

[6] ComReg Document - *Market Review – Wholesale Physical Network Infrastructure Access (Market 4) – Response to ComReg Document 08/104 and Draft Decision*, dated 22 December 2008.

[7] ComReg Decision - *Response to Consultation on Eircom's Universal Service Obligation - Quality of Service Performance Targets*, dated 28 May 2008

5 European Best Practice and KPIs

5.1 A report (07)53 on ERG Best Practice on Regulatory Regimes in Wholesale Unbundled Access and Bitstream Access[8] was completed by the ERG in 2007 and published in 2008 ("the ERG Report"). The ERG Report considers best practice under a number of headings for Wholesale Unbundled Access ("WUA") (now referred to as the WPNIA market) and Bitstream Access, referred to as the WBA market. Amongst other issues the ERG Report considers a "minimal set" of metrics as a measure of quality of service, and as an enhancement of the impact of non-discrimination obligations by increased transparency. Suggested KPIs and the importance of such KPIs are also examined within the ERG Report. It is argued that it is best practice for Regulators to ensure that relevant KPIs are implemented and for these to be monitored appropriately.

5.2 The ERG Report also observes that an *"effective means of direct verification of non-discrimination is the formulation and publication of appropriate key performance indicators"* and notes that Quality of Service (along with Migration and Richness of Reference Offers and Pricing Issues) is one of three topics that are of particular importance. The report also notes that Quality of Service (QoS) *"has a direct impact on the service provided to the end user"* and is *"a key factor for process optimisation and rationalisation for operators."*

5.3 Furthermore, it is observed that a *"player with SMP[9] has the potential to leverage this into downstream retail markets, by providing a different QoS to different wholesale customers."* This could give the SMP operator an unfair advantage by which it would offer a superior product through its own retail function to any which could be constructed from wholesale inputs available to OAOs. This would have an adverse effect on competition as the ERG Report notes, and this would be *"ultimately to the detriment of retail customers."*

5.4 In order to demonstrate that the wholesale inputs are being provided on a non-discriminatory basis, it is necessary to publish the retail equivalents of those inputs which the SMP operator self-supplies or supplies to its own retail arm, its partners and its subsidiaries. This is acknowledged in the ERG Report.[10] It states that a set of KPIs might be set *"so as to ensure non discriminatory behaviour by the SMP-player in comparison with its own retail downstream arm."*

5.5 The ERG Report was prepared in relation to the WUA (WPNIA) and WBA markets. ComReg is of the view that the observations made in the ERG Report would hold true in relation to the RNA market as well. ComReg believes that because the quality of products and services in the WBA market are dependent on the quality of the underlying copper on which these services are provided (which fall within the RNA market), the ERG Report is directly relevant to RNA.

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[8] http://erg.ec.europa.eu/doc/publications/erg_07_53_wla_wba_bp_final_080604.pdf

[9] SMP : Significant Market Power

[10] http://erg.ec.europa.eu/doc/publications/erg_07_53_wla_wba_bp_final_080604.pdf

5.6 ComReg is mindful of the fact that in Ireland, new SLAs have been concluded in relation to the Single Billing via Wholesale Line Rental (SB-WLR) and the Local Loop Unbundling ("LLU") product families and that a new SLA is being progressed in relation to WLL products. A considerable section of the ERG Report is concerned with the conclusion of SLAs and the setting of associated targets (with penalties) as a means to ensure performance levels within those markets. The setting of targets in the SLAs means that there is already an objective performance level set by negotiation between Eircom and OAOs. However, the SLAs could be complemented by the comparative measures facilitated by KPIs.

5.7 In its paper (07) 54[11] "ERG Common Position on Best Practice in remedies imposed as a consequence of a position of SMP in the relevant markets for Wholesale Leased Lines", ("the ERG WLL Report") the ERG states that *"compilation of Key Performance Indicators (KPIs) allows NRAs (and stakeholders, if published) to assess whether the service provided to different customers is broadly comparable, in particular whether the service provided to the SMP player's own downstream service is comparable to that provided to third parties."* The suggested remedy is to be considered in the context of ensuring a *"level playing field"* by which the ERG means (amongst other things) that there should be no advantage to the SMP operators based on *"discrimination on price or non-price basis in favour of its own downstream arm."* ComReg believes that the rationale for compiling KPIs in the WLL market is very similar to that underpinning the approach in the WPNIA and WBA markets.

5.8 The European Competitive Telecommunications Association (ECTA), responded to the consultation (07)54[12] in its document "ECTA[13] comments on draft common position: Wholesale Leased Line". ECTA requests that there be an explicit reference to the avoidance of *"price and non-price discrimination"*[14] and that KPIs ought to be published as publication would *"allow all stakeholders to satisfy their legitimate need to know whether non-discrimination obligations are being effectively enforced."*

5.9 As argued in the ERG WLL Report the requirement to publish KPIs is believed to be a critical step in ensuring non-discrimination through enhanced transparency and therefore effectively promoting competition in the market. The benefits of the publication of KPIs are also described in the ERG document (06)33[15]. Therefore, the positions taken by the ERG in these documents accords with and supports ComReg's proposals.

5.10 The ERG Report recommends a "minimal set" of KPIs for the WPNIA market and "similar downstream products" which would (based on benchmark analysis of European NRA practice) consist of the following:

(a) Ordering (a service or product) -

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11 http://erg.ec.europa.eu/doc/publications/erg_07_54_wll_cp_final_080331.pdf

12 http://erg.ec.europa.eu/doc/publications/erg_07_54_wll_cp_final_080331.pdf

13 http://erg.ec.europa.eu/doc/publications/consult_best_practice_remedies/ecta.pdf

14 http://erg.ec.europa.eu/doc/publications/consult_best_practice_remedies/ecta.pdf

15 http://erg.ec.europa.eu/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf

- Number of orders completed; and

- Percentage of orders rejected after having successfully passed the administrative validation step.

(b) Delivery (of a service or product) -

- Average Delivery Time;

- Percentage of delivery at or before the committed date; and

- Delivery precision e.g, percentage of fault reported in the 30 days following service delivery.

(c) Fault Repair (of a service or product) -

- Percentage of faults under the SMP player responsibility reported per line per year;

- Average lapse of time for fault clearance; and

- Percentage of fault cleared at or before the committed date.

The ERG Report provides details of how this "minimal set" of KPIs has been implemented across Europe and graphs the relative popularity of the metrics proposed.[16]
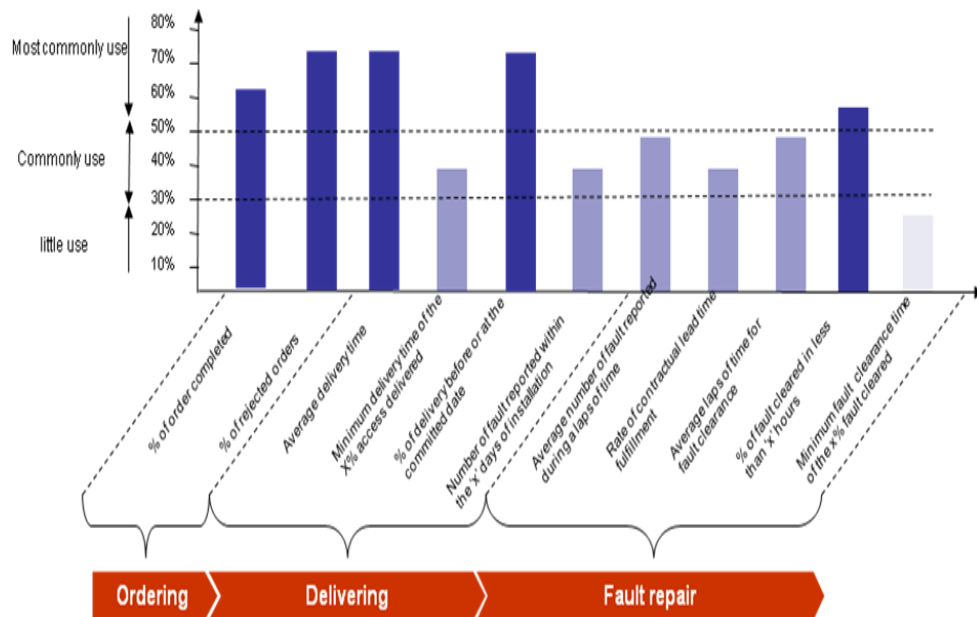
5.11 In compiling the KPIs proposed in this consultation, ComReg has been informed by work carried out in this area by the ERG. However, some of the measures suggested in the ERG work may already either be in place or about to be introduced as a result of separate initiatives within the relevant markets. Thus, for example, metrics associated with order acceptance are already published in

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16
http://erg.ec.europa.eu/doc/publications/consult_symmetry_mf_tr/erg_07_53rev1b_wba_wla_dr_rep_anx.pdf.

relation to SB-WLR as part of the performance statistics associated with that product in ComReg's Quarterly Report. Similar data for the LLU product set will be published by Eircom on its website as a result of Section 10.9 of the WPNIA decision[17]. ComReg is of the view that the net effect of imposing the metrics proposed in this consultation would be to supply the coverage advocated by the ERG with added detail in areas of interest to Irish stakeholders.

Q. 2. Do you agree with ComReg's approach to implementing the ERG's "minimum set"? Please provide reasons for your answer.

Q. 3. ComReg believes (as set out in Section 4 and supported by the ERG positions quoted in Section 5) that the proposed KPIs would enhance transparency and provide compelling information in relation to Eircom's non-discrimination obligation. Do you agree with this? Please provide reasons for your answer.

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[17] ComReg Decision: *Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4), Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision (the "Decision Document")* dated 20 May 2010

6 Relationship of KPIs to existing Retail and Wholesale Metrics and Targets

6.1 ComReg is aware of the benefits and relevance of existing measures already provided in wholesale and retail markets. It has analysed "best practice" amongst its peers in Europe and has given extensive consideration to the likely function of KPIs in the context of other obligations already imposed upon Eircom. In this regard, ComReg is mindful of Eircom's obligations in relation to USO targets, and its obligation to conclude SLAs within the relevant markets. USO and SLA targets provide objective standards against which retail and wholesale products can be assessed as appropriate.

6.2 Also, in relation to products not directly affected by the USO target, ComReg believes that the quality of relevant products and services is directly or indirectly dependent on the quality of underlying products and services from which that service is constructed. Many of these underlying services, for example the quality of the copper network, as measured by "Fault Rate Occurrence", are the subject of specific targets associated with Eircom's USO. Thus any improvement in the overall reliability of the copper network, as a result of quality thresholds imposed under Eircom's USO, would be reflected in the reliability of other offerings employing the same copper network.

6.3 A direct beneficiary of this overall improvement in the copper network would be wholesale narrowband products such as SB-WLR. The wholesale bitstream product set, whose reliability is also a function of the quality of the copper loops upon which it is offered, would also be expected to improve. Similarly, if the quality of these inputs deteriorates, Eircom may be subject to the sanctions imposed by ComReg in relation to the USO.

6.4 In the context of SLA targets, ComReg notes that new, more stringent SLAs have been agreed by Eircom and OAOs in recent months in some of the relevant markets. This is the case for the SB-WLR and LLU products, and ComReg understands that a revised SLA associated with WLL products will be implemented in the third quarter of 2010. If Eircom performance were to drop below the thresholds agreed between Eircom and OAOs in these revised SLAs, then Eircom would be liable to pay service credits as set out in those SLAs.

6.5 In some cases, for example with respect to products in the Retail Narrowband Access market, general underperformance could mean that Eircom could be affected both by sanctions imposed in relation to the USO targets and by specific penalties as set out in the SB-WLR SLA. Therefore, ComReg is of the initial view that there is sufficient incentive for Eircom to reach existing quality thresholds and is not minded to impose further obligations at this time by setting targets as part of this consultation.

Q. 4. Do you agree with ComReg's preliminary view that there is sufficient incentive for Eircom to reach existing quality targets and, therefore, that the imposition of targets associated with the proposed KPIs is not necessary? Please provide reasons for your answer.

7 Implementation of Metrics

General Principles

7.1 ComReg proposes to leverage data associated with existing reporting activities as far as possible while being mindful of the interests of all stakeholders. ComReg believes that such an approach would minimise the potential cost of the proposals and maximise transparency by relying on metrics which are already produced and are well understood.

7.2 For the purpose of comparison it should be possible to assess whether common equivalent inputs in respect of products offered on a wholesale and retail basis were being provided in a non-discriminatory manner by Eircom. The KPIs should be structured in such a way that it would be clear whether or not there is discrimination in respect of these inputs.

7.3 ComReg is of the preliminary view that two elements of any given deliverable would be of interest to stakeholders in respect of orders for supply and repair of products and services. These would be (i) the order validation stage and (ii) the order execution stage.

7.4 For Eircom's own retail orders it is understood that validation is intrinsic to the order entry process and that data is validated as it is entered. Order validation is not a distinct stage in the process. OAO orders may go through validation steps particular to each OAO (i.e. on the OAO's own systems) as well as pre-placement data gathering (e.g. address matching and associated keys) before they are transferred to Eircom's systems. However, upon presentation to Eircom (e.g. via the Universal Gateway), OAO orders are validated for conformance to Eircom's data requirements. Measuring non-discrimination, given these practical considerations, would be, in ComReg's preliminary view, a matter of demonstrating that Eircom's order validation process did not add material delay to the processing of orders submitted to Eircom by OAOs.

7.5 However, ComReg understands that for orders related to supply of services, order validation time is included within the time interval between the order being placed on the Eircom UG and its completion. This means that OAO order execution time would include the validation period (which as noted is not applicable to Eircom's own orders) and this will be compared with the Eircom retail equivalent order execution time. Any extra delay in order execution which arises as a result of the validation stage is therefore included within the execution metrics presented. ComReg is therefore of the preliminary understanding that a "like for like" comparison is being made in the comparison of order execution metrics on the provisioning side.

7.6 For orders related to repair of services, it is understood that orders are validated on the UG and automatically transferred from the UG to Eircom's internal systems and that this occurs in a matter of minutes. ComReg is of the preliminary view that while the interval prior to transfer is additional to the order processing times addressed in the proposed metrics for repair of services, it is not significant in the context of the order execution time. ComReg is interested in the views of respondents on this point.

7.7 ComReg's proposed approach is to take a representative wholesale metric which, if possible, is already measured and to find a suitable equivalent which is

self-supplied by Eircom. These two would be directly compared. A number of examples below may serve to illustrate the approach proposed:

Wholesale input	Proposed Retail Equivalent
Supply time for ULMP order	Standard PSTN Delivery Time
Supply time for LS order	Standard Retail DSL Delivery Time
Supply time for WLR transfer order	Std Eircom Winback Delivery time
Supply time for Bitstream order	Standard Retail DSL Delivery Time
Supply time Wholesale Leased Line	Retail Leased Line Delivery Time

7.8 Thus, for example, for unbundling of the local metallic path ("ULMP") orders (including geographic number portability with ULMP ("GLUMP")) the delivery of the service consists of running a jumper in the exchange with some supplementary activities. The retail equivalent to this activity is taken to be supply of a PSTN standard order i.e. not Electronically Enabled but not requiring field intervention anywhere other than in the exchange. A standard public switched telephone network ("PSTN") provide is understood to consist of the running of an exchange jumper plus some supplementary activities (e.g. activation etc).

7.9 Further detail on the proposed equivalents is contained in the sections devoted to the relevant markets but the general approach should be clear from the above table.

7.10 As noted, ComReg proposes that metrics, where possible, would reflect measurements currently compiled by Eircom in relation to its SLAs or other regular reports, and it will be seen that this approach is reflected in the metrics proposed.

7.11 ComReg (in line with European best practice set out in Section 5) also proposes metrics in relation to fault incidence and order execution quality which, although they rely on data already gathered, provide additional transparency in relation to wholesale products provided by Eircom. Fault Incidence is designed to show the incidence of faults for services supplied in each of the regulated markets. Order execution quality metrics are designed to show the quality of provisioning and repair activity in the markets. On the provisioning side the proposed metric measures the incidence of faults on a service within a period after the supply of that service in each of the markets. On the repair side, the proposed metric is intended to demonstrate the incidence of a fault recurrence within a period after a fault repair.

7.12 Eircom currently carries out analysis similar to that contained in the "Quality of Supply" proposal in order to determine ELF (Early Life Failure) rebates for the supply of ULMP services. In order to qualify for an ELF rebate a fault must occur on the new service within 8 working days of supply and the fault must be cleared with a clear code from a list published by Eircom on its website.[18] The arrangements form part of an industry-agreed process. Despite the similarity to

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[18]

http://oldsite.eircomwholesale.ie/dynamic/pdf/WSLAM%20Fault%20Clear%20Codes%20(2).xls

ELF analysis, the Quality of Supply and Quality of Repair metrics proposed in this consultation have a different objective and are designed to measure the quality of the service delivered to the end customer as it is experienced by the customer. ComReg's proposed Quality of Supply/Repair metrics provide for a 28-day window for the reporting of faults and, provided that the reported fault was valid, would not exclude a fault on the basis that it was not directly associated with the original provisioning or repair activity. However, ComReg would propose to allow standard fault exclusions in each case, as set out for example in Appendix 1 of the LLU SLA[19]. ComReg is interested in the views of Industry and other stakeholders on the detail of this proposal.

7.13 Where, upon consideration of the published metrics, ComReg observed that the quality of service associated with a particular product was discriminatory, it could investigate the discrepancy in accordance with its objectives and functions as provided for at sections 10 and 12 of the Communications Regulation Acts 2002-2010 ("the Act").

Frequency of Publication

7.14 In considering the frequency at which KPIs should be published, ComReg has considered the position in other European countries where relevant. The ERG Report states that *"periodicity of a year or a quarter is not sufficient to ensure the needed responsiveness"* and concludes that publication on a monthly basis is to be preferred.

7.15 In the UK, the Office of the Telecommunications Adjudicator publishes a range of KPIs related to Openreach performance on its website.[20] These KPIs are published on a monthly basis. In addition, Openreach itself publishes LLU performance statistics on a weekly basis on its website.[21]

7.16 In France, similarly, Orange publishes a range of KPIs on a monthly basis as agreed with the French NRA: ARCEP[22].

7.17 On the other hand, ComReg is aware of the conclusions of ICP-ANACOM, the Portuguese NRA in its "Determination on the publication of the performance levels achieved in the quality of service of wholesale offers"[23], published in March 2009, which imposed "quarterly periodicity and monthly discrimination" as its solution. This solution, ICP-ANACOM believes, ensures that *"a fair balance is reached between the regulatory costs inherent to the handling and provision of information and the need to ensure an efficient intervention and an adequate reaction time."*

7.18 The situation in Ireland is that quarterly publication of results, with monthly data is an agreed method in the SLAs that Eircom has concluded with OAOs in markets covered by this consultation. These results show the individual results

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[19] http://www.eircomwholesale.ie/Products/Access/Documents/LLU-SLA-Version-6/

20 http://www.offta.org.uk/monthly.htm

21 http://www.openreach.co.uk/orpg/products/llu/kpi/kpi.do

22 http://www.orange.com/fr_FR/groupe/reseau/documentation/

23 http://www.anacom.pt/streaming/deliofertasgrossistas11032009_en.pdf?contentId=909787&field=ATTACHED_FILE

achieved in each month of the quarter as well as the aggregate for the quarter. An example of this presentation is available for the SB-WLR product in ComReg's quarterly report.[24]

7.19 Similarly, Eircom's responsibilities in accordance with its USO designation require it to submit results to ComReg for publication on a quarterly basis. Based on what is accepted practice in the Irish market, ComReg considers that quarterly publication, with a monthly breakdown of each month, appears to be the optimal periodicity for the publication of the proposed KPIs.

7.20 ComReg believes that reports need to be published on a regular basis to ensure that meaningful actions can be triggered by them. At the same time, ComReg is mindful that resources are required, on the one hand to produce and publish such reports accurately and, on the other hand, to review, assess and respond to such reports.

7.21 ComReg considers that monthly publication would come at an increased cost, and therefore that the likely benefits of such an approach ought to be clear and demonstrable. ComReg is interested in the views of stakeholders on this point and will seek to strike a balance in the eventual periodicity decided, based on the likely benefits and costs.

7.22 The ERG document notes that *"costs will inevitably be incurred by the SMP player in setting up such a monitoring system although typically, the SMP player will need much of the information for its own management purposes."*[25] In formulating the proposed KPIs to be imposed on Eircom, ComReg has been mindful of measurements already taken by Eircom in a range of areas for current operational purposes. ComReg is of the view that the net effect of the proposals envisaged by this consultation may, in many cases, be the publication of statistics already gathered and compiled.

7.23 To conclude, ComReg's initial proposal is that it would be sufficient to publish KPIs on a quarterly basis with the quarterly KPI reports being broken down, showing the data separately for each month included within the quarterly report. KPIs should be published within two months of the end of the quarter to which the KPIs relate.

Presentation of metrics

7.24 ComReg proposes that the KPIs should be published by Eircom on its publicly available website www.eircomwholesale.ie. The KPIs may also be published by ComReg.

7.25 ComReg proposes that at least two years of history should be kept so as to ensure trend analysis can be carried out on data samples of sufficient size.

7.26 In the following sections on each of the markets, the actual metrics proposed, as well as the manner in which it is proposed they should be presented, is discussed and laid out in full detail.

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24 See for example: http://www.comreg.ie/_fileupload/publications/ComReg0971.pdf

25 http://erg.ec.europa.eu/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf

Verification of Metrics

7.27 It is proposed to require Eircom, as part of the obligation, to provide true and accurate information. Should an issue of reasonable doubt arise as to the accuracy of data supplied in relation to any of the KPIs published, ComReg has a wide range of investigative and enforcement powers which could be used to ensure the accuracy of the information supplied. These include, but are not limited to, the instigation of an investigation in accordance with sections 10 and 12 of the Act and Regulation 18 of the Access Regulations,[26] the use of information requests sent in accordance with section 13D(1) of the Act. ComReg could also, if it was deemed appropriate, rely on the Authorised Officer powers in accordance with section 39 of the Act.

Amendment of Metrics

7.28 KPIs may need to be amended from time to time. This could result in metrics being added to or deleted from the suite which Eircom would be obliged to provide. Changes could occur where new products were supplied in the markets or in response to a stakeholder requirement for enhanced metrics. ComReg believes that such changes are likely to be subject to public consultation, depending on the significance of the anticipated change.

7.29 ComReg is of the preliminary view that the approach to wholesale/retail equivalents proposed in this paper provides a satisfactory template for products which are likely to arise in the future and therefore that the general approach to KPIs will be well understood. Therefore, where there was a requirement for new KPIs to be introduced it is not believed that the consultation process would be lengthy and that an amendment to the KPIs could be implemented within months subject to its complexity and the data requirements underlying it. It is possible that such a consultation could run in parallel with the Industry product development activity which normally precedes a launch.

7.30 ComReg also appreciates that the need for specific metrics may arise at any time and will work with Industry to minimise the number and size of consultations required for the amendment of the KPI suite. An example of a consultation concerned with a specific issue was one carried out in September 2008: "Revision to Processes for collection of Quarterly Report statistical data"[27] A Decision Notice in relation to this was issued on 28 November, 2008.[28] Therefore, ComReg is of the view that (with the active involvement and assistance of Industry), the maintenance and updating of the KPI suite can be managed in an efficient and timely manner.

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[26] European Communities (Electronic Communications Networks and Services) (Access) Regulations 2003 (S.I. No. 305 of 2003), amended by the European Communities (Electronic Communications Networks and Services) (Access) (Amendment) Regulations 2007 (S.I. No. 373 of 2007)

[27]

http://www.comreg.ie/publications/consultation_on_revision_to_processes_for_collection_of_quarterly_report_statistical_data.697.1.testrespond1.html

[28] http://www.comreg.ie/_fileupload/publications/ComReg_0891.pdf

Implementation Dates

7.31 ComReg proposes that the effective date of the Decision Instrument and Directions, were they to be implemented would be six months from the date of publication of those instruments.

7.32 ComReg proposes that quarterly KPIs should be published no later than two months from the quarter end (either March, June, September or December) to which the KPIs and associated data pertain.

Q. 5. Do you agree with ComReg's approach to the implementation of KPIs? Please provide reasons for your answer.

8 Retail Narrowband Access (RNA)− proposed KPIs

Purpose of metrics in this market

8.1 Retail Narrowband Access, or RNA, in this context, refers to a national market for lower level retail narrowband access, including access via analogue exchange lines and ISDN BRA[29] carried over copper, cable or FWA[30],[31]. OAO products in this market are based on Single Billing via Wholesale Line Rental (SB-WLR). SB-WLR enables OAOs to issue one single bill to end users for Carrier Pre-Selection ("CPS") 'all calls' and line rental charges.

8.2 The OAO may offer their own branded telephony service to their SB-WLR end users based on wholesale services provided by Eircom. Eircom provides wholesale billing details to OAOs, who then bill their end users at their own retail rates for calls.

8.3 It is also possible for an OAO to offer its own branded telephony service using WLA (White Label Access) which has relevant components in this market that are common to SB-WLR.

8.4 ComReg believes that competition would be served by greater transparency as to the relative quality of product offerings in the RNA market. This would allow end users to make informed decisions about prospective providers based on detailed quality of service information in the public domain. ComReg believes that objective information on service quality would also lead to a more mature, fact-based assessment and discussion of quality in the Irish context.

8.5 Therefore, ComReg is of the preliminary view that the interests of OAOs and end users would be served by the publication of quality of service information. ComReg is also of the view that such information would be beneficial to Eircom, in that any discussion of the relative quality of its wholesale offerings would be conducted in the light of objective measurements of those offerings.

8.6 ComReg publishes detailed information on the pricing of various consumer telecommunications products on its Callcosts.ie website. Many of the products addressed on this site contain elements from the RNA market. ComReg believes that the Callcosts information could be usefully augmented with information about the relative quality of the inputs to the retail narrowband product offerings. Consumers would then be able to assess any implication that lower-priced products in the market are based on a lower quality of service. Consumers would be assured that a movement between various operators' products within the RNA market will not lead to any reduction in quality of service or in the timeliness or thoroughness of repairs.

8.7 ComReg notes that the publication of such quality of service information is commonplace in other European jurisdictions and has provided further information on the European approach to such initiatives within this document.

8.8 As stated above, ComReg has taken account of information already compiled by Eircom in formulating the metrics proposed in this market. ComReg notes that

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29 Integrated Services Digital Network - Basic Rate Access

30 Fixed Wireless Access

31 See ComReg Decision D07/61 Market Analysis: Retail Fixed Narrowband Access Markets, dated

Eircom is already required to provide information in respect of its USO obligations which is published by ComReg. Eircom is also required to provide information to ComReg on its SLA performance for SB-WLR which ComReg publishes in its Quarterly Reports.

8.9 ComReg has gained some understanding of OAOs' quality concerns in respect of inputs to retail narrowband products over the years of facilitating industry forums and from bilateral discussions with OAOs. A recurring concern with operators has been that the quality of service available to Eircom and its end users may be superior to that provided to OAOs and subsequently, its end users. ComReg's consumer complaints group is also aware of many misunderstandings concerning quality of service issues which have arisen in the absence of objective information being available in the public domain. ComReg therefore believes that the publication of relevant quality of service information which directly compares the inputs to wholesale and retail offerings within this market would either reassure OAOs and end users that no such discrimination occurs or, possibly, provide an objective basis upon which to investigate a particular complaint.

USO and narrowband service quality

8.10 Pursuant to Regulations 3 and 10 of the Universal Service Regulations[32] ComReg has set a range of binding targets[33] for Eircom's USO services and the results are published on a quarterly basis.

8.11 ComReg Decision D08/02 Notice observes that Eircom is required *"to meet legally binding quality of service performance targets for the delivery of these obligations. ComReg believes the targets are reasonable and proportionate and will lead to a higher quality of service in the future. Achieving these targets will ensure benefits for end-users, promote greater confidence in the USP and the sector generally, and generate ancillary social benefits in terms of Irish end-users finding it easier to access communications services."*

8.12 ComReg is mindful of the fact that quarterly publication of information in relation to Eircom's USO targets provides information on its retail offerings only. However, as of Q1 of 2009, in accordance with Section 6.6 (vii) of D07/61[34], ComReg has published performance metrics in relation to SB-WLR in its Quarterly Report.

8.13 It is possible for Eircom to provide services on the wholesale side which are inferior to those used in its retail offerings. Indeed ComReg concluded that this was happening in July 2007[35] in relation to PSTN repair. Although Eircom

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32 European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2003 (S.I. No. 308 of 2003), amended by European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) (Amendment) Regulations 2007 (S.I. No. 374 of 2007)

33 As laid out in ComReg Decision Document, D02/08 Decision Notice and Decision Instrument - Eircom's Universal Service Obligation Quality of Service Performance Targets, dated 28 May 2008

34 D07/61 Market Analysis: Retail Fixed Narrowband Access Markets

35 07/50 Notification to Eircom of non-compliance by Eircom with its non–discrimination obligation in relation to service repair

remediated this problem,[36] ComReg is of the view that it would be beneficial to OAOs and end-consumers of OAO offerings to be able to see for themselves that wholesale inputs are comparable to inputs used in Eircom's retail offerings and to be able to verify this on an ongoing basis.

8.14 ComReg is of the view that much of the necessary data about Eircom's wholesale and retail offerings in the RNA market is already used in the compilation of information provided by Eircom to ComReg that is in turn published by ComReg. The changes proposed in this consultation are therefore incremental and supplementary to data underlying information already supplied to ComReg in this market. However, some of the data currently provided will need to be presented in a new way in order to ensure that wholesale/retail comparisons can be readily made. In addition, some new metrics have been defined to ensure that stakeholders receive sufficient information to address their interests.

8.15 ComReg is of the view that the quality standards mandated in respect of the USO targets, also underwrite the quality of service in respect of SB-WLR, given that an obligation of non-discrimination operates also in the RNA Market[37].

8.16 ComReg is also of the preliminary view that the relevant WLA inputs should be represented in a standalone manner so that meaningful comparisons can be made with Retail PSTN and also with the performance of SB-WLR. While it may be possible to infer from other data that the common inputs to the WLA and WLR products are being supplied in a non-discriminatory manner (i.e. with respect to each other and with respect to the Retail PSTN product), ComReg proposes that the purpose of published KPIs would be to explicitly demonstrate that this is the case.

Preliminary definition of proposed metrics for Retail Narrowband Access Market

8.17 The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow. The products to be included are (i) SB-WLR, (ii) WLA and (iii) Eircom's Retail PSTN product.

8.18 The wholesale (SB-WLR and WLA) and Retail lines for which metrics should be calculated are PSTN and ISDN BRA. ComReg understands that volumes of ISDN PRA are not significant. The wholesale order types that need to be measured are (i) all order types based on Electronic Enablement (including migrations to SB-WLR & WLA) and (ii) all order types requiring field intervention.

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36 08/21 Final Opinion - Notification to Eircom of non-compliance by Eircom with its non–discrimination obligation in relation to service repair

37 D07/61 Market Analysis: Retail Fixed Narrowband Access Markets – Sections 6.4 & 6.5

Proposed Definitions

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"All Retail PSTN Connections" means the sum of In-Situ Retail PSTN Connections and All Other Retail PSTN Connections;

"All Other Retail PSTN Connections" means Lines that are not In-Situ Retail PSTN Connections and includes those that are new-build and Pending Available;

"All SB-WLR Connections" means the sum of In-Situ SB-WLR Connections and All Other SB-WLR Connections;

"All Other SB-WLR Connections" means Lines that are not In-Situ SB-WLR Connections and includes those that are new-build and Pending Available;

"All WLA Connections" means the sum of In-Situ WLA Connections and All Other WLA Connections;

"All Other WLA Connections" means Lines that are not In-Situ WLA Connections and includes those that are new-build and Pending Available;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the SB-WLR order in the case of wholesale orders;

"Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"Electronically Enabled" means that the activation of SB-WLR on a Line can be carried out remotely, through systems configuration, without the need for physical intervention;

"SB-WLR Fault" means an incident of disrupted or degraded SB-WLR service;

"SB-WLR Fault Repair" means the repair of a SB-WLR Fault resulting in the restoration of the SB-WLR service to normal working order;

"SB-WLR Fault Repair Time" means the duration from the instant of a SB-WLR Fault Report to the instant of SB-WLR Fault Repair;

"SB-WLR Fault Report" means a SB-WLR Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ SB-WLR Connection" means an Electronically Enabled Line and includes pre cabled;

"WLA Fault" means an incident of disrupted or degraded WLA service;

"WLA Fault Repair" means the repair of a WLA Fault resulting in the restoration of the WLA service to normal working order;

"WLA Fault Repair Time" means the duration from the instant of a WLA Fault Report to the instant of WLA Fault Repair;

"WLA Fault Report" means a WLA Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ WLA Connection" means an Electronically Enabled Line and includes pre cabled;

"Retail PSTN Fault" means an incident of disrupted or degraded Retail PSTN service;

"Retail PSTN Fault Repair" means the repair of a Retail PSTN Fault resulting in the restoration of the Retail PSTN service to normal working order;

"Retail PSTN Fault Repair Time" means the duration from the instant of a Retail PSTN Fault Report to the instant of Retail PSTN Fault Repair;

"Retail PSTN Fault Report" means a Retail PSTN Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ Retail PSTN Connection" means an Electronically Enabled Line and includes pre cabled;

"ISDN BRA" means Integrated Services Digital Network, Basic Rate Access;

"ISDN PRA" means Integrated Services Digital Network, Primary Rate Access;

"Line" means an Access Line which is providing a PSTN or an ISDN service to a Customer;

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks

involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU; (In the case of ISDN BRA, the boundary between Eircom's Network and the customer's private wiring the ISDN box i.e. the Siemens NT1 or NT1+ and not the NTU).

"SB-WLR Migration" means the provision of a SB-WLR on an existing active PSTN or SB-WLR Line with an other operator;

"**OAO"** means a legal entity which is designated under Section 4 (1) of the European Communities (Electronic Communications Network and Services) (Authorisation) Regulations 2003 (S.I N0.306 of 2003), to provide an electronic communications network or service;

"PSTN" means Public Switched Telephone Network;

"Quarter" (year) means a 3 month period (July to September, October to December, January to March or April to June) of a calendar year

"**SLA"** means a Service Level Agreement;

"**Supply Time"** means the duration from the date a Valid Service Order in respect of a Line is received by Eircom to the date the working service is made available for use.

"Valid Service Order" means an order by a Customer for a Line, that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"**Working Day"** means 09:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and

"Year" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

1.1 In-Situ Connections in 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN In-Situ Connections.

The figures for each Data Collection Period shall be calculated as follows:

Number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed within the
Data Collection Period where the Supply Time is within 2 Working Days   X100
Total number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed
within the Data Collection Period

1.2 Average In-Situ Connection Time

This figure shall be collected and calculated by Eircom for each Data Collection
Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN In-Situ
Connections.

The figure for each Data Collection Period shall be calculated as follows:

Sum of Supply Times of all In-Situ (SB-WLR/WLA/Retail PSTN) Connections
completed within the Data Collection Period
Total number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed
within the Data Collection Period

The metric should be expressed in Working Days.

1.3 All Other Connections in 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection
Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN
Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed within
the Data Collection Period where the Supply Time is within 10 Working Days X 100
Total number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed
within the Data Collection Period

1.4 Average Supply Time – All Other Connections

This figure shall be collected and calculated by Eircom for each Data Collection
Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN
Connections.

The figure for each Data Collection Period shall be calculated as follows:

Sum of Supply Times of All Other (SB-WLR/WLA/Retail PSTN) Connections
completed within the Data Collection Period
Total number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed
within the Data Collection Period

The metric should be expressed in Working Days.

1.5 Quality of Supply

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for all In-Situ and All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period X 100
Total number of In-Situ and All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

Metrics associated with Repair of Services

1.6 Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 2 Working Days X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.7 Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 5 Working Days X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.8 Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

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The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 10 Working Days   X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.9 Average Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Sum of (SB-WLR/WLA/Retail PSTN) Fault Repair Times of Fault Repairs completed within the Data Collection Period
Total number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

The metric should be expressed in Working Days.

1.10 Fault Incidence

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Total number of (SB-WLR/WLA/Retail PSTN) Faults for the Data Collection Period X 100
Average Number of (SB-WLR/WLA/Retail PSTN) Connections within the Data Collection Period

1.11 Quality of Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Faults reported within 28 Days on Lines which had (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period   X100
Total number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

Suggested layout of Metrics (Retail Narrowband Access)

Order Execution			
	Retail PSTN	**SB-WLR**	**WLA**
Metrics associated with Supply of Services			
SB-WLR			
In-Situ Connections in 2 Working Days	%	%	%
Average In-Situ Connection Time	days	days	days
Connections in 10 Working days	%	%	%
Average supply time	days	days	days
Quality of Supply	%	%	%
Metrics associated with Repair of Services			
SB-WLR			
Fault Repairs within 2 working days	%	%	%
Fault Repair within 5 working days	%	%	%
Fault Repair within 10 working days	%	%	%
Average Fault Repair Time	days	days	days
Fault Incidence	%	%	%
Quality of Repair	%	%	%

Questions

> **Q. 6. Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Retail Narrowband Access market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Retail Narrowband Access market? Please provide reasons for your answers.**

9 Wholesale Broadband Access (WBA)– proposed KPIs

Purpose of metrics in this market

9.1 The metrics discussed in this section concern the WBA market, which encompasses the supply of 'bitstream' access permitting the transmission of broadband data in both directions and other wholesale access products provided over other infrastructures, if and when the offer facilities equivalent to bitstream access.[38]

9.2 ComReg notes from Eircom's "Service Level Agreement for the Service Delivery and Service Assurance of Eircom ADSL Bitstream Service"[39], that there are two principal metrics in relation to the services offered as part of the WBA market. On the delivery side, the metric used is orders delivered by appointment date following successful order validation notification. The metric is subject to certain exclusions. On the assurance side the metric is service availability. Service availability has a number of dependencies which are detailed in the Service Level Agreement for the Service Delivery and Service Assurance of Eircom ADSL Bitstream Service document.

9.3 ComReg notes that the principal dependency for the stability of the bitstream service is the functioning of the underlying PSTN service. ComReg therefore believes that the stability of the current Bitstream offering would be reflected in the information related to service quality outlined in the section on the RNA market. ComReg is mindful of the importance of the Bitstream Ethernet Connection Service (BECS) to the OAOs, as well as other factors, but believes that the PSTN service is the principal determinant of service quality.

9.4 Nevertheless, ComReg's proposal for broadband services is to provide data on service delivery times and assurance specific to broadband and in a similar manner to its proposals in the other markets. This would have the benefit of providing enhanced transparency in relation to DSL-specific delivery and assurance metrics and deliver a consistency of approach across markets.

9.5 ComReg proposes that a delivery time metric is also required which would not be based on the appointment date (taken in this proposal to be always at 5 working days) but rather on the total time taken to fulfil the order from the time the order was received, regardless of the appointment date. As wholesale broadband deliveries are based on exchange work and do not involve a visit to the customer premises, ComReg believes that appointment times for broadband deliveries are solely controlled by Eircom, i.e. there is no necessity to agree an appointment with the customer. Therefore, an average delivery time regardless of any appointments made would be useful. This metric would capture the total delivery time for broadband services independent of resourcing effects introduced by the appointments process.

9.6 As such, ComReg proposes that the same data should be made available for Eircom's retail DSL product and for its wholesale bitstream offering. This would allow end customers and OAOs to inspect statistics showing both speed of delivery and product quality.

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38 See D03/05 Market Analysis – Wholesale Broadband Access

39 http://www.Eircomwholesale.ie/dynamic/pdf/adslbitstreamSLA_v1.pdf

Broadband service quality

9.7 Eircom currently reports on a number of factors in relation to the delivery and performance of its wholesale broadband offering. SLA performance reports are issued to OAOs on a monthly basis with respect to service delivery and on a quarterly basis with respect to service availability.[40]

9.8 Furthermore ComReg understands that similar information to that supplied under the auspices of the SLA to OAOs, is also gathered internally at Eircom in relation to the self-supplied retail broadband product set.

9.9 ComReg is mindful of information that is currently provided to OAOs, in accordance with the SLA and headline information tracked in relation to its retail offerings, in considering what KPIs relevant to this market would be necessary and therefore should be published. Existing definitions would be used as far as is practicable, so long as these refer to inputs supplied to OAOs and self-supplied by Eircom, such that a comparison between the two is meaningful.

9.10 In establishing a suitable standard against which to measure the performance of inputs to the wholesale product, ComReg notes that a non-discrimination obligation has been imposed in the WBA market decision.[41] The equivalent inputs to Eircom's retail offerings are therefore the standards against which non-discrimination should be assessed.[42]. To this end, for purposes of comparison, Eircom would be required to publish KPIs for the equivalent inputs to its retail offerings as well as the relevant wholesale inputs supplied to OAOs.

9.11 The current Eircom Bitstream Service SLA provides for 99.5% availability of the service with seven stipulated exclusions and a number of additional exclusion reasons. ComReg's proposals would enhance the information available by showing time to repair in 2, 5 and 10 day windows with additional metrics covering average time to repair and repair quality.

Preliminary definition of proposed metrics for Wholesale Bitstream Access Market

9.12 The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow.

9.13 The lines for which metrics should be calculated are wholesale and retail Lines with active DSL services. Data for each of these will be displayed separately. The wholesale order types whose inputs need to be measured are (i) all order

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40 Eircom - Service Level Agreement for the Service Delivery and Service Assurance of Eircom ADSL Bitstream Service

41 Section 6 of D05/11r

42 See for example 08/95: Decision to find that Eircom is not in compliance with the non-discrimination obligation in its use of "Sync Checker"

types based on Electronic Enablement (for example Bitstream Transfer orders) and (ii) all order types requiring field intervention.

Proposed Definitions of terms

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"DSL Service" means high speed, 'always on' Internet connection that has a minimum download speed of 144kbit/s;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the Bitstream order in the case of wholesale orders;

"Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"DSL" means digital subscriber line;

"DSL Connection" means the activation of a DSL Service on a DSL Line. It does not include any work performed at a Customer premises. (i.e. Self-install only)

"DSL Fault" means an incident of disrupted or degraded DSL Service excluding PSTN related faults;

"DSL Fault Report" means a DSL Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"DSL Fault Repair" means the repair of a DSL Fault resulting in the restoration of the DSL Service to normal working order;

"DSL Fault Repair Time" means the duration from the instant of a DSL Fault Report to the instant of DSL Fault Repair;

"DSL Lines" means those Access Lines that carry a DSL Service

"DSL Supply Time" means the duration from the date all Valid DSL Connection Orders in respect of a DSL Connection are received by Eircom to the date a working DSL Service is made available for use.

"Electronically Enabled" means that the activation of DSL on a Line can be carried out remotely, through systems configuration, without the need for physical intervention;

 "Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU;

"Out of Service Time" means the duration from the instant a DSL Service becomes unavailable due to a DSL Fault to the instant a working DSL Service is made available for use;

 "Quarter" (year) means a 3 month period (July to September, October to December, January to March or April to June) of a Year

 "SLA" means a Service Level Agreement;

 "Valid DSL Connection Order" means an order by a Customer for a DSL Connection, that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"Working Day" means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); ; and

"Year" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

2.1 DSL Connections in 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.

Data should be shown separately for orders based on Electronic Enablement and those requiring field intervention.

The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Connections completed within the Data Collection Period where the
DSL Supply Time is within 5 Working Days   X 100
Total number of DSL Connections completed within the Data Collection Period

2.2 Average DSL Supply Time

This figure shall be collected and calculated by Eircom for each Data Collection
Period.

Data should be shown separately for orders based on Electronic Enablement and
those requiring field intervention.

The figure for each Data Collection Period shall be calculated as follows:

Sum of DSL Supply Times for DSL Connections completed within the Data
Collection Period
Total number of DSL Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

2.3 Quality of DSL Supply

This figure shall be collected and calculated by Eircom for each Data Collection
Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for DSL Connections completed within
the Data Collection Period   X 100
Total number of DSL Connections completed within the Data Collection Period

Metrics associated with Repair of Services

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2.4 DSL Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection
Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where
the DSL Fault Repair Time is within 2 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.5 DSL Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 5 Working Days X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.6 DSL Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 10 Working Days X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.7 Average DSL Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of DSL Fault Repair Times of All Fault Repairs completed within the Data Collection Period
Total number of DSL Fault Repairs completed within the Data Collection Period

The metric should be expressed in Working Days.

2.8 Quality of Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Faults reported within 28 Days on Lines which had DSL Fault Repairs completed within the Data Collection Period X100
Total number of DSL Fault Repairs completed within the Data Collection Period

Suggested Layout of Metrics

Order Execution		
	Wholesale DSL	Retail DSL
Metrics associated with Supply of Services		
Jumper Required		
DSL Connections in 5 Working Days	%	%
Average DSL Supply Time	days	days
Quality of DSL Supply	%	%
Pre-Jumpered ¦ Jumper Not Required		
DSL Connections in 5 Working Days	%	%
Average DSL Supply Time	days	days
Quality of DSL Supply	%	%
Metrics associated with Repair of Services		
DSL Fault Repairs within 2 working days	%	%
DSL Fault Repair within 5 working days	%	%
DSL Fault Repair within 10 working days	%	%
Average DSL Fault Repair Time	days	days
Quality of DSL Repair	%	%

Questions

> **Q. 7. Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Wholesale Broadband Access market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Broadband Access market? Please provide reasons for your answers.**

10 Wholesale Physical Network Infrastructure Access (WPNIA) – proposed KPIs

Purpose of metrics in this market

10.1 Traditionally the Wholesale Unbundled Access Market has represented the market for unbundled access over "last mile" copper loops between a telephone exchange and the end user. This is also known as LLU. While ComReg is aware of the prospect that at least some of these copper loops may be replaced by fibre optic cable in the future (these loops being generically known as Next Generation Access – or NGA), a consideration of these developments and the metrics they might give rise to is outside the scope of this consultation which is concerned with Eircom's wholesale offerings based on the unbundling of copper loops. Nevertheless the relevant market is now known as WPNIA to reflect the anticipated proliferation of physical infrastructure types.

10.2 In the recent market analysis carried out for the WPNIA market it was observed that the WPNIA market comprises *"wholesale physical network infrastructure access products provided over the incumbent's current generation copper network infrastructure, including its self supply."*[43] Because self-supply is in the market, the supply of wholesale inputs in the market should be non-discriminatory in accordance with the obligation imposed. Therefore, one purpose of KPIs within the WPNIA market would be to ensure that inputs common to wholesale and retail products can be seen to be provided in accordance with the non-discrimination obligation.

10.3 While the KPIs published for the WPNIA market would relate to products offered by Eircom on a wholesale basis, and would therefore be displayed separately to KPIs calculated with respect to products in other markets, ComReg nevertheless believes that comparisons between equivalent inputs to those products may be relevant to Eircom's obligation of non-discrimination in the WPNIA market.

10.4 ComReg's consideration of the metrics to be provided in relation to the WPNIA market begins by making a distinction between Line Share ("LS") products and fully unbundled access products.

10.5 In terms of the LLU product family, ComReg believes that a wide set of metrics will be required and that these can be derived from a consideration of metrics proposed for the RNA market and the WBA market as well as Eircom's SLA for the LLU product family. Indeed, much of the data required for the compilation of such measures is already gathered by Eircom to underpin its SLA in respect of its LLU services[44].

10.6 As noted above, ComReg would consider that the delivery of common inputs to unbundled services and to Eircom's retail offerings should be non-discriminatory. An example of such an input would be the supply of copper loops. ComReg is of the view that it could, by inspecting other products or components of products delivered other than in WPNIA, be able to arrive at an

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43 ComReg Decision: *Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4), Further Response to ComReg Document No. 08/104, Response to ComReg Document No. 09/42 and Decision (the "Decision Document")* dated 20 May 2010

44 http://www.Eircomwholesale.ie/dynamic/pdf/ULMP_LS_SLA_V5.0.pdf

objective assessment of whether the delivery of wholesale inputs within the WPNIA market was non-discriminatory.

Local Loop Unbundling (LLU) product set service quality

10.7 Eircom has recently concluded an SLA in respect of its LLU product set.[45] This SLA measures performance at similar points to those measured for Eircom's SB-WLR product which are supplied to ComReg for the purposes of publication as noted above.

10.8 Performance statistics, in the context of the SLA are already provided to OAOs in respect of their own orders and rented lines and on the basis of the recent WPNIA decision will be published in an aggregate manner on Eircom's website. Eircom already provides a range of additional data to ComReg relating to the LLU product set. Such information has also been shared with industry at various times.

10.9 As noted earlier, the measures proposed in this consultation will seek to use currently produced data in respect of the WPNIA market as far as possible. However, it may be necessary to define some new metrics to ensure that stakeholders receive sufficient information to address their interests. The principle purpose of these metrics and the manner of their presentation will be to demonstrate that the supply of services by Eircom within this market is non-discriminatory.

Preliminary definition of proposed metrics for Wholesale Physical Network Infrastructure Access Market

10.10 The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow.

10.11 It is ComReg's preliminary view that the Retail equivalent input to ULMP is a copper loop supplied to Retail as part of its PSTN service. Similarly the Retail equivalent input to Line Share would be the physical intervention (jumpering) required to provide a DSL service.

Proposed Definitions

"**Access Line**" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

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45 See http://www.eircomwholesale.ie/dynamic/pdf/LLU%20SLA%20Version%206.pdf for more details

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the ULMP order in the case of wholesale orders;

"Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"GLUMP" means the synchronised delivery of ULMP and GNP;

"Geographic Number Portability (GNP)" means a facility that allows an enduser to retain his/her telephone number when changing or switching service provider and describes the process used for this when the number concerned is a geographic number;

"Line Share" means the facility whereby the high frequency service provided by the Access Seeker may be integrated over an existing PSTN Line over the same two-wire metallic path;

"Line Share Connection" means the completion of all network intervention required to provide a Line Share to an OAO. It does not include work performed at a Customer premises.

"Line Share Fault" means an incident of disrupted or degraded service on a ULMP (incl GLUMP) Connection;

"Line Share Fault Repair" means the repair of a ULMP Fault resulting in the restoration of ULMP Connection to normal working order;

"Line Share Fault Repair Time" means the duration from the instant of a ULMP Fault Report to the instant of a ULMP Fault Repair;

"Line Share Fault Report" means a ULMP Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network;

"Line Share Lines" means those Access Lines on which Line Share has been implemented;

"Line Share Supply Time" means the duration from the date all Valid Line Share Connection Orders are received by Eircom to the date a working Line Share Connection is made available for use.

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU;

"Unbundled Local Metallic Path" or **"ULMP"** means an in-situ two wire metallic path connection between the OAO's block on the main distribution frame and the Network Termination Unit, (NTU), or Network Terminating Point where no NTU exists, in the Customer's premises;

"ULMP Connection" means the completion of all network intervention required to provide ULMP (incl GLUMP) to an OAO.

"ULMP Fault" means an incident of disrupted or degraded service on a ULMP (incl GLUMP) Connection;

"ULMP Fault Repair" means the repair of a ULMP Fault resulting in the restoration of ULMP Connection to normal working order;

"ULMP Fault Repair Time" means the duration from the instant of a ULMP Fault Report to the instant of a ULMP Fault Repair;

"ULMP Fault Report" means a ULMP Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network;

"ULMP Lines" means those Access Lines on which ULMP has been implemented;

"ULMP Supply Time" means the duration from the date a Valid ULMP Connection Order is received by Eircom to the date a working ULMP Connection is made available for use;

"Valid Line Share Connection Order" means an order by an OAO for a Line Share Connection (whether made orally, or in writing, including by any electronic means, or in any other acceptable form), that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"Working Day" means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and

"**Year**" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services – Line Share

3.1 Line Share Connections in 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of Line Share Connections completed within the Data Collection Period where the Supply Time is within 5 Working Days   X 100
Total number of Line Share Connections completed within the Data Collection Period

3.2 Average Supply Time – Line Share

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of Line Share Supply Times of All Line Share Connections completed within the Data Collection Period
Total number of All Line Share Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

3.3 Quality of Line Share Supply

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for Line Share Connections completed within the Data Collection Period   X 100
Total number of Line Share Connections completed within the Data Collection Period

Metrics associated with Repair of Services

3.4 Line Share Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 2 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.5 Line Share Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 5 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.6 Line Share Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 10 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.7 Line Share DSL Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of DSL Fault Repair Times of All Fault Repairs completed within the Data Collection Period
Total number of DSL Fault Repairs completed within the Data Collection Period

The metric should be expressed in Working Days.

3.8 Quality of Line Share Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of Line Share Faults reported within 28 Days on Lines which had Line Share Fault Repairs completed within the Data Collection Period   X100
Total number of Line Share Fault Repairs completed within the Data Collection Period

Suggested Layout of Metric

Order Execution		
	Wholesale Input	Retail Equivalent (Retail DSL, Jumper Required)
Metrics associated with Supply of Services		
Line Share Connection in 5 Working days	%	%
Average Supply Time - Line Share	days	days
Quality of Supply - Line Share	%	%
Metrics associated with Repair of Services		
Line Share Fault Repairs within 2 working days	%	%
Line Share Fault Repair within 5 working days	%	%
Line Share Fault Repair within 10 working days	%	%
Average Line Share Fault Repair Time	days	days
Quality of Line Share Repair	%	%

Metrics associated with Supply of Services – ULMP

4.1 ULMP Connections in 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of ULMP Connections completed within the Data Collection Period where the Supply Time is within 10 Working Days   X 100

Total number of ULMP Connections completed within the Data Collection Period

4.2 Average Supply Time - ULMP

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of ULMP Supply Times of ULMP Connections completed within the Data Collection Period

Total number of ULMP Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

4.3 Quality of ULMP Supply

Number of Faults reported within 28 Days for ULMP Connections completed within the Data Collection Period   X 100

Total number of Line Share Connections completed within the Data Collection Period

Metrics associated with Repair of Services

4.4 ULMP Fault Repairs within 2 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 2 Working Days   X 100

Total All ULMP Fault Repairs completed within the Data Collection Period

4.5 ULMP Fault Repairs within 3 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 3 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.6 ULMP Fault Repairs within 5 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 5 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.7 ULMP Fault Repairs within 6 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 6 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.8 ULMP Fault Repairs within 10 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 10 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.9 ULMP Fault Repairs within 11 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 3 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.10   Average ULMP Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of All ULMP Fault Repair Times of All Fault Repairs completed within the Data Collection Period   ___
Total number of All ULMP Fault Repairs completed within the Data Collection Period

4.11   ULMP Fault Incidence

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Total number of ULMP Faults for the Data Collection Period   X 100
Average Number of ULMP Lines within the Data Collection Period

4.12   Quality of ULMP Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of ULMP Faults reported within 28 Days on Lines which had ULMP Fault Repairs completed within the Data Collection Period   X100
Total number of ULMP Fault Repairs completed within the Data Collection Period

Suggested Layout of Metrics

Order Execution		
	Wholesale Input	**Retail Input**
		(Retail PSTN copper loops)
Metrics associated with Supply of Services		
ULMP		
Connections in 10 Working days	%	%
Average supply time	days	days
Quality of Supply	%	%
Metrics associated with Repair of Services		
ULMP (test results supplied)		
Fault Repairs within 2 working days	%	%
Fault Repair within 5 working days	%	%
Fault Repair within 10 working days	%	%
Average Fault Repair Time	days	days
Fault Incidence		
Quality of Repair	%	%
ULMP (test results not supplied)		
Fault Repairs within 3 working days	%	■■■
Fault Repair within 6 working days	%	■■■
Fault Repair within 11 working days	%	■■■
Average Fault Repair Time	days	■■■

Questions

> **Q. 8.** Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Wholesale Physical Network Infrastructure Access market? Do you agree with ComReg's proposed retail equivalent inputs for the ULMP and LS metrics as set out above? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Physical Network Infrastructure Access market? Please provide reasons for your answers.

11 Terminating Segments of Wholesale Leased Lines – proposed KPIs

Purpose of metrics in this market

11.1 The term "Leased Lines" refers to fixed, permanent telecommunications connections providing symmetric[46] capacity or bandwidth between two points. A leased line is permanent in that the capacity is always available between the two points. However, capacity could be reserved or shared through the associated network depending on the nature of the leased line.

11.2 Leased lines are a particularly important access product in the retail space for business users and therefore in turn, for wholesale operators. They allow wholesale providers to provide a wide range of value-add services and hence to offer a differentiated variety of products to these consumers.

11.3 Eircom currently publishes leased lines delivery performance metrics on its website[47], including information on "all orders" i.e. aggregated total retail and all wholesale orders, and on wholesale performance, i.e. Wholesale Leased Lines ("WLL") and Partial Private Circuit End User Links ("PPC-EUL").

11.4 The requirement for Eircom to publish leased line performance metrics was first mandated under Direction D2/02[48], Document Number 02/28 "Service Levels Provided to Other Licensed Operators by Operators with Significant Market Power" in March 2002, although monthly publishing of metrics had commenced prior to this by mutual agreement between Eircom and the ODTR (Office of Director of Telecommunication Regulation), the body superseded by ComReg. The publication of these metrics was part of a larger project whereby Eircom was set a delivery performance target of 80% for on-time due date delivery. There has been no significant further development of the published reports since that time other than to include PPC EUL (Partial Private Circuit End User Link) delivery performance metrics within the published reports.

11.5 More recently, the implementation and publication of KPIs and the possible setting of targets for them were explored in the recent leased line market analysis decision. That process commenced with the leased line market analysis consultation document 07/77[49], Market Analysis: Leased Lines Markets, published on 1 October 2007 where ComReg proposed that metrics could be used to ensure that wholesale performance was fit for purpose through the imposition of a regulated SLA which would fix the actual level at which these targets should be set. Further, under proposals associated with the transparency obligation, the actual performance measured against those targets would be supplied to ComReg on a monthly basis and these could then be published at the discretion of the Regulator. All respondents to 07/77 agreed with ComReg's general proposal to impose a transparency obligation, though one respondent considered that actual performance measured against the SLA should only be

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46 Symmetric means the same speed or bandwidth in each direction, upstream & downstream. ComReg's view is that a leased line would be characterised by broad rather than absolute symmetry.

47 http://www.eircomwholesale.ie/leased/

48 http://www.comreg.ie/_fileupload/publications/odtr0228.pdf

49 http://www.comreg.ie/_fileupload/publications/ComReg0777.pdf

shared on a bilateral basis with the relevant OAO, and further that the information would be of a commercially sensitive nature.

11.6 These themes were developed by ComReg in the Response to Consultation and Consultation on Draft Decision, Document Number 08/63[50], Market Analysis: Leased Lines Markets Response to Consultation and consultation on Draft Decision, published on 6 August 2008. In that paper ComReg expressed the view that KPIs with targets could, in the future and following a further consultation, form part of the relevant product descriptions and would in effect form a baseline performance for the relevant products and ensure that Eircom would meet its access obligation in a satisfactory manner. In the Decision Notice and Decision Instrument, Decision No. D06/08. Document Number 08/103, Market Analysis –Leased Line Market Review, Response to Consultation on Draft Decision Instrument Final Decision Notice and Decision Instrument, published on 22 December 2008, ComReg stated that it would consult further on the actual product KPIs to ensure that products in the market were fit for purpose. In addition, under the obligation of transparency, Eircom would be required to publish such KPIs as required by ComReg. In this consultation ComReg is proposing to introduce KPIs across a number of markets. However, rather than consulting on the SLA metrics for each product and attempting to define what would be a fit for purpose performance target for each, this consultation focuses on the definitions of suitable KPIs to be measured within the wholesale markets and the publication of these and to also complete the same exercise in relation to the directly associated retail product set.

11.7 ComReg believes that it would be extremely useful for competition in the industry and as a means of demonstrating non-discrimination in the market if all interested parties were in a position to compare Eircom's performance in relation to wholesale and retail inputs.

11.8 In the leased line market this process should be a straight forward and uncomplicated exercise. Both the delivery and repair milestones are identical, mature and well established in the agreed processes for both wholesale and retail products. This should allow for the easy identification and implementation of suitable metrics to provide for appropriate comparison of wholesale versus retail performance, whilst not generating any significant additional burden upon Eircom

11.9 As stated above in paragraph 10.3, Eircom currently publishes delivery performance information on its website. It does not however publish retail performance as a separate category and therefore a direct comparison between retail and wholesale delivery performance is not facilitated.

11.10 Importantly, given the absence of performance statistics published for either retail or wholesale repair, ComReg proposes the publication of repair statistics as part of this consultation.

11.11 As these products are in many instances essential to the day to day running of businesses, certainty in the provision and assurance of the access portion of these services i.e. the leased line element, is of major significance to both the retail user and wholesale provider.

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50 http://www.comreg.ie/_fileupload/publications/ComReg0863.pdf

11.12 In order for wholesale operators to be in a position to compete efficiently and effectively at the retail level with Eircom, it is vital that, the provision and assurance of the "resold" wholesale input purchased from Eircom, can be offered in a demonstrably non-discriminatory and transparent manner to the equivalent retail input.

11.13 It is therefore critical that the principle of non-discrimination is not just adhered to in this market, but that this can be clearly demonstrated to be the case for all stakeholders. This can also be of benefit to Eircom who will be afforded an opportunity to provide assurance to their wholesale customers that the inputs provided to them are of the same quality as those provided by Eircom to its own retail arm.

11.14 ComReg therefore proposes to publish retail and wholesale performance statistics in separate categories, for both delivery and repair performance. This will allow for direct comparisons to be made and provide transparency to all stakeholders.

Leased Lines product set service quality

11.15 Eircom currently produces data reflecting both its delivery and assurance performance with respect to product in the WLL market. Much of this data is circulated to OAOs through the Leased Lines and PPC industry forum. The published information referred to above is in a consolidated report for service delivery which includes all retail and wholesale orders. A separate report for wholesale orders allows OAOs and other stakeholders to review wholesale performance against overall leased line delivery performance. Information is not published on the site for service assurance.

11.16 In addition to both of the above sources of data, Eircom provides bi-lateral performance reports for individual operators on a regular basis upon request, based on the current SLA, or as part of their wholesale account management function.

11.17 The consultation will seek to reuse information and presentation formats that are already currently readily available in respect of the Wholesale Leased Lines market in so as far as possible. However, it may be necessary to define some new metrics and to modify how the current data is presented, to ensure that stakeholders receive sufficient information to address their interest and the suggested output for leased lines is part of an overall consolidated report.

Preliminary definition of proposed metrics for the Terminating Segments of Wholesale Leased Lines

11.18 The leased line metrics, other than the fault metrics, are closely based on formats already provided by Eircom on an ongoing basis either published on its website, or provided historically to industry at the Leased Line and PPC Industry Forum of supplied to ComReg for inclusion in the ComReg Quarterly Report. These formats are set out below.

Proposed Definitions

"Co-op Fault"	means a request for technical information or active assistance by a customer in an instance where there is no fault on the Eircom network and no fault raised (e.g. providing a loop for customer testing)
"Due Delivery Date"	means the committed date for completion of a valid order for a Leased Line as per the relevant SLA
"Ethernet Leased Line"	means a Leased Line which presents an Ethernet interface to the end user
"Leased Line Supply time"	means the duration from the date all Valid Leased Line Connection Orders are received by Eircom to the date a working Leased Line Connection is made available for use excluding delays etc as per Eircom published SLA's – This definition should be used throughout this section
"Leased Line"	A Leased Line is a fixed permanent telecommunications connection providing broadly symmetric capacity between two fixed points. It is permanent in that capacity is always available between the two points, however this capacity could be reserved or shared through the associated network depending on the nature of the Leased Line
"Leased Line Fault"	means an incident of disrupted or degraded service of a Leased Line on the Eircom network
"Leased Line Fault Report"	means a Leased Line Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network
"Leased Line Fault Repair"	means the repair of a Leased Line Fault resulting in the restoration of Leased Line Connection to normal working order;
"Leased Line Fault Repair Time"	means the duration from the instant of a Leased Line Fault Report to the instant of a Leased Line Fault Repair;
"Legacy Ethernet"	Eircom Ethernet services provided on legacy (pre-NGN) infrastructure

"NGN Ethernet"	refers to the Eircom Next Generation Network Ethernet network use to provide a suite of NGN services over the NGN core and/or NGN access network
"Non-fault"	means a reported fault which is found not to lie within the Eircom network
"Non-Standard Order (Leased Line)"	means an order which has been designated as "Non-Standard Order" as per corresponding SLA published on the Eircom wholesale website
"OAO (Other Authorised Operator)"	means a legal entity which is designated Under Section 4 (1) of the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2003 (S.I. No. 306 of 2003), to provide an electronic communications network or service
"Project Order (Leased Line)"	means an order which has been designated as "Project Order" and is usually exempt from the applicable SLA as the DDD (Due Delivery Date) is negotiated between the parties
"Partial Private Circuits"	refers to the Eircom wholesale offering as described on Eircom wholesale website, the constituent elements for the ordering process of which are; Transport Links (TL); Subsidiary Links (SL); End User Links (EUL).
"Quarter (Year)"	means a 3 month period (January to March or April to June or July to August or October to December) of a year
"Retail Leased Line"	refer to a Leased Line supplied to an Eircom retail customer or internally to Eircom for internal use which can be delivered as a Leased Line or used as an access path to various other services e.g. MPLS, Frame relay etc. Excludes digital access paths used to supply ISDN PRA services
"SLA"	means relevant or corresponding Service Level Agreement as published on the Eircom website
"Standard Order (Leased Line)"	Order which has been designated as "Standard Order" as per corresponding SLA published on the Eircom wholesale website
"Sub 10Mb/s Leased Lines"	Leased Lines of bandwidth less than 10Mb/s
"Sub 2Mb/s Leased Lines"	Leased Lines of bandwidth 64Kb/s up to 1984Kb/s

"Traditional Leased Line"	a Leased Line delivered over a SDH/PDH network architecture of PDH/SDH bandwidths 64Kb/s and upwards, with corresponding interface standards (X.21, G.35, G703/G.704 etc). The current wholesale variants offered by Eircom are wholesale Leased Lines and PPC (Partial Private Circuits).
"Leased Line Connection Order"	means an order for a Leased Line which has been lodged by the appropriate means (by email or any other acceptable electronic means and that is not later deemed invalid
"**Working Hour**"	means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)
"Working Day"	means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and
"Year"	means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

Metrics Associated with the Supply of Leased Line Services

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They will apply as relevant to each individual metric as laid out in the associated tablature form

The metrics for Traditional Leased Lines are the measurement of the delivery performance of the Eircom Retail Leased Line service and the performance of the combined wholesale services: Wholesale Leased Lines and Partial Private Circuits End User Links (PPC EUL's).

Metric Reference	Title	Definition
5.1.1 to 5.1.24	Average delivery supply-times for traditional Leased Lines Sub 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths less than 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.25 to 5.1.48	Average delivery supply-times for traditional Leased Lines of 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth equal to 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.49 to 5.1.72	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths greater than 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.73 to 5.1.96	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths less than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period

5.1.97 to 5.1.120	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.121 to 5.1.144	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths less than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.145 to 5.1.168	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.169 to 5.1.192	Average delivery supply-times for traditional Leased Lines Sub 2Mb for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths 64Kb/s to 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders, for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specific 3 month quarterly time-period
5.1.193 to 5.1.216	Average delivery supply-times for traditional Leased Lines of 2Mb/s for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth of 2Mb/s for retail orders, in categories for standard, project and non-standard designated orders, for all orders (100%) and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), delivered in a specific 3 month quarterly time-period
5.1.217 to 5.1.240	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth of 2Mb/s for retail orders, in categories for standard, project and non-standard designated orders, for all orders (100%) and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specific 3 month quarterly time-period

5.1.241 to 5.1.264	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for retail customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths below 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), delivered in a specified 3 month quarterly time-period
5.1.265 to 5.1.288	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.289 to 5.1.312	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths below 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.313 to 5.1.336	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period

Metrics associated with Designation of Service Orders

Metrics associated with designation of Leased Line orders received by Eircom

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They will apply as relevant to each individual metric as laid out in the associated tablature form.

The metrics for Traditional Leased Lines are the measurement of the order designation of the Eircom Retail Leased Line service and the performance of the combined wholesale services: Wholesale Leased Lines and Partial Private Circuits End User Links (PPC EULs). Similarly for Ethernet services, the metrics refer to customer portion of the services and exclude any orders for the interconnection portion of the various legacy and NGN services.

Metric Reference	Title	Definition
5.2.1 to 5.2.9	Order designation statistics for traditional Leased Lines Sub 2Mb/s for wholesale customers	Percentage of orders for traditional Leased Lines of bandwidths 64kb/s to 1984kb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.10 to 5.2.18	Order designation statistics for traditional Leased Lines of 2Mb/s for wholesale customers	Percentage of orders for traditional leased of bandwidth 2Mb/s which are categorised as being standard, project and non-standard, for wholesale orders only as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.19 to 5.2.27	Order designation statistics for traditional Leased Lines greater than 2Mb/s for wholesale customers	Percentage of orders for traditional leased of bandwidth s greater than 2Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.28 to 5.2.36	Order designation statistics for legacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.37 to 5.2.45	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for wholesale customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period

5.2.46 to 5.2.54	Order designation statistics for NGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's , measured monthly, of those order placed within a specified 3 monthly time period
5.2.55 to 5.2.63	Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for wholesale customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.64 to 5.2.72	Order designation statistics for traditional Leased Lines Sub 2Mb/s for retail customers	Percentage of orders for traditional Leased Lines of bandwidths 64kb/s to 1984kb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.73 to 5.2.81	Order designation statistics for traditional Leased Lines of 2Mb/s for retail customers	Percentage of orders for traditional leased of bandwidth 2Mb/s which are categorised as being standard, project and non-standard, for retail orders only as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.82 to 5.2.90	Order designation statistics for traditional Leased Lines greater than 2Mb/s for retail customers	Percentage of orders for traditional leased of bandwidth s greater than 2Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.91 to 5.2.99	Order designation statistics for legacy Ethernet Leased Lines Sub 10Mb/s for retail customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's placed within the given time period
5.2.100 to 5.2.108	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for retail customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's , measured monthly, of those order placed within a specified 3 monthly time period
5.2.109 to 5.2.117	Order designation statistics for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a

specified 3 monthly time period

| 5.2.118 to 5.2.126 | Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for retail customers | Percentage of orders for NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period |

Metrics associated with Repair of Services

Metrics associated with repair of Leased Line services

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They will apply as relevant to each individual metric as laid out in the associated tablature form.

There is no differentiation made between the various technologies for the repair metrics. The wholesale metrics are the measure of repair performance for the combined wholesale offerings: Wholesale Leased Lines, Partial Private Circuit End user Links and the various Ethernet equivalents (Wholesale Ethernet Access Circuits provided on the Ethernet legacy products and on the Eircom NGN, Wholesale Symmetric Ethernet Access circuits).

Metric Reference	Title	Definition
5.3.1 to 5.3.9	Percentage of faults on wholesale Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	Percentage of faults (excludes non-faults and co-op faults) reported on wholesale Leased Lines repaired within 8, 24 and after 24 hours, of all faults reported, measured on a monthly basis, within a given 3 month quarterly period
5.3.10 to 5.3.18	Percentage of faults on retail Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	Percentage of faults (excludes non-faults and co-op faults) reported on retail Leased Lines repaired within 8, 24 and after 24 hours, of all faults reported, measured on a monthly basis, within a given 3 month quarterly period

Metric Main Reference Number	Delivery Statistics for the Leased Line market Qtr X, Year Y	Month-Year							
	Section 1 Wholesale only	100% of Orders				97.5% of Orders			
	Delivery lead-time for wholesale orders including WLL, EUL's and Ethernet equivalents (excludes PPC Transport Link or Ethernet EIL -Ethernet Inerconnection Links)	Standard	Project	Non Standard	Total	Standard	Project	Non Standard	Total
5.1.1 to 5.1.24	Average delivery supply-times for traditional Leased Lines Sub 2Mb/s for wholesale customers	1.1	1.2	1.3	1.4	1.5	1.6	1.7	1.8
5.1.25 to 5.1.48	Average delivery supply-times for traditional Leased Lines of 2Mb/s for wholesale customers	1.25	1.26	1.27	1.28	1.29	1.30	1.31	1.32
5.1.49 to 5.1.72	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for wholesale customers	1.49	1.50	1.51	1.52	1.53	1.54	1.55	1.56
5.1.73 to 5.1.96	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	1.73	1.74	1.75	1.76	1.77	1.78	1.79	1.80
5.1.97 to 5.1.120	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	1.97	1.98	1.99	1.100	1.101	1.102	1.103	1.104
5.1.121 to 5.1.144	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	1.121	1.122	1.123	1.124	1.125	1.126	1.127	1.128
5.1.145 to 5.1.168	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	1.145	1.146	1.147	1.148	1.149	1.150	1.151	1.152

Wholesale Supply: Sample is for one month of a quarter. Full table will expand to 3 months for each quarter.

	Section 2 Retail only market	100% of Orders				97.5% of Orders			
	Delivery lead time for orders for Eircom retail customers	Standard	Project	Non Standard	Total	Standard	Project	Non Standard	Total
5.1.169 to 5.1.192	Average delivery supply-times for traditional Leased Lines Sub 2Mb for retail customers	1.169	1.170	1.171	1.172	1.173	1.174	1.175	1.176
5.1.193 to 5.1.216	Average delivery supply-times for traditional Leased Lines of 2Mb/s for retail customers	1.193	1.194	1.195	1.196	1.197	1.198	1.199	1.200
5.1.217 to 5.1.240	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for retail customers	1.217	1.218	1.219	1.220	1.221	1.222	1.223	1.224
5.1.241 to 5.1.264	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for retail customers	1.241	1.242	1.243	1.244	1.245	1.246	1.247	1.248
5.1.265 to 5.1.288	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	1.265	1.266	1.267	1.268	1.269	1.27	1.271	1.272
5.1.289 to 5.1.312	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	1.289	1.290	1.291	1.292	1.293	1.294	1.295	1.296
5.1.313 to 5.1.336	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	1.313	1.314	1.315	1.316	1.317	1.318	1.319	1.320

Retail Supply: Sample is for one month of a quarter. Full table will expand to 3 months for each quarter

Reference Number	% Order Designation Statistics for the Leased Line market Qtr X, Year Y	Month-Year		
	Section 1 Wholesale only	**100% of Orders**		
	Delivery lead-time for wholesale orders including WLL, EUL's and Ethernet equivalents (excludes interconnects: PPC Transport Link or Ethernet EIL -Ethernet Inerconnection Links)	**% Standard**	**% Project**	**% Non Standard**
5.2.1 to 5.2.9	Order designation statistics for traditional Leased Lines Sub 2Mb/s for wholesale customers	2.1	2.2	2.3
5.2.10 to 5.2 18	Order designation statistics for traditional Leased Lines of 2Mb/s for wholesale customers	2.10	2.11	2.12
5.2.19 to 5.2.27	Order designation statistics for traditional Leased Lines greater than 2Mb/s for wholesale customers	2.19	2.20	2.21
5.2.28 to 5.2.36	Order designation statistics forlegacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	2.28	2.29	2.30
5.2.37 to 5.2.45	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for wholesale customers	2.37	2.38	2.39
5.2.46 to 5.2.54	Order designation statistics forNGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	2.46	2.47	2.48
5.2.55 to 5.2.63	Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for wholesale customers	2.55	2.56	2.57

Wholesale Order Designation: Sample is for one month of a quarter. Full table will expand to 3 months for each quarter

	Section 2 Retail only market	100% of Orders		
	Order designation for orders for Eircom retail orders only	% Standard	% Project	% Non Standard
5.2.64 to 5.2.72	Order designation statistics for traditional Leased Lines Sub 2Mb/s for retail customers	2.64	2.65	2.66
5.2.73 to 5.2.81	Order designation statistics for traditional Leased Lines of 2Mb/s for retail customers	2.73	2.74	2.75
5.2.82 to 5.2.90	Order designation statistics for traditional Leased Lines greater than 2Mb/s for retail customers	2.82	2.83	2.84
5.2.91 to 5.2.99	Order designation statistics forlegacy Ethernet Leased Lines Sub 10Mb/s for retail customers	2.91	2.92	2.93
5.2.100 to 5.2.108	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for retail customers	2.100	2.101	2.102
5.2.109 to 5.2.117	Order designation statistics for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	2.109	2.110	2.111
5.2.118 to 5.2.126	Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for retail customers	2.188	2.189	2.190

Retail Order Designation : Sample is for one month of a quarter. Full table will expand to 3 months for each quarter

Leased Line Repair Statistics (percentage of faults fixed within defined time periods) excludes non-faults and co-op faults									
Year, Quarter	**QX, 20XX**								
Reference Number	Section 1 Percentage of faults on wholesale Leased Lines fixed within designated time periods								
	Month 1			Month 2			Month 3		
Percentage of faults on wholesale Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours
5.3.1 to 5.3.9	3.1	3.2	3.3	3.4	3.5	3.6	3.7	3.8	3.9
Reference Number	Section 2 Percentage of faults on retail Leased Lines fixed within designated time periods								
	Month 1			Month 2			Month 3		
Percentage of faults on retail Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours	% Faults repaired within 8 hours	% Faults repaired within 24 hours	% Faults repaired after 24 hours
5.3.10 to 5.3.18	3.10	3.11	3.12	3.13	3.14	3.15	3.16	3.17	3.18

Wholesale and Retail Fault Repair;

Questions

> **Q. 9.** Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the market for Terminating Segments of Wholesale Leased Line market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Leased Line market? Please provide reasons for your answers.

12 Regulatory Impact Assessment

12.1   The purpose of a Regulatory Impact Assessment (RIA) is to analyse the likely effect of proposed new regulation or regulatory change. The RIA should help identify regulatory options, and determine which option is likely to be most effective in achieving the regulatory objective. The RIA will also assess the impact of these regulatory options on stakeholders.

12.2   ComReg's approach to RIA is set out in the Guidelines published in August 2007.[51] This approach was developed taking into account the Government's Better Regulation programme.[52] ComReg's ultimate aim in conducting a RIA is to ensure that all proposed measures are appropriate, proportionate and justified.

12.3   In the case at hand, ComReg is considering whether to augment/supplement existing transparency and non-discrimination obligations imposed on the SMP operator in a number of markets that are already regulated. The proposed further specification of the transparency and non-discrimination remedies is intended to assist ComReg in ensuring the effective application of the non-discrimination remedy in practice.

12.4   In assessing different regulatory options, the RIA will be structured as follows:
The principles applied when assessing and selecting remedies
Does current regulation achieve objectives as effectively as possible?
Are changes to regulation required to improve transparency?
The impact of the proposed changes
  Conclusion – assessing the impacts and choosing the best option
The principles applied when assessing and selecting remedies

12.5   The RIA carried out by ComReg and presented in this Consultation followed ComReg's Guidelines[53] and took close account of the Government's Better Regulation agenda, and of international best practice (by, for example, considering developments in thinking about RIA published by the EC and the OECD). This was done in accordance with Ministerial Policy Direction 6.54

12.6   In adhering to the structure in section 12.4 above for the purposes of this assessment, ComReg's approach to RIA follows five main steps:
- Step 1: describe the policy issue and identify the objectives
- Step 2: identify and describe the regulatory options
- Step 3: determine the impacts on stakeholders
- Step 4: determine the impacts on competition
- Step 5: assess the impacts and choose the best option

12.7   In choosing remedies pursuant to Regulation 9(6) of the Access Regulations, ComReg must ensure they are:
- based on the nature of the problem identified;

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51 "Guidelines on ComReg's Approach to Regulatory Impact Assessment" ComReg doc 07/56a, 10 August 2007

52 Regulating Better, Department of the Taoiseach, January 2004

53 ComReg 07/56a

54 Policy Directions made by Dermot Ahern T.D. (the then) Minister for Communications, Marine and Natural Resources on 21 February, 2003 and 26 March, 2004

- proportionate and justified in the light of the objectives laid down in section 12 of the Communications Regulation Act of 2002; and
- only imposed following consultation in accordance with Regulations 19 and 20 of the Framework Regulations.

12.8 The relevant objectives, as set out in section 12 of the Communications Regulation Act, 2002 which must be taken into account when applying remedies are as follows:
- to promote competition;
- to contribute to the development of the internal market; and
- to promote the interests of users within the Community.

12.9 These objectives together guide ComReg in its assessment of regulatory options, and ultimately in the selection of a proposed remedy.

What are the objectives of ComReg's proposal to augment the transparency obligations?

12.10 In line with the principles set out above, a key ComReg objective is to ensure that transparency exists in the provision of wholesale products by Eircom. Transparency is intended to promote competition in the interest of telecommunications users by ensuring that all operators and ComReg can observe those price and non-price terms which underpin important investment decisions concerning entry and expansion in markets where Eircom has been designated with significant market power (SMP). Transparency obligations are in part designed to allow ComReg to determine whether the SMP operator is meeting its non-discrimination obligations. Non-discrimination obligations require the SMP operator inter alia to supply products and services of an equivalent quality to all operators, including to its own internal operation. Effective non-discrimination obligations are thus critical in promoting undistorted competition in the best interests of end users.

12.11 Improved transparency around wholesale product performance would assist OAOs in comparing critical aspects of wholesale products and services with the retail equivalent and provide them with an objective basis for future investment decisions in the markets in question. Performance metrics would assist OAOs in analysing product performance over time. Evidence, through published KPIs, of a superior retail product or evidence of a degraded wholesale product is critical proof for OAOs when negotiating with Eircom for better services or to maintain an appropriate standard of service. ComReg considers that this would, in turn, improve the quality of wholesale products and promote more effective competition in retail markets.

12.12 Improved transparency would also provide an objective data source for ComReg for monitoring compliance with non-discrimination obligations while further equipping Eircom with a means for verifying its own performance, thereby contributing to a more effective regulatory process for handling potential complaints/disputes.

12.13 Ultimately, ComReg considers that making wholesale product performance data available would assist OAOs in competing for customers in downstream retail markets. Such information would enable OAOs to confirm to customers the quality of service assurance available and also provide evidence of service quality to retail customers. End users would in turn benefit from greater

information on the retail choices available to them and increased confidence in competing retail operators. Enhanced retail competition should also deliver important benefits to consumers in terms of price and product innovations over the medium to longer term.

12.14 Does current regulation achieve objectives as effectively as possible?

12.15 KPIs are not currently published for Eircom's wholesale products, though Eircom does provide performance data to ComReg on a regular basis for other purposes relating to different regulatory functions.

12.16 For this reason, ComReg needs to assess whether (and for what purpose) the augmenting/supplementing of transparency remedies is proportional and justified. The first step is to review: (a) the type of information that is currently being collected for each market, and (b) how it can be used by ComReg.

12.17 The following information is currently available to ComReg:

12.18 Universal Service Obligation (USO) statistics

12.19 This information provides (amongst other things) statistics demonstrating the performance of Eircom's voice services. The USO definitions consider metrics under the following headings: Service Delivery, Service Provisioning and Fault Management. The USO statistics, however, offer less depth of detail than what is being sought by ComReg in this proposal, and do not allow ComReg, operators and end users to make effective wholesale/retail comparisons.

12.20 ComReg therefore proposes to use the agreed USO metrics as a template for defining KPIs for wholesale products and services, allowing consistency, continuity, and clarity in the proposed obligations, while further enhancing transparency by providing a basis for comparison between the performance of Eircom's wholesale products and its retail products.

12.21 ComReg Quarterly Report and Service Level Agreement (SLA) data

12.22 ComReg's Quarterly Report features an appendix detailing the performance of the wholesale offering in the Retail Narrowband Access market (the SB-WLR[55] product) against the Service Level Agreement (SLA).

12.23 ComReg also receives SLA information from Eircom on such wholesale products as LLU[56], Leased Lines and PPCs[57]. However, although SLA information on all of the above wholesale products is already being produced by Eircom, only the information provided relating to the SB-WLR product is publicly available at present via the Quarterly Report. Product performance data for Leased Lines and LLU is not publicly available to operators or end-users, thereby constraining their ability to monitor Eircom's ongoing performance.

12.24 In conducting its regulatory business, ComReg endeavours to take into account and leverage existing reporting capabilities as far as possible. The proposed amendments are therefore intended to align as much as possible with existing reporting mechanisms, and are incremental to information already supplied to ComReg in this market. However, ComReg's intention is that some of the

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55 Single Billing and Wholesale Line Rental

56 Local Loop Unbundling

57 Partial Private Circuits

information currently provided will be presented in a different and more transparent way/made publicly available in order to ensure that wholesale/retail comparisons can be readily made so as to achieve the objectives set out in the previous section.

12.25 Are changes to regulation required to improve transparency and ensure the effective application of non-discrimination?

12.26 ComReg considers that the processes established under the existing transparency remedies in the following markets should be enhanced in order to improve transparency concerning Eircom's performance in the provision of key wholesale inputs for the competitive process:

- The Retail Narrowband Access (RNA) market,
- The Terminating Segments of Wholesale Leased Lines (WLL) market,
- The Wholesale Physical Network Infrastructure Access (WPNIA) market, and
- The Wholesale Broadband Access (WBA) market,

12.27 Enhancements to existing regulation are required on the grounds that the existing transparency and information gathering processes do not provide a complete set of performance metrics required in order to effectively regulate the markets set out above. The current tools available to ComReg do not facilitate and support the regular and centralised publication of Eircom's wholesale product performance metrics. Augmentation of these existing tools would improve transparency in the provision of Eircom's wholesale products, by ensuring that wholesale customers are more informed about the performance of Eircom's regulated wholesale products relative to its own retail arm, and that information is presented in an 'easily accessible' and consolidated manner.

12.28 In order to better achieve the objectives set out above, ComReg proposes to augment existing transparency obligations to require that Eircom provide specific performance data to ComReg for publication in relation to the wholesale markets referred to above.

12.29 As discussed in the previous section, while some product performance data is available to ComReg under the existing arrangements with Eircom, the data is partly limited in scope, and in terms of what it can be used for and whom it can be shared with (due to confidentiality).

12.30 The enhancements proposed by ComReg are designed specifically to address the shortcomings identified by ComReg in the existing transparency obligations and information gathering tools (described in the previous section). The main tenets of the proposed reinforcements to the transparency remedies are as follows:

12.31 To support the gathering of a complete set of performance metrics from Eircom in respect of wholesale products that fall within each of the markets set out above, on a regular basis

12.32 To facilitate and support the regular publication of Eircom's wholesale product performance metrics

12.33 To centralise the collection and publication of those performance metrics, in order to ensure that a consistent approach is taken across the relevant markets, and to improve accessibility and usability of those metrics for interested parties.

12.34 Gathering a complete set of performance metrics

12.35 At present, ComReg collects various sets of product performance metrics from Eircom. However, that information is sourced for a variety of different purposes and, in some cases, ComReg does not have complete information relating to the performance of Eircom's regulated wholesale products (see the previous section). In such cases the information does not fully satisfy ComReg's needs for the purpose of ensuring non-discrimination between Eircom's wholesale and retail products.

12.36 The proposals presented by ComReg in this paper are intended to ensure that a complete set of relevant performance data is made available, on a regular basis, in respect of the markets set out above.

12.37 Under the proposal presented in this paper, ComReg could require the publication of a full set of performance data designed specifically to facilitate transparency in the provision of regulated products. For example, in the RNA market ComReg has proposed that Eircom should provide it with metrics under the headings of Supply of Service, Assurance of Service and Repair of Service. These categories are further broken down into sub-categories which include, for example:
- Fault Repair within 5 Working Days
- Fault incident
- Average In-Situ Connection Time
- Fault Repairs within 2 Working Days
- Average Supply Time – Line Share

12.38 Similar reporting requirements would be proposed for the WBA market, in which case WBA would be compared to Eircom's DSL (retail broadband) service. The following are examples of metrics that Eircom would provide under ComReg's proposed approach:

12.39 DSL Connection by appointment date
- Quality of DSL Supply
- DSL Service Availability

12.40 In the case of WPNIA, ComReg would seek to use currently produced information as far as possible, a significant proportion of which has not been made publicly available to date, as well as introducing enhancements to the data set as appropriate. Examples of metrics which would be calculated for both the Unbundled Local Metallic Path and Line Share products under the proposed approach include:
- Connections in 2 Weeks
- Average supply time
- Quality of Supply
- Fault Repairs within X Working days
- Average Fault Repair Time

12.41 The Leased Line metrics proposed in this consultation would be broadly based on the current Leased Line and PPC SLAs which are not published at present.

Facilitating the publication of product performance metrics

12.42 In several cases, the existing metrics collection tools available to ComReg do not allow for the publication of data. ComReg's inability to publish data limits its use as a means of facilitating competition in the relevant markets. In

particular, the publication of this data would improve transparency, and thus better achieve a number of ComReg's objectives.

12.43 Therefore, ComReg proposes that Eircom would be required to publish equivalent data for its equivalent retail products, on a regular basis, so that wholesale operators and retail customers (as well as ComReg) can compare the ongoing performance of Eircom's retail and wholesale products. ComReg would require that Eircom publish wholesale product performance data on its website for public viewing.

12.44 The ability to compare retail and wholesale metrics would offer a new level of analysis for OAOs, and would assist OAOs in monitoring and achieving a better service quality from Eircom.

12.45 Centralising the metrics collection process and the publication of metrics

12.46 At present, Eircom sources product performance data from Eircom in carrying out various tasks within its broad regulatory remit. However, in each case the information is collected and presented for a different purpose, and in a varied manner. Often this information would not be publicly available. Even where information is publicly available, it is frequently embedded within reports (rather than published as a product performance report in its own right) and presented in a way that is less transparent and accessible to interested parties.

12.47 ComReg proposes to centralise the process for gathering and the publication of Eircom's wholesale performance metrics. The data would be published on a regular basis, for the purpose of informing interested parties for the purpose of facilitating competition.

12.48 The centralised structure of the metrics collection and publication proposed in this paper would facilitate an important improvement in transparency, and in the accessibility of Eircom's wholesale product performance data.

12.49 ComReg considers that the measures proposed above relating to the enhancement of the transparency remedies are the most effective means of achieving ComReg's objectives of transparency and non-discrimination to the benefit of competition and end-users. ComReg considers that the proposed measures would improve its ability to apply non-discrimination obligations in the relevant markets, and in doing so improve the effectiveness of regulation.

12.50 The impact of the proposed changes:

Impact on Stakeholders

12.51 This section summarises the impact of the proposed changes on stakeholders. ComReg seeks to consider the potential costs incurred by Eircom in complying with the proposed extended obligations while also considering and evaluating the potential benefits that would accrue to Eircom, its wholesale customers, and end users as a result of the obligations being imposed.

Eircom

12.52 ComReg acknowledges that additional effort would be involved for Eircom in order to produce the product performance metrics associated with its regulated wholesale products. However, the additional effort should not be overly burdensome for Eircom, particularly since it already produces many of the metrics included within this obligation.

12.53 In formulating the proposed KPIs, ComReg has been mindful of measurements already taken by Eircom in a range of areas for current operational purposes. ComReg considers that where Eircom would have additional costs, these costs should not be substantial given that the net effect of the proposals envisaged by this consultation will, in many cases, be the publication of statistics already gathered and compiled with certain supplementary data to enhance wholesale/retail comparisons.

12.54 The publication of performance metrics would also generate benefits for Eircom, since the published data would allow Eircom greater visibility over the performance of its own wholesale products, and to demonstrate to its wholesale customers that its wholesale products are complicit with non-discrimination obligations.

Wholesale customers

12.55 The proposed changes would improve the ability of wholesale customers to compare the performance of Eircom's regulated wholesale products with that of its retail products. The improved transparency would instil wholesale customers with greater confidence in Eircom's regulated wholesale products, by offering greater knowledge on the performance of Eircom's wholesale product suite. As a result of increased visibility of Eircom's ongoing wholesale performance, wholesale customers should have greater confidence and be more comfortable investing in markets dependent upon Eircom's regulated wholesale inputs. This should in turn promote competition in the associated retail markets.

Consumers

12.56 The proposed changes would afford consumers the confidence that Eircom's competitors are able to compete on a level playing field in the affected retail markets, and provide consumers with greater clarity around the performance of their telecommunications products. Increasing consumer confidence in competing retail operators should lead to greater competition in retail markets, which would in turn generate further benefits for end users though improved quality of service and competitive pricing

ComReg

12.57 The proposed changes would provide a mechanism that allows ComReg to effectively and efficiently monitor Eircom's compliance with non-discrimination remedies established in the aforementioned markets. In addition, the changes would also meet ComReg's ultimate strategic objective of promoting competition in the concerned markets for the benefit of consumers.

Conclusion – assessing the impacts and choosing the best option

12.58 Having assessed the potential costs and benefits involved, ComReg considers that the enhancements proposed in this paper are justified, reasonable and proportionate for the following reasons:

- The costs incurred in implementing the proposed measures are not considered overly burdensome, taking account of the measurements already produced by Eircom in a range of areas for current operational purposes.

- The publication of product performance metrics enables Eircom to demonstrate the performance of its wholesale products to existing and potential wholesale

customers, as well as compliance with regulatory obligations imposed by ComReg.

- The publication of product performance metrics could be expected to occur naturally in competitive markets, where competing providers strive to demonstrate value to potential customers in their products. As such, the voluntary publication of product performance information of this nature would be considered reasonable under competitive and unregulated market conditions.

- The benefits would be substantial in respect of enhanced investor and consumer confidence in Irish telecommunications markets and the resulting promotion of competition and reduced ongoing regulation costs. The benefits would apply across the board to Eircom, wholesale customers, consumers, and to ComReg.

12.59 On the basis of the foregoing, the anticipated benefits associated with the proposed changes, namely a strengthened regulatory and competitive process capable of delivering important pricing and product innovations to end-users, are considered to exceed the administrative costs involved.

Questions

> **Q. 10.** **Respondents are requested to provide views on whether the proposed conditions are proportionate and justified and offer views on other factors (if any) ComReg should consider in completing its Regulatory Impact Assessment.**

13 Legal Basis

General Legal Basis

13.1 In accordance with Section 10(1)(da) of the Act one of the functions of ComReg is:

(da) for the purpose of contributing to an open and competitive market and also for statistical purposes, to collect, compile, extract, disseminate and publish information from undertakings relating to the provision of electronic communications services, electronic communications networks and associated facilities and the transmission of such services on those networks"

13.2 Further, at Section 12(3) of the Act, ComReg has the obligation, when carrying out its functions, of ensuring that the measures taken by it are proportionate.

13.3 In the Access Regulations, Regulation 9 provides that when an operator has been designated with SMP the regulator shall impose, amend or withdraw the obligations as set out in Regulation 10-14 of the Access Regulations as it considers appropriate.

13.4 Regulation 10(1) of the Access Regulations provides that obligations can be imposed on an operator to ensure transparency in relation to interconnection, access or both interconnection and access, requiring such operator to make public specified information, such as accounting information, technical specification, network characteristics, terms and conditions for supply and use and prices.

13.5 In addition, ComReg can specify as part of the transparency obligation the precise information that is to be made available, the level of detail required and the manner of publication.

13.6 Finally, ComReg can also impose the obligation of non-discrimination as set out in Regulation 11 of the Access Regulations, in particular the following:

13.7 *The Regulator may in accordance with Regulation 9 impose on an operator obligations of non-discrimination in relation to interconnection, access or both interconnection and access.*

13.8 *(2) Any such obligations shall ensure, in particular, that the operator:*

(a) applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and

(b) provides services and information to others under the same conditions and of the same quality as the operator provides for its own services or those of its subsidiaries or partners.

13.9 The obligations of transparency and non-discrimination were imposed on Eircom in the following markets, following designations of SMP:

- ComReg decision No.05/11 Market Analysis – Wholesale Broadband Access – Designation of SMP and Related Remedies, dated 17 February 2005

- ComReg Decision No. D05/10 Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4) , dated 20 May 2010

- ComReg decision No. 08/103 Market Analysis – Leased Lines Market Review, dated 22 December 2008

- ComReg Decision No. 07/61, Decision Notice- Market Analysis : Retail Fixed Narrowband Access Markets, dated 24 August 2007 ("the Relevant Markets").

13.10 Regulation 17 provides that for the purpose of further specifying requirements to be complied with relating to an obligation imposed by or under the Access Regulations, ComReg may issue directions to an undertaking to do or refrain from doing anything which the Regulator specifies. Therefore the KPIs discussed in this document are proposed to form directions to Eircom for the purposes of further specifying requirements in relation to its existing obligations of transparency and non-discrimination.

13.11 In addition, to requiring Eircom to provide ComReg with the information, in line with its relevant transparency obligations in the various markets, when directed pursuant to Regulation 17 of the Access Regulations, Regulation 17(11) of the Framework Regulations provides that:

The Regulator shall, subject to the protection of the confidentiality of any information which it considers to be confidential, publish from time to time such information as would, in the opinion of the Regulator, contribute to an open and competitive market.

13.12 As such, ComReg is also entitled to publish the information if it considers that it is going to contribute to an open and competitive market, subject to the protection of confidential information.

13.13 In addition, ComReg is also entitled to publish information provided by Eircom in accordance with Regulation 18(1)(d) of the Authorisation Regulations provides that:

The Regulator may require an undertaking to provide information under the general authorisation in respect of a licence or a right of use for numbers or a specific obligation but only where such requirement is proportionate and objectively justified for:

(d) publication of comparative overviews of quality and price of services for the benefit of consumers,

13.14 Under section 6.1 of the general conditions of the General Authorisation ComReg, in document 03/81 R1 dated 25 July 2003, ComReg provided for the following:

 6.1 The Authorised Person shall provide such information requested from time to time by the Commission, in the form and at the times specified by the Commission, for the purpose of the objectives set out in Regulations 17(1) and 18(1) of the Authorisation Regulations and in Regulation 17(1) of the Framework Regulations; and in accordance with the provisions of Regulation 18(3) of the Authorisation Regulations and Regulation 17(2) of the Framework Regulations.

ComReg believes that it is necessary to request Eircom to publish the KPIs associated with the inputs to its self supplied services so as add to Eircom's obligation of transparency and for the purposes of Eircom's non-discrimination obligation, the comparison with the KPIs associated with the inputs to Eircom's equivalent wholesale offerings. ComReg believes that this will provide for consumers a comparative overview of quality of services as between Eircom and OAOs services. ComReg believes that the further specification proposed by this consultation made in accordance with Eircom's transparency and non-discrimination obligations, already imposed in each relevant market, will provide clear information for all stakeholders, including OAOs, end-users, Eircom and ComReg.

13.15 Finally, ComReg believes that having taken into consideration information already available in the relevant markets, including the ComReg Quarterly Report, SLAs, USO targets and information provided on www.callcosts.ie, the proposed KPIs and the collective manner in which they are to be published, add to the information available, where there is a need for further information.

13.16 In light of all of the above, the publication of the KPIs will aid in assisting open and competitive markets and as such, this proposed decision is considered to be justified and proportionate at both a retail and wholesale level.

Legal Basis – Retail Narrowband Access Market

13.17 Eircom was designated with SMP in this market in accordance with ComReg decision No. 07/61, Decision Notice- Market Analysis: Retail Fixed Narrowband Access Markets, dated 24 August 2007 ("the Retail Narrowband Decision").

13.18 At section 6.4 of the Retail Narrowband Decision, Eircom has the obligation of non-discrimination. In addition, at section 6.7, ComReg determined that in furtherance of the non-discrimination obligation imposed on Eircom, the obligation of transparency in relation to the services to which the non-discrimination obligation applied was also to be imposed. It is not anticipated to impose KPIs on services that fall outside of those specified in the Retail Narrowband Decision.

13.19 Therefore, in accordance with the Retail Narrowband Decision and Regulations 9, 10, 11 and 17 of the Access Regulations and Regulation 14(1) of the Universal Service Regulations, ComReg proposes to further specify the requirements to be complied with in relation to Eircom's transparency and non-discrimination obligations, to direct Eircom to publish the relevant KPIs for the Retail Narrowband Market.

13.20 As discussed throughout this paper, ComReg believes that to give meaning to the KPIs relating to Eircom's wholesale offerings, and in accordance with Eircom's obligations of transparency and non-discrimination, it is essential to publish Eircom's KPIs for the equivalent self supplied products. As such, for the purpose of comparison and in accordance with Regulation 10 of the Access Regulations, Regulation 18(1)(d) of the Authorisation Regulations and section 6.1 of the General Authorisation, ComReg is entitled to require Eircom to publish the KPIs for the purposes of producing comparative overviews of quality and price of services for the benefit of consumers. ComReg proposes to

also publish, pursuant to Regulation 17(11) of the Framework Regulations, the KPIs to ensure that the information contributes to an open and competitive market.

13.21 In addition, to ComReg's obligation, at Section 12(3) of the Act, to be proportionate in relation to the carrying out of its functions, which includes being proportionate in relation to the transparency and non-discrimination obligations already in place in this market. ComReg is also required to be proportionate and objectively justified when requiring the information under Regulation 18(1)(d) of the Authorisation Regulations. ComReg believes that as it is giving consideration in this consultation to existing metrics and targets required of Eircom, this proposed decision is proportionate, as ComReg is collating information already provided and seeking further information that it considers is required for the purposes of aiding an open and competitive market. Therefore, the proposals in this consultation are justified and in line with ComReg's obligations and functions in Sections 10 and 12 of the Act.

Legal Basis – Wholesale Broadband Access

13.22 Eircom was designated with SMP in this market in accordance with ComReg Decision 03/05 (Doc No.05/11r) Market Analysis – Wholesale Broadband Access – Designation of SMP and Related Remedies, dated 17 February 2005 ("the WBA Decision").

13.23 At section 6 of the WBA Decision Eircom has the obligation of non-discrimination, in addition at section 7 Eircom also has the obligation of transparency.

13.24 Therefore in accordance with the WBA Decision, Regulations 10, 11 and 17 of the Access Regulations, ComReg proposes to further specify requirements to be complied with in relation to Eircom's transparency and non-discrimination obligations, to direct Eircom to publish the relevant KPIs for the WBA Market.

13.25 As discussed throughout this paper, ComReg believes that to give meaning to the KPIs relating to Eircom's wholesale offerings, and in accordance with Eircom's obligations of transparency and non-discrimination, it is essential to publish Eircom's KPIs for the equivalent self supplied products. As such, for the purpose of comparison and in accordance with Regulation 10 of the Access Regulations, Regulation 18(1)(d) of the Authorisation Regulations and section 6.1 of the General Authorisation, ComReg is entitled to require Eircom to publish the KPIs for the purposes of producing comparative overviews of quality of service for the benefit of consumers. ComReg proposes to also publish, pursuant to Regulation 17(11) of the Framework Regulations, the KPIs to ensure that the information contributes to an open and competitive market.

13.26 In addition, to ComReg's obligation, at Section 12(3) of the Act, to be proportionate in relation to the carrying out of its functions, which includes being proportionate in relation to the transparency and non-discrimination obligations already in place in this market. ComReg is also required to be proportionate and objectively justified when requiring the information under Regulation 18(1)(d) of the Authorisation Regulations. ComReg believes that as it is giving consideration in this consultation to existing metrics and targets

required of Eircom, this proposed decision is proportionate, as ComReg is collating information already provided and seeking further information that it considers is required for the purposes of aiding an open and competitive market. Therefore, the proposals in this consultation are justified and in line with ComReg's obligations and functions in Sections 10 and 12 of the Act.

Legal Basis – Wholesale Physical Network Infrastructure Access

13.27 Eircom was designated with SMP in this market in accordance with ComReg decision No.D05/10 Response to Consultation and Decision, Wholesale Physical Network Infrastructure Access, Market 4, dated 20 May 2010 ("the WPNIA Decision").

13.28 At section 9 of the WPNIA Decision Eircom has been given the obligation of non-discrimination. In addition, at section 10 Eircom have the obligation of transparency. In particular at section 10.9 it provides that Eircom are obliged to publish, on its publicly available website, information about performance metrics.

13.29 Therefore, in accordance with the express provision in the WPNIA Decision and Regulations 10, 11 and 17 of the Access Regulations, ComReg proposes to further specify requirements to be complied with in relation to Eircom's transparency and non-discrimination obligations to direct Eircom to publish the relevant KPIs for the WPNIA Market.

13.30 As discussed throughout this paper, ComReg believes that to give meaning to the KPIs relating to Eircom's wholesale offerings, and in accordance with Eircom's obligations of transparency and non-discrimination, it is essential to publish Eircom's KPIs for the equivalent/similar self supplied inputs that are within the WPNIA market. As such, for the purpose of comparison and in accordance with Regulation 10 of the Access Regulations, Regulation 18(1)(d) of the Authorisation Regulations and section 6.1 of the General Authorisation, ComReg is entitled to require Eircom to publish the KPIs for the purposes of producing comparative overviews of quality and price of services for the benefit of consumers. ComReg proposes to also publish the KPIs, pursuant to Regulation 17(11) of the Framework Regulations, to ensure that the information contributes to an open and competitive market.

13.31 In addition, to ComReg's obligation, at Section 12(3) of the Act, to be proportionate in relation to the carrying out of its functions, which includes being proportionate in relation to the transparency and non-discrimination obligations already in place in this market. ComReg is also required to be proportionate and objectively justified when requiring the information under Regulation 18(1)(d) of the Authorisation Regulations. ComReg believes that as it is giving consideration in this consultation to existing metrics and targets required of Eircom, this proposed decision is proportionate, as ComReg is collating information already provided and seeking further information that it considers is required for the purposes of aiding an open and competitive market. Therefore, the proposals in this consultation are justified and in line with ComReg's obligations and functions in Sections 10 and 12 of the Act.

Legal Basis – Terminating Segments of Wholesale Leased Lines

13.32 Eircom was designated with SMP in this market in accordance with ComReg decision No. 08/103 Market Analysis – Leased Lines Market Review, dated 22 December 2008 ("the Leased Lines Decision").

13.33 At section 8 of the Leased Lines Decision Eircom has the obligation of non-discrimination. In addition, at section 9 Eircom has an obligation of transparency imposed on it. At section 9.9 Eircom are obligated to publish KPIs, subject to further consultation.

13.34 Therefore, in accordance with the express provision in the Leased Lines Decision, ComReg, pursuant to this consultation and Regulations 10, 11 and 17 of the Access Regulations, proposes to further specify requirements to be complied with in relation to Eircom's transparency and non-discrimination obligations, to direct Eircom to publish the relevant KPIs for the Leased Lines Market. However, as discussed above, ComReg does not propose to set any KPI targets as part of this consultation.

13.35 As discussed throughout this paper, ComReg believes that to give meaning to the KPIs relating to Eircom's wholesale offerings, and in accordance with Eircom's obligations of transparency and non-discrimination, it is essential to publish Eircom's KPIs for the equivalent self supplied products. As such, for the purpose of comparison and in accordance with Regulation10 of the Access Regulations and 18(1)(d) of the Authorisation Regulations and section 6.1 of the General Authorisation, ComReg is entitled to require Eircom to publish the KPIs for the purposes of producing comparative overviews of quality of services for the benefit of consumers. ComReg proposes to also publish, pursuant to Regulation 17(11) of the Framework Regulations, the KPIs to ensure that the information contributes to an open and competitive market.

In addition, to ComReg's obligation, at Section 12(3) of the Act, to be proportionate in relation to the carrying out of its functions, which includes being proportionate in relation to the transparency and non-discrimination obligations already in place in this market. ComReg is also required to be proportionate and objectively justified when requiring the information under Regulation 18(1)(d) of the Authorisation Regulations. ComReg believes that as it is giving consideration in this consultation to existing metrics and targets required of Eircom, this proposed decision is proportionate, as ComReg is collating information already provided and seeking further information that it considers is required for the purposes of aiding an open and competitive market. Therefore, the proposals in this consultation are justified and in line with ComReg's obligations and functions in Sections 10 and 12 of the Act.

14 Submitting Comments

All comments are welcome; however it would make the task of analysing responses easier if comments were referenced to the relevant question numbers from this document.

The consultation period will run from 27 September 2010 to 8 November 2010 during which the Commission welcomes written comments on any of the issues raised in this paper.

Having analysed and considered the comments received, ComReg will publish a Response to Consultation which will, inter alia, summarise the responses received to the consultation. ComReg will also publish a Decision Instrument as appropriate.

In order to promote further openness and transparency ComReg will publish all respondents' submissions to this consultation, subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24

Please note

ComReg appreciates that many of the issues raised in this paper may require respondents to provide confidential information if their comments are to be meaningful.

As it is ComReg's policy to make all responses available on its web-site and for inspection generally, respondents to consultations are requested to clearly identify confidential material and place confidential material in a separate annex to their response.

Such Information will be treated subject to the provisions of ComReg's guidelines on the treatment of confidential information – ComReg 05/24

15 Appendix A – Decision Instrument and Directives

STATUTORY AND LEGAL POWERS

15.1 This Decision Instrument and these Directions are made by ComReg, pursuant to the following:

    I.   Sections 10 and 12 of the Act of 2002;

    II. Regulation 9 of the Access Regulations;

    III. Regulation 10 of the Access Regulations;

    IV. Regulation 11 of the Access Regulations;

    V. Regulation 17 of the Access Regulations;

    VI. Regulation 17(11) of the Framework Regulations;

    VII.   Regulation 18(1)(d) of the Authorisation Regulations;

    VIII.   Regulation 14(1) of the Universal Service Regulations;

    IX. Section 6.1 of the General Authorisation and;

    X. The below listed ComReg Market Analysis Decisions, designating Eircom with Significant Market Power, in the relevant markets in accordance with Regulations 25, 26 and 27 of the Access Regulations:

        a. ComReg decision No.05/11 Market Analysis – Wholesale Broadband Access – Designation of SMP and Related Remedies, dated 17 February 2005

        b. ComReg Decision No. D05/10 Market Review: Wholesale (Physical) Network Infrastructure Access (Market 4) , dated 20 May 2010

        c. ComReg decision No. 08/103 Market Analysis – Leased Lines Market Review, dated 22 December 2008

        d. ComReg decision No. 07/61, Decision Notice- Market Analysis : Retail Fixed Narrowband Access Markets, dated 24 August 2007

15.2 This Decision Instrument and these Directions are also made by ComReg having regard to and having taken in to account the following:

15.3 The Policy Directions made by the Minister for Communications, Marine and Natural Resources on 21 February 2003 and 26 March 2004;

15.4 The analysis and reasoning set out in ComReg Document No.[Consultation Document No.] and the submissions received from respondents in relation to same; and

15.5 The analysis and reasoning set out in ComReg Document No. ● [insert full title of the final Decision] which shall, as necessary, be construed together with this Decision Instrument and these Directions.

Scope and Application

15.6 This Decision Instrument and these Directions apply to Eircom.

15.7 This Decision Instrument and these Directions are binding upon Eircom and Eircom shall comply with them in all respects.

Publication of KPIs

15.8 Eircom is hereby directed to publish on a publically available website the KPIs as provided and defined in the attached Annexes 1-4.

15.9 Eircom is directed to publish the KPIs, as provided and defined in the attached Annexes 1-4, on a quarterly basis.

15.10 The KPIs referred to in section 15.9 shall be published no later than two months from the relevant quarter end.

15.11 ComReg may also publish the KPIs.

15.12 Eircom is directed to publish the information as per section 15.9, in a true and accurate manner. The information published in section 15.9 may be subject to checks by ComReg in accordance with its powers contained in the Act, including but not limited to sections 13D(1) and 39.

Severance and maintenance of provisions

15.13 If any section or provision or portion of this Decision Instrument and these Directions is found by a Court to be invalid, or otherwise judged by a Court to be unlawful, void or unenforceable, that section, provision or portion shall, to the extent required, be severed and rendered ineffective as far as possible, without modifying the remaining section(s), provision(s) or portion(s) of this Decision Instrument and these Directions and this shall not in any way affect the validity or enforcement of this Decision Instrument and these Directions.

Statutory Powers not affected

15.14 For the avoidance of doubt, nothing in this Decision Instrument and these Directions shall operate to limit ComReg in the exercise and performance of its statutory powers or duties under any primary or secondary legislation (in force on or prior to or after the effective date of this Decision Instrument and these Directions) from time to time as the occasion requires.

Effective Date and Duration

15.15 This Decision Instrument and these Directions shall be effective from the date of publication.

15.16 Sections 15.8 and 15.9 if this Decision Instrument shall be applied six months from the effective date.

15.17 This Decision Instrument and these Directions shall have full force and effect and shall remain in place until any further directions are issued by ComReg.

Review and Amendment

15.18 ComReg may review, withdraw or amend the KPIs, as set out in Annexes 1-4, from time to time further to a consultation if appropriate.

ALEX CHISHOLM
COMMISSIONER
THE COMMISSION FOR COMMUNICATIONS REGULATION
DATED THIS THE X DAY OF X 201X

Appendix 1

Preliminary definition of proposed metrics for Retail Narrowband Access Market

The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow. The products to be included are (i) SB-WLR, (ii) WLA and (iii) Eircom's Retail PSTN product.

The wholesale (SB-WLR and WLA) and Retail lines for which metrics should be calculated are PSTN and ISDN BRA. The wholesale order types that need to be measured are (i) all order types based on Electronic Enablement (including migrations to SB-WLR & WLA) and (ii) all order types requiring field intervention.

Proposed Definitions

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"All Retail PSTN Connections" means the sum of In-Situ Retail PSTN Connections and All Other Retail PSTN Connections;

"All Other Retail PSTN Connections" means Lines that are not In-Situ Retail PSTN Connections and includes those that are new-build and Pending Available;

"All SB-WLR Connections" means the sum of In-Situ SB-WLR Connections and All Other SB-WLR Connections;

"All Other SB-WLR Connections" means Lines that are not In-Situ SB-WLR Connections and includes those that are new-build and Pending Available;

"All WLA Connections" means the sum of In-Situ WLA Connections and All Other WLA Connections;

"All Other WLA Connections" means Lines that are not In-Situ WLA Connections and includes those that are new-build and Pending Available;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the SB-WLR order in the case of wholesale orders;

"Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"Electronically Enabled" means that the activation of SB-WLR on a Line can be carried out remotely, through systems configuration, without the need for physical intervention;

"SB-WLR Fault" means an incident of disrupted or degraded SB-WLR service;

"SB-WLR Fault Repair" means the repair of a SB-WLR Fault resulting in the restoration of the SB-WLR service to normal working order;

"SB-WLR Fault Repair Time" means the duration from the instant of a SB-WLR Fault Report to the instant of SB-WLR Fault Repair;

"SB-WLR Fault Report" means a SB-WLR Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ SB-WLR Connection" means an Electronically Enabled Line and includes pre cabled;

"WLA Fault" means an incident of disrupted or degraded WLA service;

"WLA Fault Repair" means the repair of a WLA Fault resulting in the restoration of the WLA service to normal working order;

"WLA Fault Repair Time" means the duration from the instant of a WLA Fault Report to the instant of WLA Fault Repair;

"WLA Fault Report" means a WLA Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ WLA Connection" means an Electronically Enabled Line and includes pre cabled;

"Retail PSTN Fault" means an incident of disrupted or degraded Retail PSTN service;

"Retail PSTN Fault Repair" means the repair of a Retail PSTN Fault resulting in the restoration of the Retail PSTN service to normal working order;

"Retail PSTN Fault Repair Time" means the duration from the instant of a Retail PSTN Fault Report to the instant of Retail PSTN Fault Repair;

"Retail PSTN Fault Report" means a Retail PSTN Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"In-Situ Retail PSTN Connection" means an Electronically Enabled Line and includes pre cabled;

"ISDN BRA" means Integrated Services Digital Network, Basic Rate Access;

"ISDN PRA" means Integrated Services Digital Network, Primary Rate Access;

"Line" means an Access Line which is providing a PSTN or an ISDN service to a Customer;

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU; (In the case of ISDN BRA, the boundary between Eircom's Network and the customer's private wiring the ISDN box i.e. the Siemens NT1 or NT1+ and not the NTU).

"SB-WLR Migration" means the provision of a SB-WLR on an existing active PSTN or SB-WLR Line with an other operator;

"**OAO**" means a legal entity which is designated under Section 4 (1) of the European Communities (Electronic Communications Network and Services) (Authorisation) Regulations 2003 (S.I N0.306 of 2003), to provide an electronic communications network or service;

"PSTN" means Public Switched Telephone Network;

"Quarter" (year) means a 3 month period (July to September, October to December, January to March or April to June) of a calendar year

"**SLA**" means a Service Level Agreement;

"**Supply Time**" means the duration from the date a Valid Service Order in respect of a Line is received by Eircom to the date the working service is made available for use.

"Valid Service Order" means an order by a Customer for a Line, that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"**Working Day**" means 09:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and

"**Year**" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

1.12 In-Situ Connections in 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN In-Situ Connections.

The figures for each Data Collection Period shall be calculated as follows:

Number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period where the Supply Time is within 2 Working Days   X100
Total number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

1.13 Average In-Situ Connection Time

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN In-Situ Connections.

The figure for each Data Collection Period shall be calculated as follows:

Sum of Supply Times of all In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period
Total number of In-Situ (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

1.14 All Other Connections in 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period where the Supply Time is within 10 Working Days X 100
Total number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

1.15 Average Supply Time – All Other Connections

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Sum of Supply Times of All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period
Total number of All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

1.16 Quality of Supply

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for all In-Situ and All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period X 100
Total number of In-Situ and All Other (SB-WLR/WLA/Retail PSTN) Connections completed within the Data Collection Period

Metrics associated with Repair of Services

1.17 Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 2 Working Days   X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.18 Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 5 Working Days   X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.19 Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period where the Fault Repair Time is within 10 Working Days   X 100
Total (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

1.20 Average Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Fault Repairs.

The figure for each Data Collection Period shall be calculated as follows:

Sum of (SB-WLR/WLA/Retail PSTN) Fault Repair Times of Fault Repairs completed within the Data Collection Period
Total number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

The metric should be expressed in Working Days.

1.21 Fault Incidence

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Total number of (SB-WLR/WLA/Retail PSTN) Faults for the Data Collection Period X 100

Average Number of (SB-WLR/WLA/Retail PSTN) Connections within the Data Collection Period

1.22 Quality of Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period. It shall be calculated for each of SB-WLR, WLA and Retail PSTN Connections.

The figure for each Data Collection Period shall be calculated as follows:

Number of (SB-WLR/WLA/Retail PSTN) Faults reported within 28 Days on Lines which had (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period   X100
Total number of (SB-WLR/WLA/Retail PSTN) Fault Repairs completed within the Data Collection Period

Appendix 2

Preliminary definition of proposed metrics for Wholesale Bitstream Access Market

15.19 The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow.

15.20 The lines for which metrics should be calculated are wholesale and retail Lines with active DSL services. Data for each of these will be displayed separately. The wholesale order types whose inputs need to be measured are (i) all order types based on Electronic Enablement (for example Bitstream Transfer orders) and (ii) all order types requiring field intervention.

Proposed Definitions of terms

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

"DSL Service" means high speed, 'always on' Internet connection that has a minimum download speed of 144kbit/s;

"ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the Bitstream order in the case of wholesale orders;

"Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"DSL" means digital subscriber line;

"DSL Connection" means the activation of a DSL Service on a DSL Line. It does not include any work performed at a Customer premises. (i.e. Self-install only)

"DSL Fault" means an incident of disrupted or degraded DSL Service excluding PSTN related faults;

"DSL Fault Report" means a DSL Fault reported by a Customer which is valid unless it can be reasonably attributed to components outside the Eircom network;

"DSL Fault Repair" means the repair of a DSL Fault resulting in the restoration of the DSL Service to normal working order;

"DSL Fault Repair Time" means the duration from the instant of a DSL Fault Report to the instant of DSL Fault Repair;

"DSL Lines" means those Access Lines that carry a DSL Service

"DSL Supply Time" means the duration from the date all Valid DSL Connection Orders in respect of a DSL Connection are received by Eircom to the date a working DSL Service is made available for use.

"Electronically Enabled" means that the activation of DSL on a Line can be carried out remotely, through systems configuration, without the need for physical intervention;

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU;

"Out of Service Time" means the duration from the instant a DSL Service becomes unavailable due to a DSL Fault to the instant a working DSL Service is made available for use;

"Quarter" (year) means a 3 month period (July to September, October to December, January to March or April to June) of a Year

"SLA" means a Service Level Agreement;

"Valid DSL Connection Order" means an order by a Customer for a DSL Connection, that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"Working Day" means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); ; and

"Year" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

2.4 DSL Connections in 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.

Data should be shown separately for orders based on Electronic Enablement and those requiring field intervention.

The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Connections completed within the Data Collection Period where the DSL Supply Time is within 5 Working Days   X 100
Total number of DSL Connections completed within the Data Collection Period

2.5 Average DSL Supply Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.

Data should be shown separately for orders based on Electronic Enablement and those requiring field intervention.

The figure for each Data Collection Period shall be calculated as follows:

Sum of DSL Supply Times for DSL Connections completed within the Data Collection Period
Total number of DSL Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

2.6 Quality of DSL Supply

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for DSL Connections completed within the Data Collection Period   X 100
Total number of DSL Connections completed within the Data Collection Period

Metrics associated with Repair of Services

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2.9 DSL Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 2 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.10   DSL Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 5 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.11   DSL Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 10 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

2.12   Average DSL Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of DSL Fault Repair Times of All Fault Repairs completed within the Data Collection Period
Total number of DSL Fault Repairs completed within the Data Collection Period

The metric should be expressed in Working Days.

2.13   Quality of Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of DSL Faults reported within 28 Days on Lines which had DSL Fault Repairs completed within the Data Collection Period}}{\text{Total number of DSL Fault Repairs completed within the Data Collection Period}} \times 100$$

Appendix 3

Preliminary definition of proposed metrics for Wholesale Physical Network Infrastructure Access Market

15.21 The wholesale inputs as delivered by Eircom's Wholesale products and the equivalents consumed in Eircom's Retail inputs are to be tracked in the proposed KPIs which follow.

15.22 It is ComReg's preliminary view that the Retail equivalent input to ULMP is a copper loop supplied to Retail as part of its PSTN service. Similarly the Retail equivalent input to Line Share would be the physical intervention (jumpering) required to provide a DSL service.

Proposed Definitions

"Access Line" means a connection from the Network Termination Point to the entry point to the local switch or remote concentrator, whichever is nearer. In many cases this is the main distribution frame;

 "ComReg" means the Commission for Communications Regulation established under Part 2 of the Communications Regulation Act, 2002;

"Customer" means a natural or legal person, or their representative making a valid request for a service at a specified address or the operator submitting the ULMP order in the case of wholesale orders;

 "Data" means the data relating to the calculation methodologies set out below;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data. There are four Data Collection periods in a Year. These are 1 July to 30 September; 1 October to 31 December; 1 January to 31 March and 1 April to 30 June;

"Day" means a calendar day;

"GLUMP" means the synchronised delivery of ULMP and GNP;

"Geographic Number Portability (GNP)" means a facility that allows an enduser to retain his/her telephone number when changing or switching service provider and describes the process used for this when the number concerned is a geographic number;

 "Line Share" means the facility whereby the high frequency service provided by the Access Seeker may be integrated over an existing PSTN Line over the same two-wire metallic path;

"Line Share Connection" means the completion of all network intervention required to provide a Line Share to an OAO. It does not include work performed at a Customer premises.

"Line Share Fault" means an incident of disrupted or degraded service on a ULMP (incl GLUMP) Connection;

"Line Share Fault Repair" means the repair of a ULMP Fault resulting in the restoration of ULMP Connection to normal working order;

"Line Share Fault Repair Time" means the duration from the instant of a ULMP Fault Report to the instant of a ULMP Fault Repair;

"Line Share Fault Report" means a ULMP Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network;

"Line Share Lines" means those Access Lines on which Line Share has been implemented;

"Line Share Supply Time" means the duration from the date all Valid Line Share Connection Orders are received by Eircom to the date a working Line Share Connection is made available for use.

"Network Termination Point" means the physical point at which a subscriber is provided with access to a public communications network; in the case of networks involving switching or routing, the network termination point is identified by means of a specific network address, which may be linked to a Customer number or name;

"Network Termination Unit" (NTU) – The NTU shall be the physical interface between the Access Line and the Customer Premises Equipment (CPE), and will mark the boundary between Eircom's Network and the customer's private wiring, which includes anything connected on the Customer's side of the NTU;

"Unbundled Local Metallic Path" or **"ULMP"** means an in-situ two wire metallic path connection between the OAO's block on the main distribution frame and the Network Termination Unit, (NTU), or Network Terminating Point where no NTU exists, in the Customer's premises;

"ULMP Connection" means the completion of all network intervention required to provide ULMP (incl GLUMP) to an OAO.

"ULMP Fault" means an incident of disrupted or degraded service on a ULMP (incl GLUMP) Connection;

"ULMP Fault Repair" means the repair of a ULMP Fault resulting in the restoration of ULMP Connection to normal working order;

"ULMP Fault Repair Time" means the duration from the instant of a ULMP Fault Report to the instant of a ULMP Fault Repair;

"ULMP Fault Report" means a ULMP Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network;;

"ULMP Lines" means those Access Lines on which ULMP has been implemented;

"ULMP Supply Time" means the duration from the date a Valid ULMP Connection Order is received by Eircom to the date a working ULMP Connection is made available for use;

"Valid Line Share Connection Order" means an order by an OAO for a Line Share Connection (whether made orally, or in writing, including by any electronic means, or in any other acceptable form), that is not later deemed invalid;

"**Working Hour**" means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)

"Working Day" means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and

"Year" means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services – Line Share

3.9 Line Share Connections in 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of Line Share Connections completed within the Data Collection Period where the Supply Time is within 5 Working Days   X 100
Total number of Line Share Connections completed within the Data Collection Period

3.10   Average Supply Time – Line Share

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of Line Share Supply Times of All Line Share Connections completed within the Data Collection Period
Total number of All Line Share Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

3.11 Quality of Line Share Supply

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of Faults reported within 28 Days for Line Share Connections completed within the Data Collection Period   X 100
Total number of Line Share Connections completed within the Data Collection Period

Metrics associated with Repair of Services

3.12 Line Share Fault Repairs within 2 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 2 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.13 Line Share Fault Repair within 5 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 5 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.14 Line Share Fault Repair within 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of DSL Fault Repairs completed within the Data Collection Period where the DSL Fault Repair Time is within 10 Working Days   X 100
Total DSL Fault Repairs completed within the Data Collection Period

3.15 Line Share DSL Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Sum of DSL Fault Repair Times of All Fault Repairs completed within the Data Collection Period}}{\text{Total number of DSL Fault Repairs completed within the Data Collection Period}}$$

The metric should be expressed in Working Days.

3.16 Quality of Line Share Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

$$\frac{\text{Number of Line Share Faults reported within 28 Days on Lines which had Line Share Fault Repairs completed within the Data Collection Period}}{\text{Total number of Line Share Fault Repairs completed within the Data Collection Period}} \times 100$$

Metrics associated with Supply of Services – ULMP

4.1 ULMP Connections in 10 Working Days

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of ULMP Connections completed within the Data Collection Period where the Supply Time is within 10 Working Days   X 100
Total number of ULMP Connections completed within the Data Collection Period

4.2 Average Supply Time - ULMP

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of ULMP Supply Times of ULMP Connections completed within the Data Collection Period
Total number of ULMP Connections completed within the Data Collection Period

The metric should be expressed in Working Days.

4.3 Quality of ULMP Supply

Number of Faults reported within 28 Days for ULMP Connections completed within the Data Collection Period   X 100
Total number of Line Share Connections completed within the Data Collection Period

Metrics associated with Repair of Services

4.4 ULMP Fault Repairs within 2 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 2 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.5 ULMP Fault Repairs within 3 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 3 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.6 ULMP Fault Repairs within 5 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 5 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.7 ULMP Fault Repairs within 6 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 6 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.8 ULMP Fault Repairs within 10 Working Days (Test Results Provided)
This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 10 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.9 ULMP Fault Repairs within 11 Working Days (No test results)

This figure shall be collected and calculated by Eircom for each Data Collection Period.

The figure for each Data Collection Period shall be calculated as follows:

Number of All ULMP Fault Repairs completed within the Data Collection Period where the ULMP Fault Repair Time is within 3 Working Days   X 100
Total All ULMP Fault Repairs completed within the Data Collection Period

4.10   Average ULMP Fault Repair Time

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Sum of All ULMP Fault Repair Times of All Fault Repairs completed within the Data Collection Period   _____
Total number of All ULMP Fault Repairs completed within the Data Collection Period

4.11   ULMP Fault Incidence

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Total number of ULMP Faults for the Data Collection Period   X 100
Average Number of ULMP Lines within the Data Collection Period

4.12   Quality of ULMP Repair

This figure shall be collected and calculated by Eircom for each Data Collection Period.
The figure for each Data Collection Period shall be calculated as follows:

Number of ULMP Faults reported within 28 Days on Lines which had ULMP Fault Repairs completed within the Data Collection Period   X100
Total number of ULMP Fault Repairs completed within the Data Collection Period

Appendix 4

Preliminary definition of proposed metrics for the Terminating Segments of Wholesale Leased Lines Market

The leased line metrics, other than the fault metrics, are closely based on formats already provided by Eircom on an ongoing basis either published on its website, or provided historically to industry at the Leased Line and PPC Industry Forum of supplied to ComReg for inclusion in the ComReg Quarterly Report. These formats are published below in Tables 1, 2 and 3.

Proposed Definitions

"Co-op Fault"	means a request for technical information or active assistance by a customer in an instance where there is no fault on the Eircom network and no fault raised (e.g. providing a loop for customer testing)
"Due Delivery Date"	means the committed date for completion of a valid order for a Leased Line as per the relevant SLA
"Ethernet Leased Line"	means a Leased Line which presents an Ethernet interface to the end user
"Leased Line Supply time"	means the duration from the date all Valid Leased Line Connection Orders are received by Eircom to the date a working Leased Line Connection is made available for use excluding delays etc as per Eircom published SLA's – This definition should be used throughout this section
"Leased Line"	A Leased Line is a fixed permanent telecommunications connection providing broadly symmetric capacity between two fixed points. It is permanent in that capacity is always available between the two points, however this capacity could be reserved or shared through the associated network depending on the nature of the Leased Line
"Leased Line Fault"	means an incident of disrupted or degraded service of a Leased Line on the Eircom network
"Leased Line Fault Report"	means a Leased Line Fault reported by an OAO which is valid unless it can be reasonably attributed to components outside the Eircom network

"Leased Line Fault Repair"	means the repair of a Leased Line Fault resulting in the restoration of Leased Line Connection to normal working order;
"Leased Line Fault Repair Time"	means the duration from the instant of a Leased Line Fault Report to the instant of a Leased Line Fault Repair;
"Legacy Ethernet"	Eircom Ethernet services provided on legacy (pre-NGN) infrastructure
"NGN Ethernet"	refers to the Eircom Next Generation Network Ethernet network use to provide a suite of NGN services over the NGN core and/or NGN access network
"Non-fault"	means a reported fault which is found not to lie within the Eircom network
"Non-Standard Order (Leased Line)"	means an order which has been designated as "Non-Standard Order" as per corresponding SLA published on the Eircom wholesale website
"OAO (Other Authorised Operator)"	means a legal entity which is designated Under Section 4 (1) of the European Communities (Electronic Communications Networks and Services) (Authorisation) Regulations 2003 (S.I. No. 306 of 2003), to provide an electronic communications network or service
"Project Order (Leased Line)"	means an order which has been designated as "Project Order" and is usually exempt from the applicable SLA as the DDD (Due Delivery Date) is negotiated between the parties
"Partial Private Circuits"	refers to the Eircom wholesale offering as described on Eircom wholesale website, the constituent elements for the ordering process of which are; Transport Links (TL); Subsidiary Links (SL); End User Links (EUL).
"Quarter (Year)"	means a 3 month period (January to March or April to June or July to August or October to December) of a year
"Retail Leased Line"	refer to a Leased Line supplied to an Eircom retail customer or internally to Eircom for internal use which can be delivered as a Leased Line or used as an access path to various other services e.g. MPLS, Frame relay etc. Excludes digital access paths used to supply ISDN PRA services

"SLA"	means relevant or corresponding Service Level Agreement as published on the Eircom website
"Standard Order (Leased Line)"	Order which has been designated as "Standard Order" as per corresponding SLA published on the Eircom wholesale website
"Sub 10Mb/s Leased Lines"	Leased Lines of bandwidth less than 10Mb/s
"Sub 2Mb/s Leased Lines"	Leased Lines of bandwidth 64Kb/s up to 1984Kb/s
"Traditional Leased Line"	a Leased Line delivered over a SDH/PDH network architecture of PDH/SDH bandwidths 64Kb/s and upwards, with corresponding interface standards (X.21, G.35, G703/G.704 etc). The current wholesale variants offered by Eircom are wholesale Leased Lines and PPC (Partial Private Circuits).
"Leased Line Connection Order"	means an order for a Leased Line which has been lodged by the appropriate means (by email or any other acceptable electronic means and that is not later deemed invalid
"**Working Hour**"	means 60 minutes duration between 9.00 – 17.00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays)
"Working Day"	means 9:00 – 17:00 from Monday – Friday (excluding Saturday, Sunday, bank and public holidays); and
"Year"	means the period between 1 July, Year X to 30 June, Year X + 1.

Metrics associated with Supply of Services

Metrics Associated with the Supply of Leased Line Services

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They
will apply as relevant to each individual metric as laid out in the associated tablature form

The metrics for Traditional Leased Lines are the measurement of the delivery performance
of the Eircom Retail Leased Line service and the performance of the combined wholesale
services: Wholesale Leased Lines and Partial Private Circuits End User Links (PPC EUL's).

Metric Reference	Title	Definition
5.1.1 to 5.1.24	Average delivery supply-times for traditional Leased Lines Sub 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths less than 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.25 to 5.1.48	Average delivery supply-times for traditional Leased Lines of 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth equal to 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.49 to 5.1.72	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for wholesale customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths greater than 2Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.73 to 5.1.96	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths less than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period

5.1.97 to 5.1.120	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.121 to 5.1.144	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths less than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.145 to 5.1.168	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for wholesale customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for wholesale orders only (those to OAOs) in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.169 to 5.1.192	Average delivery supply-times for traditional Leased Lines Sub 2Mb for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidths 64Kb/s to 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders, for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specific 3 month quarterly time-period
5.1.193 to 5.1.216	Average delivery supply-times for traditional Leased Lines of 2Mb/s for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth of 2Mb/s for retail orders, in categories for standard, project and non-standard designated orders, for all orders (100%) and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), delivered in a specific 3 month quarterly time-period
5.1.217 to 5.1.240	Average delivery supply-times for traditional Leased Lines greater than 2Mb/s for retail customers	Average supply-time in working days for delivery of traditional Leased Lines of bandwidth of 2Mb/s for retail orders, in categories for standard, project and non-standard designated orders, for all orders (100%) and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specific 3 month quarterly time-period

5.1.241 to 5.1.264	Average delivery supply-times for legacy Ethernet Leased Lines Sub 10Mb/s for retail customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths below 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), delivered in a specified 3 month quarterly time-period
5.1.265 to 5.1.288	Average delivery supply-times for legacy Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	Average supply-time in working days for delivery of legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.289 to 5.1.312	Average delivery supply-times for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths below 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period
5.1.313 to 5.1.336	Average delivery supply-times for NGN Ethernet Leased Lines equal to or greater than 10Mb/s for retail customers	Average supply-time in working days for delivery of NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s for retail orders only, in categories for standard, project and non-standard designated orders for all orders (100%), and for 97.5% of orders (2.5% of orders with the longest supply-time discarded), measured monthly, delivered in a specified 3 month quarterly time-period

Metrics associated with Designation of Service Orders

Metrics associated with designation of Leased Line orders received by Eircom

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They will apply as relevant to each individual metric as laid out in the associated tablature form.

The metrics for Traditional Leased Lines are the measurement of the order designation of the Eircom Retail Leased Line service and the performance of the combined wholesale services: Wholesale Leased Lines and Partial Private Circuits End User Links (PPC EULs). Similarly for Ethernet services, the metrics refer to customer portion of the services and exclude any orders for the interconnection portion of the various legacy and NGN services.

Metric Reference	Title	Definition
5.2.1 to 5.2.9	Order designation statistics for traditional Leased Lines Sub 2Mb/s for wholesale customers	Percentage of orders for traditional Leased Lines of bandwidths 64kb/s to 1984kb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.10 to 5.2.18	Order designation statistics for traditional Leased Lines of 2Mb/s for wholesale customers	Percentage of orders for traditional leased of bandwidth 2Mb/s which are categorised as being standard, project and non-standard, for wholesale orders only as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.19 to 5.2.27	Order designation statistics for traditional Leased Lines greater than 2Mb/s for wholesale customers	Percentage of orders for traditional leased of bandwidth s greater than 2Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.28 to 5.2.36	Order designation statistics for legacy Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.37 to 5.2.45	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for wholesale customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period

5.2.46 to 5.2.54	Order designation statistics for NGN Ethernet Leased Lines Sub 10Mb/s for wholesale customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's , measured monthly, of those order placed within a specified 3 monthly time period
5.2.55 to 5.2.63	Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for wholesale customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.64 to 5.2.72	Order designation statistics for traditional Leased Lines Sub 2Mb/s for retail customers	Percentage of orders for traditional Leased Lines of bandwidths 64kb/s to 1984kb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.73 to 5.2.81	Order designation statistics for traditional Leased Lines of 2Mb/s for retail customers	Percentage of orders for traditional leased of bandwidth 2Mb/s which are categorised as being standard, project and non-standard, for retail orders only as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.82 to 5.2.90	Order designation statistics for traditional Leased Lines greater than 2Mb/s for retail customers	Percentage of orders for traditional leased of bandwidth s greater than 2Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period
5.2.91 to 5.2.99	Order designation statistics for legacy Ethernet Leased Lines Sub 10Mb/s for retail customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's placed within the given time period
5.2.100 to 5.2.108	Order designation statistics for legacy Ethernet Leased Lines greater than 10Mb/s for retail customers	Percentage of orders for legacy Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for wholesale orders only, as defined in the corresponding Eircom SLA's , measured monthly, of those order placed within a specified 3 monthly time period
5.2.109 to 5.2.117	Order designation statistics for NGN Ethernet Leased Lines Sub 10Mb/s for retail customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidth less than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a

specified 3 monthly time period

5.2.118 to 5.2.126	Order designation statistics for NGN Ethernet Leased Lines greater than 10Mb/s for retail customers	Percentage of orders for NGN Ethernet Leased Lines of bandwidths equal to or greater than 10Mb/s which are categorised as being standard, project and non-standard for retail orders only, as defined in the corresponding Eircom SLA's, measured monthly, of those order placed within a specified 3 monthly time period

Metrics associated with Repair of Services

<u>Metrics associated with repair of Leased Line services</u>

All figures shall be calculated by Eircom for each Data Collection Period.
The figures for each Data Collection Period shall be calculated as described below. They will apply as relevant to each individual metric as laid out in the associated tablature form.

There is no differentiation made between the various technologies for the repair metrics. The wholesale metrics are the measure of repair performance for the combined wholesale offerings: Wholesale Leased Lines, Partial Private Circuit End user Links and the various Ethernet equivalents (Wholesale Ethernet Access Circuits provided on the Ethernet legacy products and on the Eircom NGN, Wholesale Symmetric Ethernet Access circuits).

Metric Reference	**Title**	**Definition**
5.3.1 to 5.3.9	Percentage of faults on wholesale Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	Percentage of faults (excludes non-faults and co-op faults) reported on wholesale Leased Lines repaired within 8, 24 and after 24 hours, of all faults reported, measured on a monthly basis, within a given 3 month quarterly period
5.3.10 to 5.3.18	Percentage of faults on retail Leased Lines repaired within 8, 24 and after 24 hours, (excludes non-faults and co-op faults)	Percentage of faults (excludes non-faults and co-op faults) reported on retail Leased Lines repaired within 8, 24 and after 24 hours, of all faults reported, measured on a monthly basis, within a given 3 month quarterly period

16 Appendix B – Consultation Questions

List of Questions

Q. 1. Do you agree with ComReg's reasons for implementing KPIs? Please provide reasons for your answer.

Q. 2. Do you agree with ComReg's approach to implementing the ERG's "minimum set"? Please provide reasons for your answer.

Q. 3. ComReg believes (as set out in Section 4 and supported by the ERG positions quoted in Section 5) that the proposed KPIs would enhance transparency and provide compelling information in relation to Eircom's non-discrimination obligation. Do you agree with this? Please provide reasons for your answer.

Q. 4. Do you agree with ComReg's preliminary view that there is sufficient incentive for Eircom to reach existing quality targets and, therefore, that the imposition of targets associated with the proposed KPIs is not necessary? Please provide reasons for your answer.

Q. 5. Do you agree with ComReg's approach to the implementation of KPIs? Please provide reasons for your answer.

Q. 6. Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Retail Narrowband Access market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Retail Narrowband Access market? Please provide reasons for your answers.

Q. 7. **Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Wholesale Broadband Access market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Broadband Access market? Please provide reasons for your answers.**

Q. 8. **Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the Wholesale Physical Network Infrastructure Access market? Do you agree with ComReg's proposed retail equivalent inputs for the ULMP and LS metrics as set out above? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Physical Network Infrastructure Access market? Please provide reasons for your answers.**

Q. 9. **Do you agree with ComReg's proposed KPIs for Supply of Services and Repair of Services in the market for Terminating Segments of Wholesale Leased Line market? Are there other KPIs you would like to see included in this category? Do you have any other observations in relation to the KPIs being proposed in the Wholesale Leased Line market? Please provide reasons for your answers.**

Q. 10. **Respondents are requested to provide views on whether the proposed conditions are proportionate and justified and offer views on other factors (if any) ComReg should consider in completing its Regulatory Impact Assessment.**

Q. 11. **Do you agree or disagree that the above proposed Decision Instrument is clear, unambiguous and practical? Please explain your view and, if relevant, propose alternative wording.**