Commission for
Communications Regulation

Universal Service Requirements

Provision of access at a fixed location (AFL)

Quality of Service (QoS)

Consultation

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Additional Information

All responses to this consultation should be clearly marked:

"Reference: Submission re ComReg 18/120 as indicated above, and sent by post, facsimile, e-mail or online at www.comreg.ie (current consultation), see Section 6 for next steps on submitting comments.

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1. Executive summary

1 The Commission for Communications Regulation (**"ComReg"**) is the independent regulator for the electronic communications sector in Ireland. ComReg was established by section 6 of the Communications Regulation Act 2002 (the **"Act of 2002"**).

2 ComReg's key statutory objectives in relation to the provision of of electronic communications services (**"ECS"**) are to:

(i) Promote competition.

(ii) Contribute to the development of the internal market.

(iii) Promote the interests of users in Ireland, as well as within the European Union.

3 In order to promote the interests of users of ECS, ComReg must ensure the provision of basic telecommunications services in the State. This is known as the universal service and ComReg may designate one or more ECS providers to be a universal service provider (**"USP"**) with universal service obligations (**"USO"**).

4 Decision 05/16 obliged eircom Ltd (**"eir"**), as the designated USP, to provide access at a fixed location and telephone services **("AFL")** in accordance with Regulation 3 of the Universal Service Regulations **("the Regulations")**[1]**.** The manner in which this is achieved by the USP is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing such access and service.

5 In addition, Regulation 10 of the Regulations "*Quality of service of designated undertakings*" allows ComReg to specify requirements to be complied with by the USP in relation to the quality of service performance metrics (**"QoS performance targets"**) of certain USOs that it delivers to end-users.

6 D03/17 obliged eircom Limited (**"eir"**) as the designated USP, to comply with ComReg specified quality of service performance targets requirements. ComReg maintained national connection targets and introduced sub-national connection targets. ComReg also introduced national and sub-national 'service availability' targets (which combines fault occurrence and fault repair metrics) which are expressed in terms of a 'maximum of working days outage per line'.

[1] The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011.

7 In light of the forthcoming expiration of the current Universal Service Requirements Provision of access at a fixed location (AFL) quality of service (QoS) performance decision (31 December 2018), ComReg is undertaking a review of the current QoS targets, taking into account a number of key considerations:

- Protecting the interests of end-users
- The likely deterioration in performance, in certain areas, in particular, absent any targets
- The obligation to provide access at a fixed location is technology neutral
- eir's indication[2] of its intention to transition its copper network to fibre
- eir's predictive model for investment/network performance ("eir's model")[3]

8 ComReg is considering relevant factors that may have changed since the quality of service targets were set in 2017. These include the following;

- The current QoS regime (Chapter 2)
- eir's QoS performance (Chapter 4)
- Any changes to eir's current predictive model for investment/network performance – ("eir's model")
- Actual investment made by eir and eir's commercial rollout

9 Having considered the above, ComReg is of the preliminary view that there continues to be a requirement for QoS performance targets. In considering the appropriate targets, ComReg notes that the QoS performance targets may be maintained in their current form or modified.

10 To ascertain what the most appropriate QoS performance target requirements should be, ComReg has regard to the following principles:-

- The targets should aim to balance the interests of end-users with promoting efficient investment.

[2] See Information Notice ComReg 17/05, 19 January 2017
[3] eir's current model provided to ComReg on foot of Section 13D Information Request.

- The targets should allow eir, as the USP, to have the flexibility to balance investment (in current and new networks) and repair expenditure as it considers appropriate to meet the targets.

- The cost and other implications for eir should be proportionate.

11 ComReg's preliminary view is that a change in the level of the targets is not appropriate at this time. However, ComReg is of the preliminary view that it may be appropriate to consider whether, in light of the Commitment Agreement[4], the QoS of any Connections arising in the scope of that agreement should be separately reported within the NBP Area[5] . The NBP Area would retain the same QoS targets as before, however the NBP Area reporting would consist of two sub-areas: NBP sub-area 1 – NBP Area excluding the Commitment Agreement area[4]; and NBP sub-area 2 –Commitment Agreement area.(Chapter 3).

12 Therefore, in this consultation, ComReg is of the preliminary view that it is appropriate to:-

- Re-impose the existing national and sub-national connection targets.

- Re-impose the existing national and sub-national service availability targets.

- Retain the existing reporting, measurement auditing and publication of QoS performance, save for the NBP Area reporting would now consist of two further sub-areas: sub-area 1 – NBP Area excluding the Commitment Agreement area[4]; and sub-area 2 – Commitment Agreement area for reporting purposes), and the associated national area.

- Retain the aforementioned proposed AFL USO QoS targets until 31st December 2020.

13 ComReg is seeking the views of stakeholders on its proposals for QoS targets, to ascertain what the most appropriate requirements should be.

[4] https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf.
[5] As defined and set out in *"Universal Service Requirements Provision of access at a fixed location (AFL) Quality of Service (QoS)"* document number D17/10, D03/17 and *"Response to Consultation and Decision Schedules"* document 17/10a, D03/17.

14 ComReg looks forward to receiving responses from all stakeholders in relation to the proposals in this consultation document. ComReg will review and fully take into account all responses it receives in coming to a final decision.

2. Background to the current QoS Regime, set in 2017

15 The Commission for Communications Regulation (**"ComReg"**) is the independent regulator for the electronic communications sector in Ireland. ComReg was established by section 6 of the Communications Regulation Act 2002 (the **"Act of 2002"**).

16 In order to promote the interests of users of ECS, ComReg must ensure that all users have access to basic telecommunications services in the State. This is known as the universal service and ComReg may designate one or more ECS providers to be a universal service provider (**"USP"**) with universal service obligations (**"USO"**).

17 In Decision 05/16 ComReg designated eircom Ltd (**"eir"**) as the USP in Ireland for the period 29 July 2016 – 30 June 2021 to provide connections and a voice service at a fixed location. That Decision seeks to ensure that end-users will continue to have access to the universal service. This includes access to a public communications network (**"PCN"**) and a publicly available telephone service over a network connection that allows for originating and receiving of national and international calls. This connection must be capable of supporting voice, and facsimile, as well as data communications at data rates that are sufficient to permit functional internet access (**"FIA"**).

18 Decision 05/16 obliged eir, as the designated USP, to provide access at a fixed location and telephone services **("AFL")** in accordance with Regulation 3 of the Universal Service Regulations **("the Regulations")**[6]**.** The manner in which this is achieved by the USP is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service.

[6] The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011.

19 In addition, Regulation 10 of the Regulations "*Quality of service of designated undertakings*" allows ComReg to specify requirements to be complied with by the USP in relation to the quality of service performance metrics (**"QoS performance targets"**) of certain USOs that it delivers to end-users.

20 In the consultation process that led to Decision 05/16[7] and Decision 03/17 ComReg consulted on appropriate new QoS performance targets for the provision of access and telephone services.

2.1 ComReg statutory and policy objectives

21 This current ComReg consultation takes account of its statutory and policy objectives, which are set out in the Framework Regulations 2011[8] and the Act of 2002.

22 One of ComReg's key statutory objectives is to promote and protect the interests of end-users of the universal telecommunications service in the State. In fulfilling this overall statutory objective, ComReg seeks to ensure that it appropriately considers and balances the requirements of its other related objectives. ComReg is for example, required to promote efficient investment and innovation in new and enhanced infrastructures, while acting in a technological neutral manner (by not favouring one technology over another and not unduly placing constraints or obligations on certain technologies). Further, ComReg has a statutory objective to take due account of the variety of conditions relating to competition and consumers that exist in the various geographic areas within the State.

23 ComReg aims to promote and protect the interests of end-users by adopting measures to ensure that end-users will continue to have access to a universal service in terms of acceptable quality and availability.

2.2 National broadband plan transition period

24 In December 2014, ComReg published its Call for Input[9] to provide an opportunity for stakeholders to identify areas where they believed regulatory clarity may be desirable in the context of the National Broadband Plan.

[7] Consultation 15/89 "USO-Provision of access at a fixed location" 7/8/15 and Consultation 16/31 "Universal Service Requirements – Provision of access at a fixed location (AFL)" 23/5/16.
[8] S.I. No. 333/2011 - European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011.
[9] ComReg Document No. 14/26 entitled "National Broadband Plan – Call for Input on Regulatory Implications" dated 4 December 2014.

25 In eir's submission to the Call for Input it raised the issue of a potential future transition from its existing copper access network to fibre access network(s) in the NBP intervention area.

26 On 18 June 2015, ComReg published its response to the call for input (ComReg Document No.15/57[10]). ComReg made it clear in consultation ComReg 16/01[11], that ComReg would not want regulation to unnecessarily obstruct the replacement of legacy network elements with new technologies, where this is economically efficient and in the interests of end-users. However, ComReg also made it clear that regulation should ensure that the transition arrangements take due account of the need to minimise the disruption for end-users and OAOs.

27 On 7 April 2017 eir entered into a Commitment Agreement with DCCAE in relation to eir's plans to provide High speed broadband to 300,575 premises in rural areas on a commercial basis[4].

28 At this time, ComReg does not know how the winning bid for the tender for NBP services in the NBP intervention area will be constructed; what technologies will be used; the specific timing of implementation; and to what extent copper will be reused as part of the solution.

29 ComReg is therefore assuming that some form of new infrastructure will be deployed in the NBP intervention area as part of the winning bid, and that this will be rolled out in parallel to the existing copper access network.

30 ComReg also assumes that in the intervening period, between NBP contract award and completion of the NBP roll-out, there may be a period during which dual running of the existing copper access network and the new infrastructure will be unavoidable.

[10] ComReg Document No. 15/57 entitled "National Broadband Plan – Response to Call for Input" dated 18 June 2015.
[11] Call for Input; 16/01; "Transition from Eir's copper network; proposed principles and notification procedures".

2.3 eir's proposed transition from copper

31 In July 2016, eir wrote to advise ComReg of its intention to retire and/or reduce access to eir's legacy service or networks outside the NBP intervention area. An Information notice containing eir's letter and ComReg's response was published on 19 January 2017.[12] The information notice also detailed the next steps in that process.

32 In October 2018 ComReg requested eir to provide an update on its current analysis and impact assessment including plans and timelines for the withdrawal of copper based services. [redacted]

33 Critically, during any proposed transition period, it is imperative that the minimum quality of service targets are provided, while allowing greater flexibility as to how this may be achieved by eir, particularly in remote areas[14], so as to not adversely affect end-users.

2.4 Universal service QoS performance targets

34 In setting the current QoS performance targets[15] ComReg applied the following overarching principles:

- The targets should aim to balance the interests of end-users with promoting efficient investment.
- The targets should allow eir to have the flexibility to balance investment (in current and new networks) and repair expenditure as it considers appropriate to meet the targets.[16]

[12] See Information Notice ComReg 17/05, 19 January 2017.
[13] [redacted]
[14] For the purpose of the analysis of the AFL USO and measuring the QoS performance against the targets, three sub-national areas were identified in the specific context of USO, by taking account of potential competitive constraints including the demand and supply side developments on the delivery of the universal service Areas derived for this purpose in 2015.
[15] D03/17.
[16] The approach should not seek to require further improvement by eir in respect of its current generation network, beyond its current general performance levels at this time (LFI), which means that eir has the flexibility to balance investment costs against operational costs, in light of the NBP and the rollout of

- The cost and other implications for eir should be proportionate.

35 Connection targets remained the same at national level as applied heretofore and also applied at the sub-national level for connections.

36 The three sub-national areas were defined in the specific context of USO, by taking account of potential competitive constraints including the demand and supply side developments on the delivery of the universal service. The three sub-national areas[17] are:

- "Area 1" – Market Driven Infrastructure Based Competition – based on areas where eir faces greater market-driven infrastructure-based competition, including, from Vodafone/ESB/SIRO or UPC.
- "Area 2" NBP[18] – based on the NBP intervention areas where a high capacity broadband access network is intended to be made available through Irish Government subsidies.
- "Area 3" eir only – based on areas where eir faces no competition from any fixed infrastructure providers but could face competition from mobile networks providing fixed access solutions.

37 To fulfil ComReg's statutory duties to protect the interests of end-users, whilst taking proportionate measures, also promoting efficient investment and innovation by eir, ComReg decided to impose service availability targets (D03/17).This meant that if fault occurrence performance deteriorated (i.e. there were more faults) then eir could address this issue to meet the performance targets by repairing the faults quicker. Equally, if fault levels improved, particularly with the rollout of fibre, then eir's repair performance would not be as critical in meeting the targets.

next generation networks on a commercial basis. eir will have the necessary commercial freedom to choose how they will meet their USO obligations.

[17] It is important to note that these 3 areas were defined in the specific context of USO and especially looking at the provision of competitive constraints on the provision of voice AFL. This analysis was therefore different from the analysis aiming at defining Larger Exchange Areas (LEA) conducted in ComReg documents 11/72 and 13/14

[18] This area was defined based on the original NBP area (i.e. 750,000) (https://www.dccae.gov.ie/en-ie/news-and-media/press-releases/Pages/National%20Broadband%20Plan%20State%20Intervention.aspx) as opposed to the currently defined NBP area https://www.dccae.gov.ie/en-ie/communications/topics/Broadband/national-broadband-plan/Pages/National-Broadband-Plan.aspx

2.4.1 eir's model

38 In D03/17 ComReg considered eir's investment/network performance scenario model ("eir's model")[19]. eir's model forecasted future estimates of fault occurrence (2016-2020) based on past performance and factored in aspects such as [redacted]

39 eir's model *'achievable speed of repair'* values were established by reviewing [redacted]

40 eir's model "*achievable speed of repair*" nationally, and for each of the sub-national areas, was expected by eir to remain the same during this transition period (i.e. eir's model *"achievable speed of repair"* appeared to remain constant irrespective of which investment scenario was considered) (Table 1).

41 eir subsequently confirmed in writing, on foot of a subsequent ComReg 13D Information Request[20] that eir's model '*achievable speed of repair'* would be achieved each year commencing July 2016 (i.e. from the commencement of eir's model). eir's model did not seek to improve further eir's 'achievable speed of repair' in particular in certain sub-national areas.

Table 1:eir's 'achievable speed of repair' values [redacted]

42 All *additional* investment in eir's model appeared to be focused on reducing the LFI, while the model's *'achievable speed of repair'* for each sub-national area remained constant in all investment scenarios.

[19] eir investment model 25th August 2016 "20160526_AFLUSO_QoS_Repaired.xlsx (Excel workings) provided to ComReg in response to Section 13D Information Request.
[20] eir response to 13D 28th October 2016.

43 During the transition period when alternative networks are being deployed, ComReg's objective is to ensure that reasonable requests for access at a fixed location and associated quality of service are met, but without requiring unnecessary investment in eir's copper network and without inhibiting the retirement of that network, once an alternative is available. Therefore, ComReg decided that it would not be appropriate to require eir to make additional capital investment to solely reduce the LFI, in circumstances where ComReg understood that regardless of such investment, eir's model *'achievable speed of repair'* nationally and for each of the sub-national areas was expected by eir to remain the same during this transition period.

44 Using eir's model for its *'planned'* national investment and its national *'achievable speed of repair'*, eir's figures illustrated that there would be no '*additional*' investment other that it's '*planned*' investment of [€[redacted] each year required to meet the national target maximum of 0.237 working days outage per line.

45 This allowed eir a margin of 0.005% using eir's model and addressed eir's concerns about year-to-year variability in performance. Accordingly no 'additional' investment to reduce line faults was required as a result of ComReg setting this target.

46 A national service availability target of **a maximum of 0.237 working days outage per line**,[21] was set having regard to the 5 year observed average of availability (2009-2014) and the predicted performance based on eir's three year model[3].

47 ComReg also introduced sub-national service availability targets to ensure that the minimum sub-national availability levels did not deteriorate, while affording greater flexibility to eir as to how they achieved this[22].

[21] The availability target is calculated using fault occurrence during the period and repair performance.
[22] These sub-national targets were a particularly important measure in light of the introduction of a single national service availability metric instead of the previous six separate national targets relating to fault repairs and fault occurrence.

48 Using eir's model for its *'planned'* sub-national investment and its sub-national *'achievable speed of repair'*, together with eir's claimed adjustment, eir's figures illustrated that there would be no 'additional' investment other than its 'planned' investment of € [redacted] each year required to meet a sub-national target of maximum of [redacted] working days outage per line.

49 ComReg noted that eir's model was confined to the copper network. While the performance of its planned fibre connections was not factored in, eir had included planned investment and its estimate of "achievable speed of repair" in its model.

50 eir's model took no account of possible performance improvements as a result of :

- eir's own fibre deployment strategy and the associated migration of customers.
- any cost comparison of copper versus fibre deployment and the associated service availability improvements.
- Its significant planned rural FTTH deployment

51 Accordingly, ComReg was of the view that eir could further improve performance in the NBP area (recognising the conservative approach within eir's model) through the following possible mechanisms (1) increasing the number of eir resources per fault (towards the ratio in the competitive area) and/or (2) altering any policy in relation to the dispatch of resources for repair in certain areas , to narrow the gap in speed of repair, between [redacted] areas and (3) rolling out new technology to poor performing lines to increase performance.

52 In light of these factors ComReg set the same sub-national service availability targets of **a maximum of 0.607[23] working days outage per line** for three sub-national areas, having regard to the 5 year observed average of availability (2009-2014) and the predicted performance based on eir's three year model. The same sub-national target was set for all areas, based on the lowest performing area. This was intended to ensure that quality of service performance in that area did not deteriorate below what ComReg regarded as the minimum.

[23] The availability target is calculated using fault occurrence during the period and repair performance.

53 Most importantly the service availability targets allowed eir to decide whether to invest to prevent faults by either rolling out new technology or maintain existing network connections or by carrying out repairs more quickly instead of investing in preventative maintenance.

54 ComReg was confident that the introduction of both national and sub-national service availability targets in D03/17 was a proportionate approach to achieving a minimum QoS performance standard and that it was appropriate to oblige eir to achieve this minimum standard, during this NBP transition period, while at the same time adequately protecting the interests of end-users.

55 Regulation 3 (1-3) provision of access at a fixed location and provision of telephony services, do not stipulate the network or technology to be used. Accordingly eir is free to meet its USP obligations utilising either copper or fibre networks, or both.

56 The introduction of national and sub-national service availability targets did not force eir to invest extensively and/ or exclusively in its copper network. This provided the necessary innovation and investment incentives for eir to accelerate any of its desired network deployment and/or replacement. It also gave eir the flexibility to make commercial decisions about whether and where to commit capital expenditure (**"CAPEX"**) on proactive maintenance of its network (essentially, prevention of line faults) and/or whether and where to commit operational expenditure (**"OPEX"**) on reactive maintenance (essentially, repair of line faults).

57 It is ComReg's view that the national and sub-national service availability targets allowed eir to balance investment with reactive maintenance and repairs, while continuing to protect end-users by ensuring a minimum service availability level.

58 ComReg also amended the appropriate definitions so that, if appropriate, they can encompass other technologies, including fibre which may be used to provide access at a fixed location instead of current generation network.

59 ComReg was of the view that as new networks were deployed the targets may need to be reviewed in light of the expected better performance of those new networks, which were also expected to become more prevalent and widespread nationally.

60 In this context, ComReg was of the view that it was appropriate to review the QoS performance targets in a shorter timeframe than the USO Designation itself (i.e. prior to the expiry of D03/17 on 31 December 2018 as opposed to the expiry of D05/16 on 29 July 2021).

3. Need for AFL USO Quality of Service (QoS) in the State

61 This chapter considers the regulatory options available to ComReg. Chapter 4, provides an overview eir's QoS performance to date.

62 ComReg may designate an undertaking(s) where necessary to provide the services specified in the Regulations and may, if it considers necessary, specify further measures applicable to those designated undertakings where appropriate. QoS Performance Targets is an example of this.

63 In Decision 05/16 ComReg designated eircom Ltd (**"eir"**) as the USP in Ireland for the period 29 July 2016 – 30 June 2021 to provide connections and a voice service at a fixed location. That Decision seeks to ensure that end-users will continue to have access to the universal service. This includes access to a communications network (**"PCN"**) and a publicly available telephone service over a network connection that allows for originating and receiving of national and international calls. This connection must be capable of supporting voice, and facsimile, as well as data communications at data rates that are sufficient to permit functional internet access (**"FIA"**).

64 Decision 05/16 obliged eir, as the designated USP, to provide access at a fixed location and telephone services **("AFL")** in accordance with Regulation 3 of the Universal Service Regulations **("the Regulations")**[24]**.** The manner in which this is achieved by the USP is not prescribed and the principle of technological neutrality allows the USP to choose the optimum method of providing access and service.

65 In addition, Regulation 10 of the Regulations "*Quality of service of designated undertakings*" allows ComReg to specify requirements to be complied with by the USP in relation to the quality of service performance metrics (**"QoS performance targets"**) of certain USOs that it delivers to end-users.

[24] The European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011.

66 An AFL USO QoS ensures the provision of basic telecommunications services in uneconomic areas of the State as well as for uneconomic end-users in economic areas, at an appropriate quality of service. These end-users are dispersed throughout the State. AFL USO QoS contributes to social and economic inclusiveness and cohesiveness.

67 ComReg in considering what the most appropriate QoS performance target requirements should be, having regard to the following principles:-

- The targets should aim to balance the interests of end-users with promoting efficient investment.
- The targets should allow eir to have the flexibility to balance investment (in current and new networks) and repair expenditure as it considers appropriate to meet the targets.
- The cost and other implications for eir should be proportionate.

68 In light of the concerns in relation to consumer welfare, and mindful of efficient investment incentives, ComReg is considering the following options available to it with respect to the potential nature and structure of any future QoS obligations.

69 ComReg has considered the following options

- Option 1 – maintain an AFL USO QoS obligation;
  - Option 1a - maintain the current AFL USO QoS targets and areas
  - Option 1b - maintain the current AFL USO QoS targets but modify the current Area 2 NBP sub-national area for reporting purposes to separately identify and report on NBP sub-area 1- NBP Area excluding the Commitment Agreement area[4] and NBP sub-area 2 -Commitment Agreement[4];
- Option 2 - remove the AFL USO QoS obligation.

70 Options 1 and 2 are addressed in the RIA. Option 1a and 1b are summarised below.

3.1 Option 1a – Maintain the current AFL USO QoS targets and areas

71 This option would maintain the status quo (i.e. no change to the current policy), retaining the obligation on eir to comply with performance targets and areas as set out in Decision 03/17.

72 A rationale for keeping existing targets and areas set in Decision D03/17 would be recognition by ComReg that:

- A QoS regime remains necessary and appropriate to safeguard and ensure, during the transition to a fully completed NBP infrastructure, the provision of AFL in the State at an adequate level of QoS;
- Performance targets are important measures of consumer welfare and ensure that eir's performance in delivering AFL USO services, particularly in remote areas does not adversely affect consumers standard of service;
- With a cessation of QoS targets at this time there is a risk that eir would no longer continue investing in certain areas leading to a significant deterioration in service standards. The minimum quality delivered by eir should be at least maintained during the transition to a fully completed NBP infrastructure and result in an appropriate minimum quality delivery of AFL USO service across the country.
- ComReg's guiding principle is that consumers should not have a lesser quality of service while transitioning to new advanced networks; and

73 These targets can be reasonably achieved by eir, as set out at chapter 4.

3.2 Option 1b – Maintain the current AFL USO QoS targets and modify the NBP reporting area

74 This option considers the following:

- Modify the current 'Area 2' NBP sub-national area to separately identify and report on:

- NBP sub-area 1 - NBP Area excluding the Commitment Agreement area[25]
- NBP sub-area 2 - Commitment Agreement[4] area

- Retain the existing national and sub-national area definitions
- Retain the existing national and sub-national connection targets -applicable to the three sub-national areas.
- Retain the existing national and sub-national service availability targets - applicable to the three sub-national areas.
- Retain the existing reporting, measurement auditing and publication of QoS performance, save for the extension of these reporting obligations to now include the two new sub-areas within the NBP sub-national Area. For the avoidance of doubt the QoS targets only apply at the NBP sub-national area level (i.e. not the NBP sub-area 1 or 2).
- Retain the aforementioned proposed AFL USO QoS targets until 31st December 2020.

75 Each of these elements are now expanded below.

3.2.1 Modify the current 'Area 2' NBP sub-national reporting area

76 The rationale for this approach is in recognition that the NBP area (as defined in D03/17) is now comprised of two distinct reporting sub-areas: sub-area 1 - NBP Area excluding the Commitment Agreement area[4]; and sub-area 2 - Commitment Agreement with DCCAE[4]

77 eir has indicated that there may be a level of [redacted]

78 ComReg proposes to modify the reporting definition of the existing 'Area 2' NBP to now include two new sub-areas:

[25] See footnote 4.

- NBP sub-area 1 - NBP Area excluding the Commitment Agreement area[26] ; and
- NBP sub-area 2 -.the Commitment Agreement.

79 The premises within the scope of the Commitment Agreement are identified by eir as commercial deployments.

80 Accordingly it would be important going forward for ComReg to understand the quality of service levels in each of the two sub-areas.

81 ComReg is therefore of the preliminary view, that the definition of NBP sub-national area (by reference to Schedule 2 in D03/17s) should be refined to explicitly include both the NBP sub-area 1 and the NBP sub-area 2.

82 eir currently has the capability to provide the relevant NBP sub-national area data report to ComReg, the relevant Commitment Agreement area data report to DCCAE. Accordingly, ComReg is of the preliminary view that the requirement to report on the 'Area 2' NBP by NBP sub-area 1 and NBP sub-area 2 should be easily implemented by eir.

Q. 1	Do you agree with ComReg's preliminary view to modify 'Area 2' NBP sub-national area to include the two new NBP sub-areas (NBP sub-area 1 – NBP Area excluding the Commitment Agreement area[4] and NBP sub-area 2 – the Commitment Agreement area) from a reporting perspective? Please provide reasons and evidence to support your view.

3.2.2 National and sub-national connection targets

83 ComReg is of the preliminary view that the existing sub-national connection QoS targets should continue to apply to 'Area 2' NBP and not at the individual sub-area levels. This will benefit end-users who should experience reasonable and fair connection times irrespective of geographic location.

84 The current national and sub-national connection targets set out in D03/17 are intended to ensure consistency in minimum service provision nationally and across all three existing geographic areas. Annex 1 sets out eir's actual national and sub-national connection performance[27] (2017 and year to date 2018).

[26]

[27] Based on ComReg information notices 18/62, 18/71 and 18/87.

85 From the perspective of end-users the continuation of connection targets (national and sub-national) are important to ensure that they do not experience considerable delays in getting a telephone line and service connected.

Q. 2	Do you agree with ComReg's preliminary view that the national and sub-national connection QoS measures should be maintained? Please provide reasons and evidence to support your view.
Q. 3	Do you agree with ComReg's preliminary view that the national and sub-national connection QoS measures should be maintained at the current levels? Please provide reasons and evidence to support your view.

3.2.3 National and sub-national service availability targets

86 Sub-national service availability targets are an appropriate mechanism to ensure that the amount of time that services are not working (whether because of a fault, or a delayed repair), are more consistent across all of the State and at least do not fall below a minimum standard in all specified areas.

87 ComReg is of the preliminary view that the current sub-national target of 0.607 should continue apply. ComReg's rationale is based on eir having formally previously confirmed to ComReg that all of its investment scenarios in its model are based on the copper network only and eir's model supplied to ComReg takes no account of possible performance improvements as a result of eir's own fibre deployment strategy and the associated migration of customers, including its significant planned rural FTTH deployment.

88 The AFL USO which eir is required to provide pursuant to Decision D05/16 is technology neutral and does not mandate the provision of the AFL USO via eir's copper network – the USO designation is technology agnostic and eir can choose (i.e. it is in eir's control) the optimum method of provisioning access and service as well as direct its investment as it sees fit.

89 eir, as the AFL USO USP with QoS obligations is obliged to report performance data to ComReg on a quarterly basis, two months after the quarter end, and which must be accompanied by an independent audit report of the data in accordance with D03/17[28]. These targets are measured annually.

[28] "Universal Service Requirements Provision of access at a fixed location (AFL) Quality of Service (QoS)" D03/17 Decision Instrument, Section 6.

90 ComReg notes that eir has not yet reported, which it is entitled to do on the use of fibre access within the quarterly data eir is obliged to submit to ComReg.

Q. 4	Do you agree with ComReg's preliminary view that the national and sub-national service availability QoS measures should be maintained? Please provide reasons and evidence to support your view.
Q. 5	Do you agree with ComReg's preliminary view that the national and sub-national service availability QoS measures should be maintained at the current levels? Please provide reasons and evidence to support your view.

3.2.4 Reporting, measurement, auditing and publication of QoS performance

91 ComReg is of the preliminary view that there should be no change to the current calculation, reporting and audit regime, save for, the inclusion of the separate reporting on NBP sub-area 1 and 2 within the 'Area 2' NBP service availability targets at the sub-national and national level, and connection targets at the national and sub-national level.

Q. 6	Do you agree with ComReg's preliminary view there should be no change to the current calculation, reporting and audit regime, save for, the inclusion of, and separate reporting on the NBP sub-area 1 and 2, in the 'Area 2' NBP while maintaining the service availability target at sub-national and national level, and the national and sub-national connection targets?. Please provide reasons and evidence to support your view.

3.3 Period of application

92 Taking into consideration eir's stated intention to retire and/or reduce of access to eir's legacy service or networks outside the NBP intervention area; and the current national broadband plan) ComReg is of the preliminary view that the aforementioned proposed AFL USO QoS targets should be retained until 31st December 2020.

3.4 The need for AFL USO QoS in the State

93 Currently there is no programme or mechanism which ensures that AFL at an appropriate level of QoS is provided to those who need it, other than a regulatory decision by ComReg.

94 ComReg's overall objective is to ensure that AFL USO QoS levels are appropriate, having regard to the existing and future network deployments (copper and fibre), both commercially and as a result of the NBP.

95 ComReg is of the preliminary view that absent of any AFL USO QoS targets, eir would be unlikely to have same financial incentives to invest (capex/opex) in its AFL network(s) in the short to medium term in order to retain the level of fault occurrence.

96 Because of this, there can be no assurance that all AFL customers would be provided with basic telecommunications services, at an appropriate quality of service standard, under normal market conditions without AFL USO QoS being imposed.

97 In considering what QoS targets should be set, ComReg has considered the following overarching principles:

- The targets should aim to balance the interests of end-users with promoting efficient investment.
- The targets should allow eir to have the flexibility to balance investment (in current and new networks) and repair expenditure as it considers appropriate to meet the targets. [29]
- The cost and other implications for eir should be proportionate.

98 Critically, during this transition period, and rollout of any new networks, it is imperative that minimum quality of service targets are in place, while ensuring that performance, particularly in remote areas, such as the NBP area do not adversely affect end-users.

99 ComReg is therefore of the preliminary view that there is a continued need for AFL USO QoS in the State.

[29] The approach should not seek to require further improvement by eir in respect of its current generation network, beyond its current general performance levels at this time (LFI), which means that eir has the flexibility to balance investment costs against operational costs, in light of the NBP and the rollout of next generation networks on a commercial basis. eir will have the necessary commercial freedom to choose how they will meet their USO obligations.

4. eir's AFL USO quality of service performance since 2017.

100 In chapter 2, ComReg gave a brief overview of the regulation of the universal services in the State. This chapter sets out eir's QoS performance to date.

101 Regulation 10 of the Regulations "*Quality of service of designated undertakings*" allows ComReg to specify requirements to be complied with by the USP in relation to the quality of service performance metrics of certain USOs that it delivers to end-users.

102 ComReg D03/17, set legally binding annual performance targets for eir, with effect from 2 February 2017, to meet it is obligations in respect of the services referred to in Regulation 3 of the Regulations.

103 ComReg D03/17 set targets at the national level for connection times and service availability, and introduced targets for each of the three sub-national areas[30] for connection times and service availability.

104 Connection targets remained the same at national level as applied heretofore and were also applied at the sub-national level for connections.(D03/17 Decision Instrument Section 4.3)

105 The service availability targets combined the fault occurrence performance achieved and fault repair performance achieved to report the actual maximum working days outage per line (D03/17 Decision Instrument Section 4.4).

106 eir, as the USP is obliged to report performance data to ComReg on a quarterly basis, two months after the quarter end, and which must be accompanied by an independent audit report of the data in accordance with D03/17. These targets are measured annually.

[30] As outlined in document 17/10a Schedule 2 the main distribution frames ('MDF') in the State are divided into three categories of sub-national areas. Area 1 – market driven infrastructure based competition (MDIBC) (Schedule 2(B) table 1; Area 2 – NBP area (Schedule 2(B) Table 2); and Area 3 – eir only area (Schedule 2(b) table3). The schedule 2 tables may be updated by ComReg, or following a request by eir (pursuant to the process set out in Section 7 of D03/17 Decision Instrument) to reflect ODFs and Aggregation Nodes as they become applicable based on CGA and NGA.

107 ComReg publishes USO performance data by quarter, providing an indication of performance towards the annual targets.

108 Annex 1 sets out full details of eir performance in 2017 and YTD in 2018. A summary is contained below.

Connections Summary

109 Table 2 and Table 3 summarise eir's national and sub-national performance for 2017 and provide an indication of performance towards each of the national and sub-national area *'in-situ'* connections performance targets for 2018. (See Appendix 1 for further details).

110 Table 4 and Table 5 summarise eir's performance for 2017 and provide an indication of performance towards each of the national and sub-national areas '*all other*' connections performance targets for 2018. (See Appendix 1 for further details).

Table 2: Summary (national and sub-national areas) *'in-situ'* connection performance (percentages) 2017 - Q2 2018

Annual Performance Targets (ComReg Decision D03/17)		IN-SITU CONNECTIONS - ACTUAL PERFORMANCE 2017				IN-SITU CONNECTIONS - ACTUAL PERFORMANCE - YTD (Q1/2) 2018			
		National area	NBP area	eir only area	MDIBC area	National area	NBP area	eir only area	MDIBC area
Within 24 hours of request	80% of connections to be completed within this time period	82.50%	85.20%	82.00%	80.20%	86.00%	88.10%	85.30%	84.40%
Within 2 weeks of request	85% of connections to be completed within this time period	99.50%	99.50%	99.70%	99.40%	99.00%	99.30%	98.80%	98.80%
Within 2 months of request	90% of connections to be completed within this time period	99.90%	99.90%	99.90%	99.90%	99.60%	99.70%	99.80%	99.50%

Table 3: Summary (national and sub-national areas) *'all other'* connection performance (percentage) 2017 - Q2 2018

Annual Performance Targets (ComReg Decision D03/17)		ALL OTHER CONNECTIONS - ACTUAL PERFORMANCE 2017				ALL OTHER CONNECTIONS - ACTUAL PERFORMANCE - YTD (Q1/2) 2018			
		National area	NBP area	eir only area	MDIBC area	National area	NBP area	eir only area	MDIBC area
Within 2 weeks of request	80% of all requests to be completed within this time period	86.80%	82.30%	88.10%	88.10%	84.10%	80.40%	86.90%	84.40%
Within 4 weeks of request	85% of all requests to be completed within this time period	96.30%	93.90%	96.40%	97.10%	94.60%	92.10%	95.70%	95.20%
Within 8 weeks of request	90% of all requests to be completed within this time period	98.40%	97.10%	98.20%	98.90%	98.10%	96.80%	98.20%	98.50%
Within 13 weeks of request	95% of all requests to be completed within this time period	99.10%	98.30%	99.10%	99.50%	99.00%	98.10%	98.90%	99.40%
Within 26 weeks of request	100% of all requests to be completed within this time period	99.80%	99.60%	99.80%	99.90%	99.80%	99.60%	99.80%	99.90%

111 eir's model did not explicitly identify new connections. Accordingly ComReg has taken eir's reported actual connections ('in-situ' and 'all other') to estimate a future trend line.

112 This trend (Table 4) is in line with the total USO working lines in eir's model and eir's actual total USO working lines.

Table 4: eir's model USO working lines versus actual USO working lines

113 Regulation 3 (1-3) provision of access at a fixed location and provision of telephony services, does not stipulate the network or technology to be used. Accordingly eir is free to meet its USP obligations utilising either copper or fibre networks, or both.

114 ComReg understands that a fibre to the cabinet first installation (FTTC: 1st Install) may be enabled remotely, once the operator sends to the end-user, the modem and splitter and the open eir technician patches the broadband service at the (FTTC). Subsequent reactivation of service can be done remotely. An operator can deliver VoIP on FTTC if the modem has analogue telephone adapter (ATA) i.e. phone connection (RJ11). The setup of VoIP is straight forward where the end-user plugs in phone and operator activates the VoIP service.

115 Furthermore, ComReg understands that after a fibre to the home first installation[31] (FTTH: 1st Install), subsequent reactivation of service can be done remotely. An operator can deliver VoIP on FTTH if the modem has ATA. The setup of VoIP is straight forward – the end-user plugs in phone and operator activates the VoIP service.

116 ComReg notes that eir has reported (as part of its input data to ComReg's Quarterly Key Data Report) that eir had [redacted] VoIP subscriptions as of Q4 2017 and [redacted] VoIP subscriptions as of Q2 2018.

117 eir's AFL USO QoS obligations oblige it to report data to ComReg on a quarterly basis, two months after the quarter end, and which must be accompanied by an independent audit report of the data in accordance with D03/17. These targets are measured annually. ComReg notes that eir has not yet reported, which it is entitled to do on the use of fibre access within the quarterly data eir is obliged to submit to ComReg.

Service availability summary – 2017 and Q1/2 2018

118 The service availability targets allows eir to decide whether to invest to prevent faults by either rolling out new technology or maintaining existing network connections or by carrying out repairs more quickly instead of investing in preventative maintenance.

119 As outlined in D03/17, eir's model provided an annual breakdown (2016-2019), which using eir's model *'achievable speed of repair'* demonstrated that the service availability performance targets were predicted to be met both nationally and sub-nationally in each of the three years, thus demonstrating that according to eir's model, both the national maximum of 0.237 working days outage per line (99.935%) and sub-national maximum 0.607 working days outage per line (99.834%) service availability targets would be met (Table 5).

[31] Field technician survey and physical install (see video https://www.youtube.com/watch?v=sAN_Tpkrrtw)

Table 5: Predicted service availability based on LFI and on eir's model 'achievable speed of repair' [redacted]

120 eir stated that the '*achievable speed of repair'* values used to underpin the model were established by [redacted]

121 eir previously confirmed to ComReg that eir's model is based on capital investment scenarios only, where the 'achievable speed of repair' is assumed to be constant and eir formally confirmed that the *'achievable speed of repair'* would be achieved from the commencement of eir's model (i.e. June 2016).

122 ComReg sought further confirmation from eir that the model *'achievable speed of repair'* would be achieved from the commencement date of eir's model. eir subsequently confirmed the aforementioned in writing, on foot of a subsequent ComReg 13D Information Request[32].

123 eir's supporting overview document[33] submitted in response to ComReg's information request (16 August 2016) also described how eir planned to invest € [redacted] M capital in the copper network on replacement/renewal in F/Y 2016/17 (€ [redacted] M capital over 3 years).

124 eir presented Table 6 showing the expected network performance nationally/sub-nationally after 3 years with the level of investment each year (€[redacted] M, based on eir's model *'achievable speed of repair'* values.

[32] eir response to 13D 28th October 2016.
[33] Response to ComReg S13D of 25 Aug16.pdf.

Table 6: *eir's planned investment (€ M capital over 3 years) – eir mode*

[redacted]

125 Using eir's 'planned' investment scenario (outlined in paragraph 44 above) and eir's yearly projected fault occurrence with its model *'achievable speed of repair'* to calculate yearly projected national and sub-national availability, the service availability performance targets were achievable each year commencing July 2016.

126 In October 2018 ComReg issued a 13D Information Request to eir seeking information to inform ComReg's review of the current AFL USO QoS targets, in light of the forthcoming expiration of the current designation (31 December 2018). Amongst other things ComReg requested eir to provide ComReg with the current version of eir's model. ComReg also sought clarification on eir's actual level of capital expenditure in the copper network in financial years 2016/17 and 2017/18.

127 ComReg has used eir's model[34].eir stated that the actual level of capital expenditure in the copper network in financial year 2016/17 was € M and € M in 2017/18.

128 Table 7 summarises eir's **actual** performance for 2017.

Table 7: Sub-national service availability summary 2017 - Q1/2 2018

Annual Performance Targets	SUB-NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE 2017			SUB-NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE -YTD (Q1/2) 2018		
(ComReg Decision D03/17)	NBP area	eir only area	MDIBC area	NBP area	eir only area	MDIBC area
Average fault repair time performance	*2.0222*	*1.9553*	*1.7384*	*2.5087*	*2.3759*	*1.9986*
Line fault occurrence performance per 100 lines	*22.7390*	*12.1352*	*6.6715*	*12.9095*	*5.5725*	*3.5499*
Sub-national - 0.607 maximum working days outage per line	**0.460**	**0.238**	**0.116**	**0.324**	**0.133**	**0.071**

[34] eir response (23 October 2018) to 13D 17 October 2018.

129 Table 8 summarises eir's **actual** sub-national service availability performance for 2017l

Table 8: National service availability summary 2017 - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)	NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE 2017 National area	NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE - YTD (Q1/2) 2018 National area
Average fault repair time performance	*1.9320*	*2.3459*
Line fault occurrence performance per 100 lines	*12.6372*	*6.6704*
National - 0.237 **maximum working days outage per line**	**0.245**	**0.157**

130 As outlined earlier in paragraph 50 eir's model took no account of possible performance improvements (e.g. eir's fibre deployment strategy; fibre versus copper deployment costs; and significant planned FTTH deployment):

131 Accordingly ComReg was of the view that eir could further improve performance in the NBP area (recognising the conservative approach within eir's model) through the following possible mechanisms (1) increasing the number of eir resources per fault (towards the ratio in the competitive area) and/or (2) altering any policy in relation to the dispatch of resources for repair in certain areas , to narrow the gap in speed of repair, between [redacted] areas and (3) rolling out new technology to poor performing lines to increase performance.

132 In light of these factors ComReg set the same sub-national service availability targets of **a maximum of 0.607[35] working days outage per line** for three sub-national areas, having regard to the 5 year observed average of availability (2009-2014) and the predicted performance based on eir's three year model. The same sub-national target was set for all areas, based on the lowest performing area. This was intended to ensure that quality of service performance in that area did not deteriorate below what ComReg regarded as the minimum.

133 ComReg now examines the impact of each of the following parameters on eir's actual service availability performance:

- eir's model *'achievable speed of repair'* versus actual speed of repair

[35] The availability target is calculated using fault occurrence during the period and repair performance.

- eir's planned versus actual investment
- eir's planned versus eir's actual LFI

eir's model *'achievable speed of repair'* versus actual speed of repair

134 Table 9 demonstrates eir's actual speed of repair performance as at December 2017).

Table 9: eir's actual speed of repair performance – December 2017[3] [redacted]

[redacted]

135 Table 10 demonstrates the variances in eir's actual speed of repair performance against its *'achievable speed of repair'* in eir's model at December 2017.

Table 10: Variance eir's actual speed of repair performance December 2017 versus *'achievable speed of repair'* eir's model

[redacted]

136 Table 11 clearly demonstrates at the summary level that in 2017 and up to Q2 2018 eir's actual performance is varying when compared with its model's *'achievable speed of repair'* in all sub-national areas, and at the national level.

[36] eir's financial year is defined as commencing 1 July until 31 June in the relevant year.

Table 11: eir model *'achievable speed of repair'* versus eir's actual speed of repair

[redacted]

137 In 2017 eir achieved a national speed of repair which was [redacted] % of its stated model *'achievable speed of repair'*. eir achieved an eir only sub national area speed of repair which was [redacted]% of its stated model *'achievable speed of repair'*. eir achieved an MDIBC sub national area speed of repair which was [redacted]% of its stated model *'achievable speed of repair'*. eir achieved an NBP sub national area speed of repair which was [redacted] % of its stated model *'achievable speed of repair'*.

138 In Q2 2018 eir is currently achieving a national speed of repair which is [redacted]% of its stated model *'achievable speed of repair'*. eir is currently achieving an eir only sub national area speed of repair which is [redacted]% of its stated model *'achievable speed of repair'*. eir is currently achieving an MDIBC sub national area speed of repair which is [redacted]% of its stated model *'achievable speed of repair'*. eir is currently achieving an NBP sub national area speed of repair which is [redacted]% of its stated model *'achievable speed of repair'*.

139 eir's model explicitly assumed that eir's '*achievable speed of repair*' would be met from July 2016 (i.e. the commencement date of eir's model). Accordingly based on the flexibility provided by service availability targets eir can choose to be either invest to prevent faults by either rolling out new technology or maintaining existing network connections.

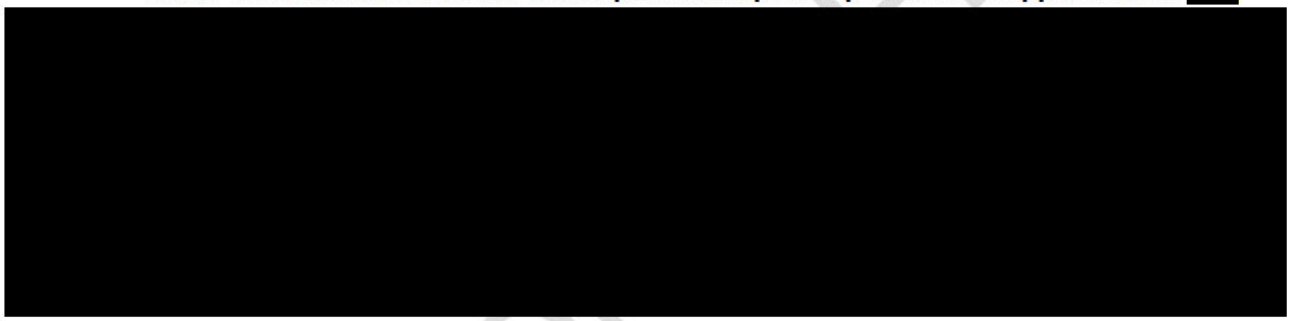
140 Table 12 clearly demonstrates eir's performance as of June 2018 against its model *'achievable speed of repair*'.

Table 12: eir model *'achievable speed of repair'* versus eir's actual speed of repair

eir's planned versus actual capital investment

141 Table 13 summarises eir's planned[37] versus actual capital expenditure in the copper network in financial years 2016/17 and 2017/18.

Table 13: eir actual versus eir model planned capital expenditure - copper networ



142 eir's actual level of capital expenditure[38] in the copper network in 2016/17 and 2017/18 is than eir's forecasted level (eir model). eir actual capital expenditure in the copper network in financial year 2016/17 is]]% of eir planned capital expenditure and is]]% of eir planned capital expenditure in financial year 2017/18..

143 In 2017 eir entered into a Commitment Agreement with DCCAE in relation to eir's plans to provide High speed broadband to 300,575 premises in rural areas on a commercial basis[39]. This will predominantly be delivered through the deployment of FTTH. While eir's initial estimates were that circa [% of the 300,575 premises may be served through eVDSL (i.e. copper network), .

[37] As outlined in eir's model.
[38] Based on eir's response of 16th October 2018 to ComReg's 13D of 25th August 2018.
[39] Primarily commercial fibre deployments rural areas within the original NBP footprint (Commitment Agreement)

144 ComReg notes that section 1.3 'Sub-milestone Definitions' of the Commitment Agreement includes pole survey and pole replacement. ComReg has issued a further 13D Information Request seeking further details on eir's copper network capital expenditure, in order for ComReg to understand specifically how it relates to eir's Commitment Agreement with DCCAE.

145 The current service availability targets clearly demonstrate how they facilitate eir and provide the flexibility to decide whether to invest to prevent faults by either rolling out new technology or maintain existing network connections or by carrying out repairs more quickly instead of investing in preventative maintenance.

eir's planned versus actual LFI

146 eir's model is predicated on eir realising its (1) *'achievable speed of repair'* and (2) implementing its planned annual capital investment of € [ ] M from the commencement of eir's model (July 2016).

147 Fault Occurrence or Line Fault Index (LFI) measures the number of faults occurring per one hundred lines. It is a proxy measure for the quality of an underlying network and is an indicator as to the level of preventative maintenance being undertaken within the network.

148 Based on eir's model Table 14 shows eir's expected copper network performance (LFI) and the maximum working day outage per line, nationally and sub-nationally after three years. eir's model demonstrated eir achieving its *'achievable speed of repair'* and the national service availability target, based on eir achieving a national LFI of [redacted]

Table 14: eir's planned investment (eir model € [M over three years)

[redacted]

149 As outlined at paragraphs 44 to 51 ComReg was of the view that eir could further improve performance in the NBP area (recognising the conservative approach within eir's model) through the following possible mechanisms (1) increasing the number of eir resources per fault (towards the ratio in the competitive area) and/or (2) altering any policy in relation to the dispatch of resources for repair in certain areas , to narrow the gap in speed of repair, between [redacted] areas and (3) rolling out new technology to poor performing lines to increase performance. Accordingly ComReg set the sub-national target at 0.607 maximum working day outage per line.

150 [redacted]

151 The impact of the level of capital expenditure is demonstrated in Table 11[40]. It shows the **actual** line fault index (LFI) associated with the copper network performance nationally and sub-nationally (after 2 years of eir's model) based on eir's **actual** capital copper network investment.

152 eir's capital investment (€ [redacted] over two years) in the copper network, has contributed to a reduction in the current LFIs in both the national and sub-national areas.

Table 15: Actual LFIs versus eir's model LFIs [✂]

153 [redacted]

[40] eir's model commenced from 1 July 2016.

[redacted]

156 In paragraphs 146 to 155 ComReg has assessed the impact of each of the following parameters on eir's actual service availability performance:

- actual speed of repair
- actual capital investment
- eir's actual LFI

157 ComReg's analysis based on the available data indicates that:

- eir appears to have made [redacted] level of capital investment in order to facilitate other new commercial technology deployments (eir's fibre deployment strategy[41]; and significant FTTH deployment[42]) and to meet its Commitment Agreement obligations.
- eir's level of actual capital investment has resulted in associated reduction in the LFIs in the national, NBP and MDIBC area, however the LFI in eir only area has increased.
- eir [redacted] model *'achievable speed of repair'* which eir planned to achieve from July 2016.

158 The level of the national service availability target is set so that in order for eir to achieve it, eir has to sufficiently over achieve each of the sub-national targets in one or more areas, to ensure that the overall national service availability target is met eir's actual performance is set out in Annex 1.

[41] Primarily commercial fibre deployments in urban areas.
[42] Primarily commercial fibre deployments rural areas within the original NBP footprint (Commitment Agreement).

5. Draft Regulatory Impact Assessment (RIA)

5.1 Introduction

159 In Decision D05/16, ComReg determined that there was a continued need for the imposition of USO in respect of AFL and designated eir as the USP for the period 29 July 2016 to 30 June 2021.

160 With this consultation and draft decision ComReg is seeking to fulfil its statutory objective *inter alia* to ensure that the universal service is delivered at an appropriate quality. Decision D03/17 set performance targets for ensuring a minimum quality of service. Absent a USO, there is no guarantee that reasonable requests for access would be fulfilled to a sufficient standard of quality.

161 ComReg in D03/17 introduced the following broad measures in relation to QoS targets:

- Target of *service availability*, measured by combining the fault occurrence and fault repair metrics, set at the national and sub-national levels;
- Connection targets, set at the national and sub-national levels; and
- Obligations for reporting, auditing and publication of QoS performance.

162 The analysis presented in this section represents the draft regulatory impact assessment (**"RIA"**) which sets out ComReg's preliminary view of the effect upon stakeholders, notably, end users, eir itself as the USP, of imposing QoS performance targets on eir, as the designated USP.

163 ComReg's approach to the draft RIA follows the RIA Guidelines (published in August 2007[43]) and takes into account the "Better Regulation" programme[44] and international best practice. Section 13(1) of the Act of 2002 requires ComReg to comply with Ministerial Directions. In this regard, Ministerial Policy Direction 6 February 2003 requires, that, before deciding to impose regulatory obligations on undertakings, ComReg shall conduct a RIA in accordance with European and international best practice and in accordance with measures that may be adopted under the "Better Regulation" programme.

164 As part of the process in selecting a preferred regulatory approach to this matter, ComReg sets out its key policy issues and objectives, followed by an assessment of the relevant regulatory options and their respective impacts for consumers, service providers and competition.

165 The purpose of this draft RIA is to assess on a preliminary basis the likely impact upon stakeholders of the following options:

- Option 1 –maintain an AFL USO QoS obligation;
  - Option 1a - maintain the current AFL USO QoS targets and areas
  - Option 1b - maintain the current AFL USO QoS targets – Modify the current 'Area 2 NBP sub-national area for reporting purposes to separately identify and report on NBP sub-area 1- NBP Area excluding the Commitment Agreement area[4] and NBP sub-area 2 -Commitment Agreement[4];
- Option 2 - remove the AFL USO QoS obligation.

Step 1: Describe the Policy Issue and Identify the Objectives

166 Universal service is the principle that all citizens should be provided with a range of basic services at a specific quality and at an affordable price so that they are able to participate fully in society, irrespective of their location, social standing or income.

[43] ComReg Document No. 07/56 and 07/56a.
[44] http://www/taoiseach.gov.ie/Publications/Publications_2011/Revised_RIA_Guidelines_June_2009.pdf.

167 Among ComReg's objectives, as set out in section 12 of the Communications Regulation Act 2002 (as amended), is the promotion of the interests of users within the Community, in particular "*ensuring that all users have access to a universal service*" and "*addressing the needs of specific social groups, in particular disabled users*."

168 There are both social and economic grounds for the USO, including providing services to help vulnerable users and those in remote locations whom the market might otherwise not choose to serve. The USO is also focused on bringing benefits to those with low incomes who have difficulty in affording a telephone service as well as end-users with disabilities who need particular services or facilities.

169 The AFL USO is an important part of the regulatory framework, as it ensures that all end users can obtain access to the universal service with acceptable quality. In order for the regulatory framework to function effectively and, in a way that benefits end users, it is vital that the actual performance of the USP in delivering AFL USO is satisfactory.

170 Subsequent to designating eir to deliver AFL USO, Regulation 10 of the Regulations ("*Quality of service of designated undertakings*") allows ComReg, if it considers it necessary, to specify requirements to be complied with by eir in relation to QoS performance metrics.[45]

171 One of the most important areas of USO relates to end-users being provided with a telephone service in a reasonable period of time. It is also vital that faults, which will inevitably occur, are limited in number and are repaired speedily. Decision D03/17 performance targets provide important protections for end-users in terms of connection times, and service availability metrics.

172 ComReg considers that the AFL USO needs to evolve with the changing digital environment, with technological and market developments, users' main interests may be shifting and broadband and mobile solutions, often in bundles, increasingly in demand. However, there remains a risk that left to the operation of market forces alone, access to services mandated by the Universal Services Directive may not be provided to everyone irrespective of location and at an appropriate quality.

[45] Recital 17 of the Universal Service Directive provides that national regulatory authorities should be able to monitor achieved QoS for undertakings which have been designated as having universal service obligations. In relation to the QoS attained by such undertakings, national regulatory authorities should be able to take appropriate measures where they deem it necessary.

173 In the absence of AFL USO requirements, there is a risk that QoS would deteriorate especially in "eir only" and the "NBP" (sub-areas 1)[46] areas. There is a strong risk that eir would have financial incentives not to invest significantly in the short to medium term to reduce the number of faults. eir may tend to favour areas with infrastructure based competition and or the Commitment Agreement area and ensure fewer faults or shorter repair in those areas. Any significant difference in eir's behaviour between the "market-driven infrastructure-based competition" the Commitment Agreement areas and "eir only"/ and the "NBP" (sub-area 1) areas, may result in an unacceptable deterioration of QoS within certain areas.

174 Thus, ComReg's preliminary objective for maintaining a QoS regime is that eir will meet at least a minimum quality for access at a fixed location and fixed voice service. ComReg seeks to ensure that end-users do not experience considerable delays in getting their phone line connected, and/or ensuring that a line is not out of order for an unreasonable period of time. A disruption or lack of service can be a source of considerable inconvenience and upset for customers, in particular, for those who live alone, are elderly or vulnerable.

175 In pursuing the objective to protect end-users, ComReg is also mindful of the objective to safeguard competition and promote efficient investment in infrastructure, ultimately to the benefit of end users.

176 In reviewing the current QoS performance targets[1] ComReg considered the following overarching principles:

- The targets should aim to balance the interests of end-users with promoting efficient investment.
- The targets should allow eir to have the flexibility to balance investment (in current and new networks) and repair expenditure as it considers appropriate to meet the targets.[1]

177 The cost and other implications for eir should be proportionate.

178 Having regard to eir's recent performance against current QoS performance targets, it is imperative that minimum quality levels for AFL USO services are in place, particularly in remote areas, such as eir only and NBP (sub-area 1) so as to not adversely affect end-users.

[46] NBP sub-national area excluding the Commitment Agreement premises.

179 The QoS targets would need to evolve as appropriate and align with end-users changing needs and general market developments. In considering the imposition of any regulatory measures ComReg is bound, pursuant to section 12 of the Act and Regulation 8 of the Framework Regulations, by the principle of proportionality and technological neutrality.

180 On balance, the current approach to QoS targets, while protecting end-users, also give eir appropriate flexibility in how it achieves at least a minimum quality delivery of AFL USO services particularly in remote areas so as not to adversely affect consumers.

181 ComReg is taking into account, in acting in the pursuit of its objectives as set out in Section 12 of the Act of 2002, and Regulation 16 of the Framework Regulations, the importance of promoting efficiency, sustaining competition, promoting efficient investment and innovation whilst giving the maximum benefit to end-users, in particular, elderly users and users with special needs; as more particularly set out at Article 8 of Directive 2002/21/EC[47] and the Regulations, ComReg must ensure all reasonable, proportionate measures to promote the interests of citizens by ensuring that they have access to universal services at a suitable quality standard.

Step 2: Identify and Describe the Regulatory Options

182 In Decision D05/16, ComReg determined that there was a continued need for the imposition of USO in respect of AFL and designated eir as the USP for the period 29 July 2016 to 30 June 2021.

183 Decision D03/17 set performance targets for ensuring a minimum quality of service. In light of the forthcoming expiration of the current QoS performance targets (31 December 2018),ComReg is seeking to fulfil its statutory objective *inter alia* to ensure that the universal service is delivered at an acceptable quality taking into account a number of key considerations:

- Protecting the interests of end-users
- The likely deterioration in performance, in certain areas, in particular, absent any targets
- Ensuring the obligation to provide access at a fixed location is technology neutral

[47] Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, as amended ("Framework Directive').

- eir's indication[48] of its intention to transition its copper network to fibre
- eir's current predictive model for investment/network performance ("eir's model")[49]

184 ComReg is considering a range of regulatory options open to it to achieve the objectives set out above.

- Option 1 –maintain an AFL USO QoS targets and areas
- Option 2 - Maintain the current AFL USO QoS targets and modify the reporting areas

Option 1 – Maintain an AFL USO QoS obligation

185 The rationale for Option 1 is to ensure access to at least minimum quality AFL services regardless of geographic location. Should the market fail to meet end-user demand for basic services, without a USO, there is no guarantee that such standards will be in place to protect end-users. Therefore, an AFL USO obligation to comply with QoS performance targets, could be important to protecting consumer welfare *inter alia* the targets ensure that end users, in particular, vulnerable users, who require access to basic telephony at a fixed location do not experience considerable delays in getting a telephone line connected as well as ensuring that a line is not out of order for an unreasonable length of time.

186 ComReg notes that apart from AFL USO, there is no other mechanism, programme or scheme in place to ensure that AFL, as required by the Regulations, is provided to everyone that requires it at an acceptable quality where it cannot be obtained under normal market conditions. Under this approach the USP would be required to comply with QoS targets to ensure that existing QoS in relation to the AFL service would at least not deteriorate in the NBP transition period.

187 Having specific regard to the counterfactual analysis and, its reasoning to designate eir as USP for the provision of AFL USO, ComReg is of the preliminary view that there is likely a need for some form of QoS targets to continue to be in place in the short to medium term.

[48] See Information Notice ComReg 17/05, 19 January 2017
[49] eir's current model provided to ComReg on foot of Section 13D Information Request.

188 Performance targets are important measures of consumer welfare and ensure that eir's performance in delivering the AFL USO, particularly in remote areas does not adversely affect consumers' standard of service.

189 Ensuring that end-users in Ireland can access basic telecommunications services with acceptable quality brings benefits to those who might otherwise be at risk of isolation, for instance those with low incomes who may have difficulty in affording a telephone service, consumers with disabilities who need particular services or facilities, or those in rural or sparsely populated areas for whom the cost of gaining access to services might otherwise be prohibitive. If end users would not be served in a competitive market, they must still have access to basic services of specified quality which are considered to be essential for participation in society.

190 From the end-user perspective, the availability of at least a minimum quality fixed voice service is absolutely essential in particular for more vulnerable users and to rural life. This is an important consideration in terms of consumer welfare providing continuity and reliability of voice service, including uninterrupted access to emergency services, in transition to other new advanced networks and services.

191 While Decision D05/16 designates eir as the USP it seeks to ensure that end-users have access to the universal service, additionally imposing QoS targets on eir will help to guarantee that reasonable requests for access are fulfilled to a sufficient standard of quality nationally and sub-nationally. In particular, it will help guarantee that actual performance of eir in delivering AFL USO is satisfactory – end-users will be provided with a telephone service in a reasonable period of time and faults, which inevitably occur, will be limited in number and/or repaired speedily. Potentially all end-users gain from QoS targets but more likely end-users living in "eir only" or "NBP" (sub-area 1) areas. (circa [redacted]% active lines).[50]

192 Consumer welfare can be expected to be enhanced by maintaining the AFL USO QoS targets. This would help to ensure that existing QoS levels in relation to the AFL service would at least not deteriorate below overall current QoS levels during the transition period.

[50] eir's reported USO working line base by area.

193 ComReg is of the preliminary view that during this transition period, there may be increased risk to consumers, given eir's incentives to allow its copper network to degrade. This is an important consideration given that the majority of fixed voice services, including AFL services, are based on copper (i.e. PSTN technology), however this is expected to change over time with migration to advanced networks and services providing for better quality of service performance.

194 As noted previously, eir has given an initial indication of its intention to transition its copper network to fibre. As the designated USP, however, it will need to provide end-users with an alternative method of connecting to the public telecommunications network and accessing voice services. Specifically, where copper-based products have been provided under a USO, and this is being withdrawn, then there will be a requirement that a suitable alternative product is offered and that the customer is not required to bear any significant cost in order to continue to avail of the service. ComReg is of the preliminary view that a continuation of QoS targets as a means of ensuring at least a minimum performance from the USP delivering quality AFL USO services and, hence, achieving the objectives set out, step 1. ComReg is of the preliminary view that new advanced access technologies (e.g., rollout of fibre connections) will likely bring higher QoS to the benefit of end-users.

195 Additionally, there is likely an industry benefit from QoS targets as availability of AFL at an acceptable quality standard can ensure businesses are contactable by customers resulting in a positive impact on the reputation of the business and confidence that its customers will have in it. Indeed, eir as the USP may gain from improved consumer confidence in AFL services (e.g., fewer faults, speedier repair times and/or installation times). End-users may have greater confidence in eir's network and may be more likely to remain eir customers and to use more of its products. Essentially, revenues for eir would most likely be retained (from the calls made by end-users in addition to the line rental charges they pay) from delivery of AFL at an acceptable quality standard.

196 With respect to costs, ComReg is of the preliminary view that the above benefits likely to accrue to eir will offset, to a degree, any cost to eir of meeting AFL USO QoS targets. ComReg furthermore considers that the AFL USO which eir is required to provide pursuant to Decision D05/16 is technology neutral and does not mandate the provision of the AFL USO via eir's copper network – the USO designation is technology agnostic and eir can choose (i.e. it is in eir's control) the optimum method of provisioning access and service as well as direct its investment as it sees fit.

197 For the above reasons, ComReg is of the preliminary view that the overall net impact of mandatory QoS targets on eir should be positive so that overall consumers and industry significantly gain from the requirement to meet minimum QoS levels in relation to connection and services during the transition to other new advanced networks and services.

Option 2 - Remove the AFL USO QoS obligation

198 Under Option 2 there would be no designation of a USP to deliver AFL USO at a minimum quality, hence, the QoS targets associated with the designation would not be able to be applied if appropriate (i.e. the counterfactual analysis).

199 The rationale behind this approach was that if left to the operation of market forces alone, AFL of an acceptable quality is provided to everyone that requires it in the short to medium term. This approach would involve eir (currently the USP) freely deciding what an acceptable AFL QoS is in respect of AFL as well as deciding more generally when and how to invest in its network and services.

200 eir would benefit in the absence of any associated QoS targets. Thus, for example, eir would freely decide what an acceptable AFL QoS is in respect of AFL and decide more generally when and how to invest in its network and services.

201 In this respect, eir would be unlikely to have financial incentives to invest significantly in its AFL network(s) (or certain areas) in the short to medium term to reduce the number of faults and/or to allocate sufficient resources needed to repair them. In the context of ceased USO QoS targets, any potential costs in terms of compliance with the existing QoS targets would also be removed. eir would have complete freedom to address the level of fault occurrence and repairs without having regarding to service availability.

202 However, the cost of removing AFL USO QoS targets at this time is that, as compared to the current situation, there is no guarantee that universal services envisaged by the Directive would be provided at sufficient quality, thus there is a real risk of detriment to end-users.

203 Specifically, it is the loss or prolonged interruption of a service that is expected to function that is one of the main sources of consumer harm. Businesses expect their phone to work and make plans on the basis of this expectation, thus a removal or prolonged interruption of this service could be very costly to their business and reputation, particularly where they need frequent contact with their customers. Also, particularly vulnerable or aged consumers may find the loss or prolonged interruption of a communications system upon which they were relying for contact with their support networks extremely damaging.

204 Under this approach, ComReg recognise the potential different circumstances that may emerge in the various geographic locations which may impact the requirement or not for AFL USOs. Thus for example, where a new network is being deployed under the NBP, or otherwise commercially, it may be economically inefficient and ultimately not in the interests of stakeholders for ComReg to continue to require the maintenance of obligations relating to QoS performance targets throughout the State. In doing this, ComReg considers eir's investment incentives, in particular, the balance of incentives to invest in its network to reduce the number of faults, ultimately to the benefit of end users.

205 Having regard to the assessment of current market developments as well as eir's performance and investment with respect to QoS, as set out in eir's model and it's 2017 QoS actual performance, ComReg's preliminary view of current performance is that eir's incentives to maintain an adequate level of QoS are significantly different across the country. eir would potentially have incentives to reduce investment in the network and in terms of its connection and repair efforts absent any QoS targets. Deterioration past a minimum level of QoS in relation to eir's ubiquitous network would likely be significant, and consumer welfare would suffer as a result and, in particular, "NBP" (sub-area 1)/"eir only" areas.

206 ComReg is of the preliminary view that, on balance, to completely remove the QoS targets would not meet the objectives set out above, and hence it would unlikely be the most appropriate approach in respect of consumer welfare at this time.

Nature and structure of QoS Targets

207 In D03/17 ComReg reviewed the need for and, scope of, AFL USO QoS targets and what the optimal targets were for the USP bearing in mind its performance in these areas alongside evolution in the market, on the supply as well as demand side.

208 On 7 April 2017 eir entered into a Commitment Agreement with DCCAE in relation to eir's plans to provide High speed broadband to 300,575 premises in rural areas on a commercial basis[51].

209 ComReg is of the preliminary view that there is a continued need for AFL USO QoS, to ensure that consumers throughout the State receive AFL at an acceptable quality.

Step 3 and 4: Determine the Impacts on Stakeholders and Competition

210 Having regard to ComReg's objective to safeguard and ensure the provision of a minimum set of telecommunications services in the State with an acceptable quality, mindful of investment incentives and; that the complete withdrawal of the USO is not likely appropriate at this time, this draft RIA summarises in the Table(s) and below ComReg's preliminary view of the impact of regulatory options with respect to QoS aspects on different stakeholders and competition.

Option 1a – Maintain the current AFL USO QoS targets and areas

211 This option would maintain the status quo (i.e. no change to the current policy), reimposing the obligation on eir to comply with the current requirement of Decision D03/17 performance targets. This option serves as a benchmark against which all other options can be compared.

212 A rationale for keeping existing targets set in Decision D03/17 would be recognition by ComReg that:

- A QoS regime remains necessary and appropriate to safeguard and ensure, during the transition to a fully completed NBP infrastructure, the provision of AFL in the State at an adequate level of QoS, based on ComReg's analysis of eir's performance;
- Performance targets are important measures of consumer welfare and ensure that eir's performance in delivering AFL USO services, particularly in remote areas does not adversely affect consumers' standard of service;
- With a cessation of QoS targets at this time there is a risk that eir would no longer continue investing in certain areas leading to a significant deterioration in service standards. The minimum quality delivered by eir should be at least maintained during the transition to a fully completed NBP

[51] https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf.

infrastructure and result in an appropriate minimum quality delivery of AFL USO service across the country.

- ComReg's guiding principle is that consumers should not have a lesser quality of service while transitioning to new advanced networks; and
- These targets can be reasonably achieved by eir.

Option 1b – Maintain the current AFL USO QoS targets

Modify current 'Area 2' NBP sub-national reporting area

213 The sub-national areas[52] in D03/17 are currently defined as the 'eir only', 'NBIDC' and 'NBP' areas.

- "Area 1" (MBIDC) – Market Driven Infrastructure Based Competition – based on areas where eir faces greater market-driven infrastructure-based competition, including, from Vodafone/ESB/SIRO or UPC.
- "Area 2" NBP[53] – based on the NBP intervention areas where a high capacity broadband access network is intended to be made available through Irish Government subsidies.
- "Area 3" eir only – based on areas where eir faces no competition from any fixed infrastructure providers but could face competition from mobile networks providing fixed access solutions.

214 This option considers maintaining the targets set by Decision D03/17 and modifying Area 2 –NBP reporting to recognise that this is now comprised of two distinct reporting sub-areas: sub-area 1 – NBP Area excluding the Commitment Agreement area[4]; and sub-area 2 Commitment Agreement with DCCAE. The current 'Area 2' NBP was based on the original NBP area as opposed to the currently defined NBP intervention area.

[52] It is important to note that these 3 areas are defined in the specific context of USO and especially looking at the provision of competitive constraints on the provision of voice AFL. This analysis is therefore different from the analysis aiming at defining Larger Exchange Areas (LEA) conducted in ComReg documents 11/72 and 13/14

[53] This area was defined based on the original NBP area (i.e. 750,000) (https://www.dccae.gov.ie/en-ie/news-and-media/press-releases/Pages/National%20Broadband%20Plan%20State%20Intervention.aspx) as opposed to the currently defined NBP area https://www.dccae.gov.ie/en-ie/communications/topics/Broadband/national-broadband-plan/Pages/National-Broadband-Plan.aspx

215 On 7 April 2017 eir entered into a Commitment Agreement with DCCAE in relation to eir's plans to provide High speed broadband to 300,575 premises in rural areas on a commercial basis[54].

216 ComReg is of the preliminary view that there may be a requirement to amend the definition of 'Area 2' NBP sub-national area to distinguish between and separately report on two discrete and separate sub-areas of this sub-national area:

- Sub-area 1 - the NBP Area excluding the Commitment Agreement area[55] and.
- Sub-area 2 - the Commitment Agreement; and

217 ComReg understands that eir has the capability to identify the 300,575 premises governed by the Commitment Agreement at individual premises level. Accordingly eir has the capability to report these premises both at individual premises level and at their associated MDF/ODF level.

218 ComReg proposes to modify the reporting definition of the existing 'Area 2' NBP to now report separately on sub-area 1 (NBP Area excluding the Commitment Agreement area)[56] and sub-area 2 (Commitment Agreement area).

219 eir currently has the capability to provide the relevant NBP sub-national area data report to ComReg. Accordingly, the requirement to report on 'Area 2' NBP sub-areas 1 and 2 should be easily implemented by eir.

220 ComReg notes that eir has not yet reported, which it is entitled to do, on the use of fibre access within the quarterly data eir is obliged to submit to ComReg.

National and sub-national connection targets

221 ComReg is of the preliminary view that the existing sub-national connection QoS targets should continue to apply. This will benefit end-users who should experience reasonable and fair connection times irrespective of geographic location.

[54] https://www.dccae.gov.ie/documents/Commitment%20Agreement.pdf.
[55] See footnote 4.
[56] See footnote 4 (Commitment Agreement).

222 The current national and sub-national connection targets set out in D03/17 are intended to ensure consistency in minimum service provision nationally and across all three proposed geographic areas.

223 ComReg is of the preliminary view that in light of D05/16 and the modifications to the reasonable access request criteria, the connection targets set out in D03/17 are expected to be easier to achieve. Accordingly ComReg is of the preliminary view the existing sub-national connections targets should continue to apply.

224 Overall, ComReg is of the preliminary view that the continuation of these targets outlined are unlikely to result in a disproportionate cost burden, based on eir's own model and investment figures and relative to the benefits to end-users and the industry in the transition period. The benefits to consumers are likely to be significant. In contrast, if these obligations were removed no such benefits would follow to the detriment of the consumers and potentially risk being inconsistent with the Regulations.

National and sub-national service availability targets

225 Having regard to the quantifiable assessment of eir's actual QoS performance in 2017 ComReg is of the preliminary view that it is likely necessary and proportionate to set service availability national and sub-national targets. This approach will continue to protect end-users by ensuring that the amount of time that services are not working (either because of a line fault or a delayed repair) is more consistent across all of the State and at least does not fall below a minimum standard in all specified areas.

226 ComReg is of the preliminary view that with QoS performance targets set at an appropriate level, there should be no deterioration in eir's current minimum service availability nationally or sub-nationally. Therefore, end-users in particular in "NBP" (sub-area 1)/"eir only" areas can benefit from a minimum standard as well as the potential for improved service availability which is envisaged going forward in transition to other advanced networks.

227 This measure should ensure that end-users in areas with less competition and, potentially experiencing lower levels of QoS, will not be significantly negatively affected in terms of QoS going forward.

228 It can also be expected to enhance the welfare of service providers that rely on eir's network for the delivery of services with sufficient quality, as set out in earlier sub-sections.

229 Setting minimum national and sub-national service availability targets also provides during the transition period maximum flexibility to eir in how it will achieve these targets. eir has further flexibility within each of the sub-national areas, in how the national service availability target is achieved. The over achievement in one or more sub-national areas, may be off set against the under achievement in other sub-national area(s), provided always, that the minimum sub-national target is achieved within each of the three individual sub-national areas, while also achieving the national target.

230 ComReg is of the preliminary view that the national and sub-national service availability targets will continue to protect end-users in all specified areas. It should help ensure that quality of service performance does not deteriorate below what ComReg regards as the minimum nationally and across the sub-national areas in the State.

231 In this respect, the same sub-national target has been set for all areas and at a level based on the worst performing sub-national area with a view to protecting all end-users in terms of a minimum acceptable quality service. This should ensure that performance particularly in rural areas, does not adversely affect end users.

232 It is critical that the overall general minimum service availability does not deteriorate.

233 Service availability provides eir with the flexibility to choose how best to balance preventative maintenance (capital investment) with operating expenditure (Opex). In D03/17 ComReg set the national service availability target at a level to ensure that there would be no decrease in existing service quality, and no required improvement beyond the five year actual (2009-2014) observed average national service availability levels, having regard to eir's *'achievable speed of repair'* and its predicted fault occurrence levels in the context of eir's model (planned investment), consistent with ComReg's policy objectives.

234 As outlined in D03/17 national quality of service obligations may be insufficient to ensure an appropriate quality of service across the regions in the State. ComReg remains concerned by the extent of eir's ability to differentiate investment levels and fault repair times in different geographic areas. This can create unacceptable disparities in performance across the country.

235 Sub-national service availability targets are an appropriate mechanism to ensure that the amount of time that services are not working (whether because of a fault, or a delayed repair), are more consistent across all of the State and at least do not fall below a minimum standard in all specified areas.

236 ComReg is of the preliminary view that the current sub-national target of 0.607 should continue to apply.

237 ComReg's rationale is based on eir having formally previously confirmed to ComReg that all of its investment scenarios in its model are based on the copper network only and eir's model supplied to ComReg takes no account of possible performance improvements as a result of:

- eir's own fibre deployment strategy and the associated migration of customers.
- any cost comparison of copper versus fibre deployment and the associated service availability improvements.
- [redacted] eir's model has taken no account of its significant planned rural FTTH deployment.

238 eir's model does not take into consideration possible performance improvements as a result of eir's own fibre deployment strategy and the associated migration of customers, including its significant planned rural FTTH deployment. Consequently, eir's approach appears to overstate the potential level of investment required to achieve the proposed minimum national and sub-national targets.

239 eir has confirmed its up to date model.

[57] The second TERA report, Table 12 shows the 5 year average number of working lines within the three TERA defined areas.
[redacted]

240 eir's own investor relations 'eir Q4 & Full year 2018 Results Presentation'[59] financial presentation states that at *"June 2018 there were 242,000 FTTH premises passed, with 195k of rural 300k rollout complete. eir is continuing FTTH rollout to a further 1.4m urban homes and business over 5 years"*[60].

241 It may reasonably be expected to potentially remove poor performing connections from the areas with the poorest QoS and has therefore has the potential to automatically assist eir in improving the actual national and sub-national service availability.

242 Accordingly ComReg is of the preliminary view that the sub-national service availability target of a maximum of 0.607 working days outage per line remains an appropriate target for the three sub-national areas. It establishes the minimum level of service availability to be achieved in each of the three sub-national areas.

243 Sub-national service availability targets ensure that the minimum sub-national availability levels do not deteriorate, while affording greater flexibility to eir as to how they achieve this.

244 The over achievement in one or more sub-national areas, may be off set against the reduced achievement in other sub-national area(s), provided always, that a minimum, sub-national target is achieved within each of the three individual sub-national areas in each year.

Reporting, measurement, auditing and publication of QoS performance

245 ComReg is of the preliminary view that there will be no change to the current calculation, reporting and audit regime, save for, NBP Area reporting will now consist of further two sub-areas: sub-area 1 – NBP Area excluding the Commitment Agreement area[61]; and sub-area 2 –Commitment Agreement area).

246 The methodology for measurement of performance against QoS targets is set out in the Schedules to this Consultation (ComReg Document No. 18/120a).

59 https://www.eir.ie/opencms/export/sites/default/.content/pdf/IR/presentations/2017_2018/quarter4/eir_4th_quarter_results_presentation_FY18_presentation.pdf.

60 Slide 4.

61 See footnote 4.

Step 5: Assess the Impacts and Choose the Best Option

247 ComReg's preliminary view on the most optimal regulatory approach in respect of a QoS regime is set out below having considered:

- eir actual 2017 performance; and
- eir's model
- information provided by eir in response to information requests.[62]

AFL USO QoS is necessary and justified

248 Having regard to ComReg's objectives, ComReg considered the option to remove AFL USO QoS, which would involve leaving access to services mandated by the Universal Services Directive to market forces alone and eir freely deciding the quality of that service.

249 Having considered past performance by eir relating to indicators of quality of service, and market developments generally, ComReg is of the preliminary view that at this time there cannot be complete assurance that AFL USO services would, without any mandated QoS in place, be delivered at an appropriate quality throughout the State.

250 ComReg is of the preliminary view that absent any AFL USO QoS targets, eir acting as a profit maximising operator, would have incentives to reduce its investment in networks and services in the short to medium term (outside of the MBIDC and Commitment Agreement areas), and hence would not likely maintain an adequate level of QoS. Further, there is an observed difference between "markets driven infrastructure based competition", and "eir only" and "NBP" (sub-area 1) areas with respect to an adequate minimum level of QoS. Consequently, there is a risk that QoS could significantly deteriorate in particular, in "eir only" and/or "NBP" (sub-area 1) areas, increasing geographic disparity in terms of QoS. This could negatively impact end-users as well as service providers relying on eir's network to deliver services.

251 ComReg is of the preliminary view that any costs incurred in respect of a QoS obligation would, on balance, be outweighed by the benefits to consumers and hence the complete removal of all the targets at this time is not appropriate.

[62] eir investment model 25th August 2016 "20160526_AFLUSO_QoS_Repaired.xlsx (Excel workings) provided to ComReg in response to Section 13D Information Request.

252 Accordingly, maintaining the AFL USO QoS targets and modifying the reporting areas is the preferred option (Option 1b). ComReg is of the preliminary view that imposing AFL USO QoS is necessary and proportionate weighted against the objectives to be achieved by doing so. ComReg is of the preliminary view that retaining the AFL USO QoS targets, and modifying the reporting areas in the manner outlined above, is necessary and entirely justified to protect end users who eir, as the USP, is reasonably required to provide with a connection of suitable quality. It will lead, at a minimum, to a minimum QoS (service availability and connections) for end-users and it can be envisaged that QoS will improve going forward with the rollout of advanced networks, including, NBP.

Requirement for AFL USO QoS targets

Options	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1 **Maintain AFL USO QoS obligations**	eir may incur costs for the provision of AFL USO at an acceptable quality. These costs may depend on the specification of QoS levels. Where a net cost is claimed and an unfair burden is determined, providers of electronic communications network/services may be required to contribute to a fund. The duration of the QoS obligation may impact on the net cost claimed.	Provision of AFL USO at an acceptable quality benefits all operators in terms of end user demand and satisfaction about the service. Avoids non availability of AFL which can have a detrimental effect on businesses, as being non contactable by customers can seriously affect the reputation of the business and confidence that its customers will have in it.		Ensure that end-users do not experience considerable delays in getting a phone line connected; it will also ensure that a line is not out of order for an unreasonable period of time. Benefits consumers with sufficient QoS in transition to new advanced networks and services, current QoS should not be less while it is envisaged QoS will improve going forward with the completion of advanced networks. Ensure that performance particularly in remote areas does not adversely affect consumer's standard of service.
Option 2 **Remove AFL USO QoS obligations**	eir has incentives to reduce its investment absent QoS to the detriment of operators delivering services to end users over eir's network. eir's incentives differ across	The deployment of new technology likely to result in higher QoS in localised areas, resulting in different QoS levels in different areas eir would be free to decide what	AFL USO will not be delivered to all end-users with an acceptable quality, deterioration in the level of QoS would likely be significant and to their detriment. eir's incentives differ across the	The deployment of new technology likely to result in higher QoS in localised areas, resulting in different QoS levels in different areas

	the country and these disparities in performance could increase inter alia: • eir may favour MDIBC area and ensure fewer faults and/or shorter repair times in these areas. • Despite a higher level of fault occurrence in areas with limited competition (e.g. eir only area) eir may choose to invest more in MDIBC and Commitment Agreement areas.	'*an acceptable AFL QoS is*' in respect of AFL and more generally have complete freedom on when and how to invest in its network and services. eir's incentives to maintain QoS differ across the country and it will have total flexibility as to its planned investment and/cost of repair: • in MDIBC area there are incentives to improve/maintain QoS in order to compete • eir will likely need to maintain/improve QoS in part of the NBP area in order to meet its Commitment Agreement obligations. • There may be little incentive to maintain QoS in the eir only area where eir is experiencing no competition • No additional net cost incurred due to the delivery of AFL USO at a sufficient QoS level, hence no claim as a result of AFL USO QoS - to the benefit of the industry including eir.	country and the disparities in performance would likely increase. Potentially all end-users would be negatively impacted with a lower QoS, more so for those in NBP (subset) or eir only areas (circa 50% lines) where currently there are limited/no alternatives. End users may be forced to migrate or churn more quickly onto other advanced networks alternative if and where available.	End-users in MDIBC area may experience improved QoS if competition intensifies eir will likely need to maintain/improve QoS in NBP area in light of its Commitment Agreement obligations to the benefit of end-users in these areas only.

Nature and Structure of QoS targets

Options	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Option 1 **maintain existing QoS targets** and areas National and sub-national connection targets National and sub-national Service Availability targets ***Sub-national areas**: eir only; MBIDC; NBP*	A net cost may result which can be claimed. Industry may be required to contribute to a fund, if net cost found to be an unfair burden Service availability levels may vary across the areas	Simpler to implement and monitor as existing process for monitoring targets have been in place for at least a year. Deployment of new technology and NBP rollout are likely to result in higher QoS eir has greater flexibility to decide how and where to invest (preventative maintenance vs speed of repair)	Existing targets are both national and sub-national targets. Some end-users may experience more regular faults and longer repair times than others Service availability levels may vary across the areas	eir will be required to achieve minimum national and sub-national QoS (service availability targets) for end-users Ensures no excessive fault occurrence or repair times experienced in each of the sub-national areas (i.e. areas with less competition will not be significantly negatively affected in terms of QoS)
Option 2				

Options	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
maintain existing QoS targets and modify Area 2 –NBP reporting area **Retain** national and sub- national connection targets National and sub-national Service Availability targets ***Modify*** *Sub-national areas:* ***Retain*** *eir only and MBIDC areas* *Modify the NBP reporting area – split in two:*	A net cost may arise which can be claimed May incur additional cost in implementing the additional sub-national areas (NPB sub-area 1) and Commitment Agreement sub-area 2)	Ensures that commercial expenditure (Commitment Agreement) cannot be claimed as part of any US net cost. Provides greater QoS transparency in of the existing NBP area. Retains eir's flexibility decide how and where to invest (preventative maintenance vs speed of repair) and efficient investment	In some areas, end-users may experience more regular faults and quicker repair times; or more infrequent faults and longer repair times Sub-national areas defined based on groups of MDFs with the defined areas – on going maintenance and updating costs Targets set to ensure end-users a minimum level of QoS Possibility that QoS performance in the Commitment Agreement Area may deteriorate if network not maintained into the future	End-users benefit from at least no further deterioration in eir's current minimum service availability at the national or sub-national level eir can compensate for any expected higher fault rates with speedier repairs Provides greater visibility on service availability and its drivers Sub-national targets mean end-users may benefit from a minimum service, particularly in the existing NBP area. Sub-national targets protect end-users and ensure the service quality is appropriate

Options	Impact on Industry		Impact on End-user	
	Costs	Benefits	Costs	Benefits
Commitment Agreement Area(300,575 premises) *NBP*				End-users should continue to get the level of QoS they are currently experiencing and, all end-users experience reasonable and fair connection times, irrespective of geographic location

The nature and structure of QoS targets is appropriate and proportionate

253 In light of the consumer protection concerns, notably, that during the NBP transition period there may an increased risk to consumers, given eir's incentive to allow its copper network to degrade, ComReg is of the preliminary view that to completely remove the QoS targets is not appropriate at this time.

254 It is vital that the actual performance of eir in delivering AFL USO is satisfactory. Therefore, obligations in respect of QoS, which eir as the USP is currently obliged to comply with, are set out in Decision D03/17.

255 ComReg recognises that the ECS market will change significantly in the future including as a result of the NBP. The design of AFL USO QoS needs to take into account market trends and likely evolutions in the coming 2 years, notably, the deployment of FTTH networks, the development of the NBP and adoption of VOIP etc.

256 To this end, ComReg is of the preliminary view that in light of NBP, the Commitment Agreement and the roll out of next generation networks on a commercial basis that maintaining existing targets (option 1b) and modifying Area 2 – NBP reporting area which gives due consideration to efficient investment and market realities would seem the most preferred approach.

257 The service availability targets are designed to promote efficient investment and innovation in new networks, without requiring any unnecessary investment in the current generation networks. In this respect, service availability targets would not require eir to invest extensively and exclusively in their copper network, and give eir greater freedom to decide commercially the balance between of proactive and reactive maintenance, while achieving the service availability targets, it should help provide innovation and investment incentives for eir to accelerate any desired network deployment and/or replacement. Moreover, the USO designation is technology agnostic and eir can direct its investment as it sees fit.

258 Consequently, the quality delivered by eir should be at least maintained (in terms of service availability and connections) and result in a minimum appropriate standard of service across the country. Going forward, ComReg's guiding principle is that consumers should not have less than minimum quality of service while transitioning to advanced networks.

259 The consultation incorporates an objective assessment of the various regulatory options available to guarantee that universal services envisaged by the Directive and the Regulations would be provided with a sufficient quality standard. As part of this assessment, ComReg has undertaken an analysis of the market and technological developments and their likely evolutions and an impact assessment of regulatory options for addressing identifiable consumer protection concerns.

5.2 Conclusion

260 ComReg has designated eir as the USP for the period 29 July 2016 to 30 June 2021. Thus, its role is to ensure that consumers throughout the State receive AFL USO at an acceptable quality.

261 ComReg is of the preliminary view that the evidence (including the recent performance by eir in relation to QoS targets, and market developments generally) does not support a complete withdrawal of AFL USO QoS targets at this time.

262 Thus, ComReg is of the preliminary view that Option 1b (i.e. "maintaining of existing QoS targets and modifying Area 2 NBP sub-national reporting area") represents the most justified, reasonable and proportionate of the available regulatory approaches. It seeks to balance the end-user impact with any cost burden on eir as the USP and enhances its flexibility.

263 Localised next generation network deployments, while far from ubiquitous, may have an impact on the overall quality of service level within that area. Localised deployments, may result in improvements in overall AFL USO QoS, since quality of the localised network, particularly fibre, and its associated fault incident rate, are likely to be significantly better than the existing networks.

264 ComReg is of the preliminary view that the QoS targets period will be from xx xx 20xx to xx xx 202x. This proposed approach is reflective of the yearly assessment of the potential impact of QoS targets.

265 ComReg is of the preliminary view that it will help to ensure that AFL USO QoS levels are appropriate for the predominant current generation network, having regard to the deployment of next generation networks, both commercially and as a result of NBP. This will best achieve the objectives of protecting consumer welfare while promoting effective competition and efficient investment.

Q. 7	Do you agree or disagree with ComReg's draft regulatory impact assessment of the proposed options? Please set out reasons for your answer.

6. Submitting comments

266 The timeframe for receipt of submissions to this consultation paper is 28 January 2019 during which time ComReg welcomes written responses on any of the issues raised in this consultation document. It is requested that comments within submissions make reference to the relevant question numbers from this consultation document.

267 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 and its obligation under Regulation 15 of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011.

268 Respondents are requested to clearly identify confidential material and place such material in a separate annex to responses.

269 Respondents are also requested to provide any electronic submissions in an unprotected format so that they can be appended into ComReg's submissions document for electronic publication.

7. Draft Decision Instrument

7. STATUTORY FUNCTIONS AND POWERS

7.1. This Decision and Decision Instrument is made by the Commission for Communications Regulation ("ComReg") for the purposes of imposing obligations, requirements, specifications and Performance Targets relating to quality of service for the provision by eir of its universal service obligations in respect of the services referred to in Regulation 3 of the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011 (the "**Universal Service Regulations**").

7.2. This Decision and Decision Instrument is made:

a. pursuant to and having regard to the functions and objectives of ComReg set out in sections 10 and 12 of the Communications Regulation Act 2002 (as amended) (the "**Act**") and Regulations 12 and 16 of the European Communities (Electronic Communications Networks and Services) (Framework) Regulations 2011 (the "**Framework Regulations**");

b. pursuant to the functions and powers conferred upon ComReg under and by virtue of Regulations 3, 7 and 10 of the Universal Service Regulations;

c. having regard to Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (the "Framework Directive") (as amended), and Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive) (as amended);

d. having, pursuant to section 13 of the Act, complied with the Ministerial Policy Directions where applicable;

e. having had regard to the views of interested parties, including those expressed pursuant to the public consultation carried out in accordance with Regulation 26 of the Universal Service Regulations and Regulation 12 of the Framework Regulations, in response to ComReg Document No. 18/120;

f. having had regard to the matters set out in ComReg Decision D05/16 "*Universal Service Requirements - Provision of access at a fixed location (AFL USO)*"; and

g. having had regard to the analysis and reasoning set out in ComReg Decision xx/xx, Document No. xx/xx (which shall, where the context admits or requires, be construed together with this Decision Instrument).

8. DEFINITIONS AND INTERPRETATION

8.1. The following words and phrases shall have the following meanings, unless the context otherwise requires:

"Access Line" means a Connection from the NTP to the entry point or to the local switch or remote concentrator, whichever is nearer; which is in many cases the main distribution frame (MDF) or optical distribution frame (ODF);

"Act" means the Communications Regulation Act 2002 (as amended);

"Agreed Date" means the date that a Customer has requested and that eir and a Customer have agreed for the completion of a Valid Service Order;

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

"All Other Connections" means Lines that are not In-Situ Connections and are not Connections with an Agreed Date and includes, without limitation, new build and pre-cabled Connections;

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

"Connection" means a connection to the public communications network within the meaning of Regulation 3 (1) of the Universal Service Regulations and provided pursuant to a reasonable request as set out in ComReg Decision D05/16;

"Connection Performance Targets" means the quality of service performance targets specified by ComReg in respect of Connections in relation to eir's universal service obligations for the provision of access at a fixed location, as set out in Section 4.3 of this Decision Instrument;

"Customer" means a "subscriber" within the meaning of Regulation 2 of the Framework Regulations or the Customer's representative, and in the case of requests for Connection, means an "End-User";

"Data" means any information, data, calculations, figures or metrics relevant to eir's performance, as further specified in Schedule 1 of this Decision Instrument;

"Data Collection Period" means the quarterly period in respect of which ComReg collects Data from eir. There are four Data Collection Periods in each Year, the timing of which is set out in Schedule 3(A);

"Day" means a calendar day;

"Decision Instrument" means this Decision Instrument and its Schedules ComReg Document xx/xxa hereto, which is made pursuant to, *inter alia,* Regulation 10 of the Universal Service Regulations;

"**Dxx/xx**" means the Decision and Decision Instrument issued by ComReg on xx xx 20xx, entitled "*Universal Service Requirements – Provision of Access at a Fixed Location (AFL) – Quality of Service (QoS)*";

"Effective Date" means the date this Decision Instrument becomes operative and fully effective as specified in Section 12.1 of this Decision Instrument;

"eir" means Eircom Limited and its subsidiaries and any related companies, and any undertaking which it owns or controls or any undertaking which owns or controls Eircom Limited, its successors and assigns and including agents, contractors or sub-contractors of any of the latter. For the purposes of this Decision Instrument the terms "subsidiary" and "related company" shall have the meanings ascribed to them in the Companies Act 2014;

"End-User" has the same meaning as it has in Regulation 2 of the Framework Regulations;

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

"Exchange Fault" means a Fault which is attributable to an exchange or core Network issue (and for the avoidance of doubt, excludes Line Faults, Other Faults, Faults due to Vandalism and Faults due to Third Party Damage);

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

"Fault due to Vandalism" means a Fault that has occurred due to Vandalism;

"Fault due to Third Party Damage" means a Fault that has occurred due to Third Party Damage;

"Fault Occurrence" is a measurement of the rate at which Faults occur and may refer to either the "**LFI**" ratio and / or the "**Total Faults**" ratio specified in Schedule 1;

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

"Fault Repair Time" means the duration from the occurrence of a Valid Fault to the occurrence of Fault Repair;

"Fibre Network" means an electronic communications network which is used to provide public telephony services; it supports the transfer between NTPs of speech communication and also other forms of communication, such as facsimile and data;

"Hour" means 60 minutes;

"In-Situ Connection" means a Connection via an Electronically Enabled Line, excluding Connections with an Agreed Date**;**

"**Independent Audit Report"** means a report prepared by an independent auditor pursuant to Regulation 10 (6) of the Universal Services Regulations, in respect of the Data provided by eir to ComReg in accordance with Section 6 of this Decision Instrument;

"Line" means an Access Line which is providing a Network to a Customer;

"Line Fault" means a Fault which is attributable to a Line (and for the avoidance of doubt, excludes Exchange Faults, Other Faults, Faults due to Vandalism and Faults due to Third Party Damage);

"LFI" means the number of Line Faults per 100 Lines;

"MDF" means main distribution frame;

"Ministerial Policy Directions" means the policy directions made by Dermot Ahern TD, the then Minister for Communications, Marine and Natural Resources, pursuant to Section 13 of the Act, dated 21 February 2003 and 26 March 2004;

"Month" means a calendar month;

"National Area" means all the MDF areas (or as the case may be, ODF areas) within the State as specified by the table in Schedule 2(A), or the sum of the Sub-National Areas;

"National Service Availability Target" means the performance target eir must achieve for service availability in respect of the National Area, as set out in Section 4.4 of this Decision Instrument and calculated by reference to Schedule 1;

"Network" means any electronic communications network which eir uses to fulfil its universal service obligations, including the Public Switched Telephone Network or Fibre Network;

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

"ODF" means optical distribution frame;

"Other Fault" means a Fault which lies within the Network, excluding a Line Fault, Exchange Fault, Fault due to Vandalism, or Fault due to Third Party Damage;

"Performance Targets" mean the Service Availability Targets and / or the Connection Performance Targets specified by ComReg in relation to eir's universal service obligations for the provision of access at a fixed location, as set out in Section 4 of this Decision Instrument;

"Public Switched Telephone Network" or "PSTN" means an electronic communications switched network which is used to provide publicly available telephone services; it supports the transfer between NTPs of speech communications and also other forms of communications, such as facsimile and data;

"Schedules" refers to Schedule 1 ("*USO Quality of Service - Calculation Methodologies*"), Schedule 2 ("*National and Sub-National Areas*") and Schedule 3 ("*Reports to ComReg*") of this Decision Instrument.

"Service Availability Targets" refers to both the National Service Availability Target and the Sub-National Service Availability Target, as set out in Section 4.4 of this Decision Instrument and calculated by reference to Schedule 1;

"State" means Ireland;

"Sub-National Area" means a collection of MDF areas (or as the case may be, ODF areas) within the State as specified by the tables in Schedule 2(B);

"Sub-National Service Availability Target" means the performance target eir must achieve for service availability in respect of each Sub-National Area, as set out in Section 4.4 of this Decision Instrument and calculated by reference to Schedule 1;

"Third Party" means any person other than eir;

"Third Party Damage" means unintentional damage to or destruction of the Network caused by a Third Party;

"Total Faults" means the sum of Line Faults plus Exchange Faults, plus Faults due to Vandalism, plus Faults due to Third Party Damage plus Other Faults;

"USO" means universal service obligation;

"Universal Service Regulations" means the European Communities (Electronic Communications Networks and Services) (Universal Service and Users' Rights) Regulations 2011;

"**User**" has the same meaning as it has in Regulation 2 of the Framework Regulations;

"Valid Fault" means any Fault within the Network experienced by a Customer, which cannot be attributed to components outside the Network;

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

"Vandalism" means intentional damage to or destruction of the Network caused by a Third Party, or theft by a Third Party;

"Working Day" means 8 Working Hours;

Working Days Outage per Line" means the average number of Working Days that a Line is without Network service, calculated by reference to Schedule 1;

"Working Hour" means 60 minutes duration between 09:00 – 17:00, from Monday – Friday (excluding Saturday, Sunday and public holidays);

"Week" means 7 consecutive Days;

"Year" means an annual period [save for the first year of application of this decision Dxx/xx]; is from the Effective Date to xx 202x. [For the avoidance of doubt, the second Year is from xx 20xx to xx 202x].

8.2. References to "Decision Instrument", "Schedule", "Section", and "Decision" mean respectively: references to this Decision Instrument, Schedule ComReg Document xx/xxa, sections of this Decision Instrument, and ComReg Decision Dxx/1x.

8.3. References to European Union legislation or to Irish primary or secondary legislation shall be construed as references to that legislation as amended from time to time.

8.4. Other terms, words, or phrases used in this Decision Instrument shall have the same meaning as they have in the Framework Regulations and the Universal Service Regulations, unless the context otherwise admits or requires.

8.5. Words in the singular form shall be construed to include the plural and vice versa, unless the context otherwise admits or requires.

8.6. Examples shall not be construed to limit, expressly or by implication, the matters they illustrate.

9. SCOPE AND APPLICATION

9.1. This Decision Instrument is binding upon eir and does as follows:

9.1.1. specifies and imposes Connection Performance Targets in respect of the National Area and the Sub-National Areas, in respect of eir's provision of universal service at a fixed location;

9.1.2. specifies and imposes Service Availability Targets in respect of the National Area and the Sub-National Areas based on a combination of the Fault Occurrence and Fault Repair metrics, in respect of eir's provision of universal service at a fixed location;

9.1.3. describes the methodology which eir shall use for the purposes of collecting, calculating, publishing and reporting on Data and / or Performance Targets; and

9.1.4. describes the methodology and calculations which ComReg shall use for the purposes of monitoring and assessing compliance by eir with the Performance Targets.

10. OBLIGATIONS ON EIR WITH RESPECT TO QUALITY OF SERVICE PERFORMANCE TARGETS

10.1. eir shall fully comply with each of the Performance Targets specified in this Section and with the calculation methodologies described in Schedule 1 (*USO Quality of Service -Calculation Methodologies*) of this Decision Instrument.

10.2. ComReg may amend or revise the Performance Targets and / or the Schedules from time to time as it deems appropriate, and in so doing, ComReg shall have regard to the views of interested parties.

10.3. Connections

10.3.1. eir is required to achieve and fully comply with the following Connection Performance Targets in respect of the National Area and in respect of the individual Sub-National Areas as specified in Schedule 2, for each Year:

In-Situ Connections:

a. 80% of all In-Situ Connections shall be completed within 24 Hours of request.

b. 99.8% of all In-Situ Connections shall be completed within 2 Weeks of request.

c. 100% of all In-Situ Connections shall be completed within 2 Months of request.

All Other Connections:

a. 80% of All Other Connections shall be completed within 2 Weeks of request.

b. 85% of All Other Connections shall be completed within 4 Weeks of request.

c. 90% of All Other Connections shall be completed within 8 Weeks of request.

d. 95% of All Other Connections shall be completed within 13 Weeks of request.

e. 100% of All Other Connections shall be completed within 26 Weeks of request.

10.4. Service Availability

10.4.1. eir is required to achieve and fully comply with the following Service Availability Targets in respect of the National Area and the individual Sub-National Areas, as specified in Schedule 2, for each Year:

a. National Service Availability Target of 0.237 maximum Working Days Outage per Line;

b. Sub-National Service Availability Target of 0.607 maximum Working Days Outage per Line.

11. PERFORMANCE MEASUREMENT

11.1. eir's performance against the Performance Targets shall be assessed based on the calculation methodologies set out at Schedule 1 and by reference to the MDF areas (or ODF areas, as the case may be) specified in Schedule 2.

11.2. ComReg shall monitor compliance with the Performance Targets by reference to the Independent Audited Reports of Data received from eir on a quarterly basis and shall use such Data to calculate eir's compliance with the Performance Targets for each Year.

11.3. ComReg may publish Data relating to eir's performance on its website from time to time, either in the form of an information notice (usually entitled "Provision of Universal Service by eir – Performance Data") or otherwise, as ComReg deems appropriate.

12. REPORTING AND AUDITING OBLIGATIONS

12.1. Pursuant to Regulation 10 (1), 10 (3), 10 (4) and 10 (6) of the Universal Service Regulations eir shall comply with the following reporting and auditing obligations:

12.1.1. eir shall submit Data to ComReg for each Data Collection Period in written and electronic form (spread sheet), no later than two Months from the end of each Data Collection Period, in accordance with the timing set out in Schedule 3(A);

12.1.2. eir shall ensure that Data submitted to ComReg further to Section 6.1.1 is in all respects complete, accurate and free from error and is in the format set out at Schedule 3(B);

12.1.3. eir shall arrange for an Independent Audit Report of the Data to be prepared for each Data Collection Period, at eir's own cost, and shall submit it to ComReg together with a cover letter from the independent auditor who prepared the Independent Audit Report, prior to eir publishing such Data.

13. AMENDMENT TO SCHEDULES

13.1. eir shall not, without receipt of prior written approval from ComReg, implement any amendment to:

13.1.1. The methodology for collecting, measuring, calculating or reporting on the Data specified in Schedule 1; or

13.1.2. The classification of MDFs (or as the case may be, ODFs) within the National Area and / or the Sub-National Areas, specified in Schedule 2; or

13.1.3. The timing and format of reporting specified in Schedule 3 hereto.

13.2. In respect of any request for amendment(s) to Schedules 1, 2 or 3 by eir, the following provisions shall apply:

13.2.1. eir shall notify ComReg in writing of its request and shall, at the same time, also furnish ComReg with a detailed written submission outlining the basis for its request, all relevant facts and the likely effect of the proposed amendment(s);

13.2.2. ComReg may request eir to provide it with further information in order to fully consider eir's request, and may specify a timeline for receipt of such information; and

13.2.3. Following receipt of eir's request, its written submission and, where applicable, any further information requested, ComReg shall consider the appropriateness of the proposed amendment(s) and shall communicate to eir within a reasonable period whether, or to what extent, it approves or refuses its request for amendment(s).

13.3. ComReg shall, subject to any confidentiality requirements, publish any amendment(s) to Schedules 1, 2 or 3 (either following a request from eir or pursuant to Section 4.2 above) on its website.

14. STATUTORY POWERS NOT AFFECTED

14.1. Nothing in this Decision Instrument shall operate to limit ComReg in the exercise and performance of its statutory powers or the duties conferred on it under any primary or secondary legislation (in force prior to or after the Effective Date of this Decision Instrument) from time to time.

15. MAINTENANCE OF OBLIGATIONS

15.1. Unless expressly stated otherwise in this Decision Instrument, all obligations and requirements contained in decision notices and directions made by ComReg applying to eir and in force immediately prior to the Effective Date shall continue in force and eir shall comply with same.

16. CONFLICT

16.1. For the avoidance of doubt, to the extent that there is any conflict between a ComReg Decision Instrument or ComReg document dated prior to the Effective Date and eir's obligations now set out herein, this Decision Instrument shall prevail, unless otherwise indicated by ComReg.

17. SEVERANCE

17.1. If any Section, Schedule, or portion thereof contained in this Decision Instrument is found to be invalid or prohibited by the Constitution, by any other law or judged by a court to be unlawful, void or unenforceable, then that Section, Schedule, or portion thereof shall, to the extent required, be severed from this Decision Instrument, and rendered ineffective, but as far as possible without modifying the remaining Sections, or portions thereof and shall not in any way affect the validity or enforcement of this Decision Instrument or other decision instruments.

18. EFFECTIVE DATE AND DURATION

18.1. This Decision, Decision Instrument and its Schedules are operative and fully effective from x xx 2019 and shall remain in full force and effect for two years until xx/xx 202x, unless otherwise specified by ComReg.

THE COMMISSION FOR COMMUNICATIONS REGULATION

THE xxst DAY OF xx 201x

8. Annex 1 – Eir's performance 2017 and YTD 2018

8.1 Review of eir's QoS performance to date

8.1.1 National connections – 2017 and year to date (Q1/2) 2018

270 Connection times measures the length of time taken to connect an end-user for various different connection types (i.e. in-situ; new connections). The connection methods tend to remain reasonably constant. It is a measure of the ease of reconnection and of obtaining a new connection to the underlying network.

271 The introduction of both national and sub-national connection targets was intended to ensure consistency in minimum service provision nationally and across all three geographic areas.

272 The actual annual connections performance is measured, for compliance purposes, with reference to the total number of '*in-situ*'[63] connections and '*all other*' connections. Performance is measured by quarter which provides an indication of performance towards the annual connection targets.

273 Table 16 provides a summary of eir's national '*in-situ*' connections for each quarter and the annual result for 2017.

Table 16: National '*in-situ*' connections – 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[64] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 24 hours of request	80% of connections to be completed within this time period	81.1%	81.3%	83.3%	84.8%	**82.5%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	99.8%	99.7%	99.5%	98.9%	**99.5%**
Within 2 months of request	100% of connections to be completed within this time period	99.9%	100.0%	100.0%	99.6%	**99.9%**

[63] Data reported excludes information regarding in-situ connections with an agreed date, as a greed dates for in-situ connections only arise when an end-user seeks, and eir agrees to, a deferred installation e.g. a connection for a holiday home etc..
[64] As required by Schedule 2 of ComReg 17/10a, D03/17 ComReg adjusted eir performance data for Q1 2017 (2/2/17 – 31/3/17) to reflect the usual 3 month data collection period.

274 Table 17 provides a summary of eir's national '*in-situ*' connections year to date (Q1/2) for 2018. This table provides an indication of performance towards the '*in-situ*' performance targets for 2018,.

Table 17: National '*in-situ*' connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 24 hours of request	80% of connections to be completed within this time period	85.4%	86.8%	**86.0%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	98.4%	99.6%	**99.0%**
Within 2 months of request	100% of connections to be completed within this time period	99.5%	99.8%	**99.6%**

275 Table 18 provides a summary of eir's national 'all other' connections for each quarter and the annual result for 2017. '*All other*' connections excludes information regarding '*in-situ*' connections. Furthermore where a customer introduced delay is recorded, and there is auditable evidence of such, eir shall exclude these valid service orders for the purposes of the performance targets.

Table 18: National – '*all other*' connections – 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 2 weeks of request	80% of all requests to be completed within this time period	89.6%	89.9%	87.8%	78.5%	**86.8%**
Within 4 weeks of request	85% of all requests to be completed within this time period	96.8%	96.5%	96.5%	95.0%	**96.3%**
Within 8 weeks of request	90% of all requests to be completed within this time period	98.5%	98.0%	98.6%	98.4%	**98.4%**
Within 13 weeks of request	95% of all requests to be completed within this time period	99.0%	99.0%	99.3%	99.2%	**99.1%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.8%	99.7%	100.0%	99.8%	**99.8%**

276 Table 19 provides a summary of eir's national '*all other*' connections year to date (Q1/2) for 2018[65]. This table provides an indication of performance towards the '*all other*' connections performance targets for 2018.

Table 19: National '*all other*' connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 2 weeks of request	80% of all requests to be completed within this time period	78.6%	89.8%	**84.1%**
Within 4 weeks of request	85% of all requests to be completed within this time period	93.1%	96.2%	**94.6%**
Within 8 weeks of request	90% of all requests to be completed within this time period	98.2%	98.0%	**98.1%**
Within 13 weeks of request	95% of all requests to be completed within this time period	99.1	98.9	**99.0%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.8	99.8	**99.8%**

8.1.2 Sub-national connections – 2017 and year to date (Q1/2) 2018

8.1.2.1 MDIBC area – 2017 and year to date (Q1/2) 2018

277 Table 20 provides a summary of eir's sub-national MDIBC area '*in-situ*' connections for each quarter and the annual result for 2017.

Table 20: MDIBC area –'*in situ*' connections – 2017

Annual Performance Targets (ComReg Decision D03/17)	Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)

[65] All other' connections excludes information regarding 'in-situ' connections. Furthermore where a customer introduced delay is recorded, and there is auditable evidence of such, eir shall exclude these valid service orders for the purposes of the performance targets.

Within 24 hours of request	80% of connections to be completed within this time period	80.5%	76.8%	80.5%	83.5%	**80.2%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	99.5%	99.3%	99.8%	98.9%	**99.4%**
Within 2 months of request	100% of connections to be completed within this time period	99.8%	100.0%	100.0%	99.8%	**99.9%**

278 Table 21 provides a summary of eir's sub-national MDIBC area '*in-situ*' connections year to date (Q1/2) for 2018[66]. This table provides an indication of performance towards the sub-national MDIBC area '*in-situ*' connections performance targets for 2018.

Table 21: MDIBC area – '*in-situ*' connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 24 hours of request	80% of connections to be completed within this time period	83.9%	85.0%	**84.4%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	98.5%	99.2%	**98.8%**
Within 2 months of request	100% of connections to be completed within this time period	99.6%	99.5%	**99.5%**

279 Table 22 provides a summary of eir's sub-national MDIBC area '*all other*' connections for each quarter and the annual result for 2017[67].

[66] All other' connections excludes information regarding 'in-situ' connections. Furthermore where a customer introduced delay is recorded, and there is auditable evidence of such, eir shall exclude these valid service orders for the purposes of the performance targets.
[67] See footnote 63.

Table 22: MDIBC area – *'all other'* connections – 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[53] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 2 weeks of request	80% of all requests to be completed within this time period	91.2%	91.0%	89.2%	79.9%	**88.1%**
Within 4 weeks of request	85% of all requests to be completed within this time period	97.8%	97.0%	97.5%	96.1%	**97.1%**
Within 8 weeks of request	90% of all requests to be completed within this time period	99.2%	98.4%	99.1%	98.9%	**98.9%**
Within 13 weeks of request	95% of all requests to be completed within this time period	99.5%	99.3%	99.7%	99.4%	**99.5%**
Within 26 weeks of request	100% of all requests to be completed within this time period	100.0%	99.7%	100.0%	99.9%	**99.9%**

280 Table 23 provides a summary of eir's sub-national MDIBC area *'all other'* connections year to date (Q1/2) for 2018[68]. This table provides an indication of performance towards the sub-national MDIBC area *'all other'* connections performance targets for 2018.

Table 23: MDIBC areas – '*all other*' connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 2 weeks of request	80% of all requests to be completed within this time period	79.1%	89.8%	**84.4%**
Within 4 weeks of request	85% of all requests to be completed within this time period	93.7%	96.7%	**95.2%**
Within 8 weeks of request	90% of all requests to be completed within this time period	98.7%	98.3%	**98.5%**

[68] See footnote 63.

Within 13 weeks of request	95% of all requests to be completed within this time period	99.5%	99.2%	**99.4%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.8%	99.9%	**99.9%**

8.1.2.2 eir only area – 2017 and year to date (Q1/2) 2018

281 Table 24 provides a summary of eir's sub-national eir only area '*in-situ*' connections for each quarter and the annual result for 2017.

Table 24: eir only area – *'in-situ'* connections - 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[28] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 24 hours of request	80% of connections to be completed within this time period	79.1%	81.3%	83.4%	85.8%	**82.0%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	100.0%	100.0%	99.6%	99.1%	**99.7%**
Within 2 months of request	100% of connections to be completed within this time period	100.0%	100.0%	100.0%	99.6%	**99.9%**

282 Table 25 provides a summary of eir's sub-national eir only area '*in-situ*' connections year to date (Q1/2) for 2018[69]. This table provides an indication of performance towards the sub-national eir only area '*in-situ*' connections performance targets for 2018.

Table 25: eir only area *'in-situ'* connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 24 hours of request	**80%** of connections to be completed within this time period	84.1%	86.3%	**85.3%**
Within 2 weeks of request	**99.8%** of connections to be completed within this time period	97.9%	99.6%	**98.8%**
Within 2 months of request	**100%** of connections to be completed within this time period	99.5%	100.0%	**99.8%**

[69] All other' connections excludes information regarding 'in-situ' connections. Furthermore where a customer introduced delay is recorded, and there is auditable evidence of such, eir shall exclude these valid service orders for the purposes of the performance targets.

283 Table 26 provides a summary of eir's sub-national eir only area '*all other*' connections for each quarter and the annual result for 2017.

Table 26: 'All other' connections - 'eir only' area

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[30] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 2 weeks of request	80% of all requests to be completed within this time period	89.9%	90.8%	89.2%	80.8%	**88.1%**
Within 4 weeks of request	85% of all requests to be completed within this time period	96.8%	96.8%	96.3%	95.4%	**96.4%**
Within 8 weeks of request	90% of all requests to be completed within this time period	98.3%	97.8%	98.5%	98.4%	**98.2%**
Within 13 weeks of request	95% of all requests to be completed within this time period	99.0%	98.9%	99.1%	99.4%	**99.1%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.8%	99.9%	99.8%	99.8%	**99.8%**

284 Table 27 provides a summary of eir's sub-national eir only area '*all other*' connections year to date (Q1/2) for 2018[69].This table provides an indication of performance towards the sub-national eir only area '*all other*' connections performance targets for 2018.

Table 27: eir only area – *'all other'* connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 2 weeks of request	80% of all requests to be completed within this time period	82.0%	92.0%	**86.9%**
Within 4 weeks of request	85% of all requests to be completed within this time period	94.5%	96.9%	**95.7%**
Within 8 weeks of request	90% of all requests to be completed within this time period	98.1%	98.4%	**98.2%**
Within 13 weeks of request	95% of all requests to be completed within this time period	98.9%	99.0%	**98.9%**

Within 26 weeks of request	100% of all requests to be completed within this time period	99.9%	99.7%	**99.8%**

8.1.2.3 NBP area – 2017 and year to date (Q1/2) 2018

285 Table 28 provides a summary of eir's sub-national NBP area '*in-situ*' connections for each quarter and the annual result for 2017.

Table 28: NBP area '*in-situ*' connections - 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[74] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 24 hours of request	80% of connections to be completed within this time period	83.0%	86.3%	85.9%	85.8%	**85.2%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	100.0%	100.0%	99.2%	98.7%	**99.5%**
Within 2 months of request	100% of connections to be completed within this time period	100.0%	100.0%	100.0%	99.4%	**99.9%**

286 Table 29 provides a summary of eir's sub-national NBP area '*all other*' connections year to date (Q1/2) for 2018[69]. This table provides an indication of performance towards the sub-national NBP area '*all other*' connections performance targets for 2018.

Table 29: NBP area *'all other'* connections - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 24 hours of request	80% of connections to be completed within this time period	87.5%	88.8%	**88.1%**
Within 2 weeks of request	99.8% of connections to be completed within this time period	98.6%	100.0%	**99.3%**
Within 2 months of request	100% of connections to be completed within this time period	99.3%	100.0%	**99.7%**

287 Table 30 provides a summary of eir's sub-national NBP area '*all other*' connections for each quarter and the annual result for 2017[69].

Table 30: 'All other' connections - NBP area 2017

Annual Performance Targets (ComReg Decision D03/17)		Q1 2017[76] Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Within 2 weeks of request	80% of all requests to be completed within this time period	85.4%	86.3%	82.9%	72.2%	**82.3%**
Within 4 weeks of request	85% of all requests to be completed within this time period	94.5%	95.0%	94.2%	91.6%	**93.9%**
Within 8 weeks of request	90% of all requests to be completed within this time period	96.9%	97.3%	97.4%	96.8%	**97.1%**
Within 13 weeks of request	95% of all requests to be completed within this time period	97.8%	98.6%	98.6%	98.4%	**98.3%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.3%	99.7%	100.0%	99.4%	**99.6%**

288 Table 31 provides a summary of eir's sub-national NBP area '*all other*' connections year to date (Q1/2) for 2018[69]. This table provides an indication of performance towards the sub-national NBP area '*all other*' connections performance targets for 2018.

Table 31: NBP area 'all other' connections – Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)		Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Within 2 weeks of request	80% of all requests to be completed within this time period	73.5%	87.5%	**80.4%**
Within 4 weeks of request	85% of all requests to be completed within this time period	90.0%	94.2%	**92.1%**
Within 8 weeks of request	90% of all requests to be completed within this time period	97.0%	96.6%	**96.8%**
Within 13 weeks of request	95% of all requests to be completed within this time period	98.2%	98.0%	**98.1%**
Within 26 weeks of request	100% of all requests to be completed within this time period	99.6%	99.7%	**99.6%**

8.1.3 Connections Summary – 2017 and year to date (Q1/2) 2018

289 Table 32 and Table 33 summarises eir's national and sub-national performance for 2017 and provides an indication of performance towards each of the national and sub-national area '*in-situ*' connections performance targets for 2018.

290 Table 34 and Table 35 summarises eir's performance for 2017 and provides an indication of performance towards each of the national and sub-national areas '*all other*' connections performance targets for 2018.

Table 32: Summary (national and sub-national areas) *'in-situ'* connection performance (percentages) 2017 - Q2 2018

Annual Performance Targets (ComReg Decision D03/17)		IN-SITU CONNECTIONS - ACTUAL PERFORMANCE 2017				IN-SITU CONNECTIONS - ACTUAL PERFORMANCE - YTD (Q1/2) 2018			
		National area	NBP area	eir only area	MDIBC area	National area	NBP area	eir only area	MDIBC area
Within 24 hours of request	80% of connections to be completed within this time period	82.50%	85.20%	82.00%	80.20%	86.00%	88.10%	85.30%	84.40%
Within 2 weeks of request	99.8% of connections to be completed within this time period	99.50%	99.50%	99.70%	99.40%	99.00%	99.30%	98.80%	98.80%
Within 2 months of request	100% of connections to be completed within this time period	99.90%	99.90%	99.90%	99.90%	99.60%	99.70%	99.80%	99.50%

Table 33: Summary (national and sub-national areas) *'in-situ'* connection performance (volumes) 2017 - Q2 2018

Table 34: Summary (national and sub-national areas) '*all other*' connection performance (percentage) 2017 - Q2 2018

Annual Performance Targets (ComReg Decision D03/17)		ALL OTHER CONNECTIONS - ACTUAL PERFORMANCE 2017				ALL OTHER CONNECTIONS - ACTUAL PERFORMANCE - YTD (Q1/2) 2018			
		National area	NBP area	eir only area	MDIBC area	National area	NBP area	eir only area	MDIBC area
Within 2 weeks of request	80% of all requests to be completed within this time period	86.80%	82.30%	88.10%	88.10%	84.10%	80.40%	86.90%	84.40%
Within 4 weeks of request	85% of all requests to be completed within this time period	96.30%	93.90%	96.40%	97.10%	94.60%	92.10%	95.70%	95.20%
Within 8 weeks of request	90% of all requests to be completed within this time period	98.40%	97.10%	98.20%	98.90%	98.10%	96.80%	98.20%	98.50%
Within 13 weeks of request	95% of all requests to be completed within this time period	99.10%	98.30%	99.10%	99.50%	99.00%	98.10%	98.90%	99.40%
Within 26 weeks of request	100% of all requests to be completed within this time period	99.80%	99.60%	99.80%	99.90%	99.80%	99.60%	99.80%	99.90%

Table 35: Summary (national and sub-national areas) *'all other'* connection performance (volumes) 2017 - Q2 2018

8.1.4 National service availability –2017 and Q1/2 2018

291 The service availability target combines the two parameters of fault occurrence (i.e. level of line faults) and fault repair times[70] (i.e. time needed to repair line faults). Service availability reports on the actual number of working days outage per line against the target maximum working day's outage per line.

292 ComReg publishes USO performance data by quarter. The actual annual performance is measured for compliance purposes, with reference to the average fault repair time for the year and the line fault occurrence for the year. The quarter results provide an indication of annual performance.

293 The actual annual performance is measured with reference to the average fault repair time for the year and the line fault occurrence for the year.

294 The national service availability target of **0.237** maximum working days outage per line, set the minimum service availability target to be achieved nationally. This provided eir with further flexibility within each of the sub-national areas, in how the national service availability target is achieved. The over achievement in in one or more sub-national areas, may be off set against the under achievement in other sub-national area(s) provided always that the minimum sub-national target is achieved within each of the three sub-national areas in each year.

295 If the actual number of working days outage per line annual performance result is **≤ 0.237**, the target has been achieved. If annual actual number of working days outage per line performance result **> 0.237**, the performance target has not been achieved.

296 Table 36 summarises eir's service availability performance against the national target for 2017.

Table 36: National service availability 2017

National Service Availability Target (D03/17)	Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017–31 Dec 2017)
Average Fault Repair Time Performance	1.7567	1.4807	1.6165	2.6213	1.9320

[70] Repair time measures the length of time it takes from when a fault is reported until it is repaired, and is a measure of the level of reactive maintenance/operating expenditure (opex) being undertaken.

Line Fault Occurrence Performance per 100 lines	3.4434	2.4762	2.7124	4.0321	12.6372
0.237[71] maximum Working Days Outage per line[72]	0.061	0.037	0.044	0.106	**0.245**

297 Table 37 provides an indication of eir's national service availability performance towards national service availability performance targets for 2018.

Table 37: National service availability - Q1/2 2018

al Service Availability Target (D03/17)	Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Average Fault Repair Time Performance	2.8136	1.6637	2.3459
Line Fault Occurrence Performance per 100 lines	3.9610	2.6990	6.6704
0.237[71] maximum Working Days Outage per line[72]	0.112	0.045	0.157[9]

8.1.4.1 Sub-national MDIBC area service availability –2017 and Q1/2 2018

298 The sub-national service availability target is **0.607** maximum working days outage per line for all three sub-national areas. If the annual performance result is **≤ 0.607**, the target has been achieved. If annual performance result **> 0.607**, the performance target has not been achieved.

299 Table 38 summarises eir's sub-national MDIBC service availability performance against the target for 2017.

Table 38: Sub-national MDIBC area service availability - 2017

Sub-National Service Availability Target (D03/17) – MDIBC	Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017 – 31 Dec 2017)

[71] If the annual performance result is less than or equal to 0.237, the target has been achieved. If the annual performance is greater than 0.237 the performance target has not been met.
[72] See page 28 of ComReg 18/120a for Service Availability calculation methodology.

Average Fault Repair Time Performance	1.6866	1.4379	1.5464	2.1917	1.7384
Line Fault Occurrence Performance per 100 lines	1.9208	1.4091	1.4233	1.9247	6.6715
0.607[73] maximum Working Days Outage per line[74]	0.033	0.021	0.023	0.043	**0.116**

300 Table 39 provides an indication of eir's sub-national MDIBC area service availability performance towards sub-national MBIDC area service availability performance target for 2018.

Table 39: Sub-national MDIBC area service availability –Q1/2 2018

ıal Service Availability Target (D03/17)	Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Average Fault Repair Time Performance	2.3384	1.5351	1.9986
Line Fault Occurrence Performance per 100 lines	2.0231	1.5223	3.5499
0.607[73] maximum Working Days Outage per line[74]	0.048	0.024	**0 071**

8.1.4.2 Sub-national eir only area service availability –2017 and Q1/2 2018

301 The sub-national service availability target is **0.607** maximum working days outage per line for all three sub-national areas. The sub-national service availability target of a maximum of 0.607 workings days outage per line was set having regard to the actual (5 year average) service availability level in the worst performing sub-national area.

302 If the annual performance result is **≤ 0.607**, the target has been achieved. If annual performance result **> 0.607**, the performance target has not been achieved.

303 Table 40 summarises eir's service availability performance against the eir only area sub-national target for 2017.

[73] If the annual performance result is less than or equal to 0.607, the target has been achieved. If the annual performance is greater than 0.607 the performance target has not been met.
[74] See page 28 of ComReg 18/120a for Service Availability calculation methodology.

Table 40: Sub-national eir only service availability - 2017

Sub-National Service Availability Target (D03/17) – Eir Only	Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)
Average Fault Repair Time Performance	1.7135	1.5094	1.6647	2.7171	1.9553
Line Fault Occurrence Performance per 100 lines	3.5278	2.5767	2.4935	3.5495	12.1352
0.607[73] maximum Working Days Outage per line[74]	0.061	0.039	0.042	0.097	**0.238**

304 Table 41 provides an indication of eir's sub-national eir only area service availability performance towards the sub-national eir only area service availability performance target for 2018.

Table 41: Sub-national eir only service availability –Q1/2 2018

Sub-National Service Availability Target (D03/17) – Eir Only	Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Average Fault Repair Time Performance	2.8405	1.7249	2.3759
Line Fault Occurrence Performance per 100 lines	3.2552	2.3102	5.5725
0.607[73] maximum Working Days Outage per line[74]	0.093	0.040	**0.133**

8.1.4.3 Sub-national NBP area service availability – 2017 and Q1/2 2018

305 The sub-national service availability target is **0.607** maximum working days outage per line for all three sub-national areas. If the annual performance result is **≤ 0.607**, the target has been achieved. If annual performance result **> 0.607**, the performance target has not been achieved.

306 Table 42 summarises eir's sub-national NBP area service availability performance against the sub-national target for 2017.

Table 42: Sub national NBP area service availability 2017

Sub-National Service Availability Target (D03/17) – NBP	Q1 2017 Result	Q2 2017 Result	Q3 2017 Result	Q4 2017 Result	Annual Result (1Jan 2017– 31 Dec 2017)

Average Fault Repair Time Performance	1.8103	1.4940	1.6361	2.7749	2.0222
Line Fault Occurrence Performance per 100 lines	5.6850	4.0558	5.1763	8.1203	22.7390
0.607[73] maximum Working Days Outage per line[74]	0.103	0.061	0.085	0.226	**0.460**

307 Table 43 provides an indication of eir's sub-national eir only area service availability performance towards the sub-national eir only area service availability performance target for 2018.

Table 43: Sub-national NBP area service availability - Q1/2 2018

al Service Availability Target (D03/17)	Q1 2018 Result	Q2 2018 Result	YTD Result (1 Jan 2018 – 30 June 2018)
Average Fault Repair Time Performance	3.0304	1.7115	2.5087
Line Fault Occurrence Performance per 100 lines	7.8580	5.0303	12.9095
0.607[73] maximum Working Days Outage per line[74]	0.239	0.087	**0.324**

8.1.5 Service availability summary – 2017 and Q1/2 2018

308 The service availability targets allows eir to decide whether to invest to prevent faults by either rolling out new technology or maintain existing network connections or by carrying out repairs more quickly instead of investing in preventative maintenance.

309 As outlined in D03/17 eir's model provided an annual breakdown (2016-2019), which using the eir model *'achievable speed of repair'* demonstrated that the service availability performance targets were predicted to be met both nationally and sub-nationally in each of the three years, thus demonstrating that according to eir's model, both the national maximum of 0.237 working days outage per line (99.935%) and sub-national maximum 0.607 working days outage per line (99.834%) service availability targets would be met.

Table 44: Service availability based on LFI and on eir's 'achievable speed of repair' [redacted]

[redacted]

310 eir stated that the '*achievable speed of repair*' values used to underpin the eir model were established by [redacted]

311 eir previously confirmed to ComReg that eir's model is based on capital investment scenarios only, where the 'achievable speed of repair' is assumed to be constant and eir formally confirmed that the *'achievable speed of repair'* would be achieved from the commencement of eir's model (i.e. June 2016).

312 ComReg sought further confirmation from eir that the *'achievable speed of repair'* would be achieved from the commencement date of eir's model. eir subsequently confirmed the aforementioned in writing, on foot of a subsequent ComReg 13D Information Request[75].

313 eir's supporting overview document[76] submitted in response to ComReg's information request (16 August 2016) also described how eir planned to invest € [redacted] M capital in the copper network on replacement/renewal in F/Y 2016/17 (€ [redacted] M capital over 3 years).

314 eir presented Table 45 showing the expected network performance nationally/sub-nationally after 3 years with the level of investment each year (€ [redacted] , based on eir's *'achievable speed of repair'* values.

Table 45: *eir's planned investment (€ [redacted] M capital over 3 years) – eir model*

[redacted]

[75] eir response to 13D 28th October 2016.
[76] Response to ComReg S13D of 25 Aug16.pdf

315 Using eir's 'planned' investment scenario (outlined above) and eir's yearly projected fault occurrence with its *'achievable speed of repair'* to calculate yearly projected national and sub-national availability, the service availability performance targets were achievable each year commencing July 2016.

316 Table 46 summarises eir's **actual** performance for 2017 and provides an indication of eir's actual performance towards each of the sub-national area service availability performance targets for 2018.

Table 46: Sub-national service availability summary 2017 - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)	SUB-NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE 2017			SUB-NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE -YTD (Q1/2) 2018		
	NBP area	eir only area	MDIBC area	NBP area	eir only area	MDIBC area
Average fault repair time performance	*2.0222*	*1.9553*	*1.7384*	*2.5087*	*2.3759*	*1.9986*
Line fault occurrence performance per 100 lines	*22.7390*	*12.1352*	*6.6715*	*12 9095*	*5.5725*	*3.5499*
Sub-national - 0.607 maximum working days outage per line	**0.460**	**0.238**	**0.116**	**0.324**	**0.133**	**0.071**

317 Table 47 illustrates eir's 2017 individual sub-national service availability performance in 2017.

Table 47: National service availability summary 2017 - Q1/2 2018

Annual Performance Targets (ComReg Decision D03/17)	NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE 2017	NATIONAL SERVICE AVAILABILITY - ACTUAL PERFORMANCE - YTD (Q1/2) 2018
	National area	National area
Average fault repair time performance	*1.9320*	*2.3459*
Line fault occurrence performance per 100 lines	*12.6372*	*6.6704*
National - 0.237 maximum working days outage per line	**0.245**	**0.157**

318 As outlined earlier in paragraph 50 eir's model took no account of possible performance improvements(e.g. eir's fibre deployment strategy; fibre versus copper deployment costs; and significant planned FTTH deployment):

319 Accordingly ComReg was of the view that eir could further improve performance in the NBP area (recognising the conservative approach within eir's model) through the following possible mechanisms (1) increasing the number of eir resources per fault (towards the ratio in the competitive area) and/or (2) altering any policy in relation to the dispatch of resources for repair in certain areas, to narrow the gap in speed of repair, between [redacted] areas and (3) rolling out new technology to poor performing lines to increase performance.

320 In light of these factors ComReg set the same sub-national service availability targets of **a maximum of 0.607[77] working days outage per line** for three sub-national areas, having regard to the 5 year observed average of availability (2009-2014) and the predicted performance based on eir's three year model. The same sub-national target was set for all areas, based on the lowest performing area. This was intended to ensure that quality of service performance in that area did not deteriorate below what ComReg regarded as the minimum.

[77] The availability target is calculated using fault occurrence during the period and repair performance.

9. Annex 2 – List of Questions

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