

Next Generation Access Bitstream Plus and VUA SLA

Version Control

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This document follows change control procedure:

Proposed is defined as a document status when the approved document is uploaded to Proposals Section of open eir Website.

Final is defined as a document status when the approved document is uploaded to the relevant section of the open eir Website following the publication period.

For information:

- Historical Document History Table located at end of Document.
- Publish means the action of uploading a document to the website regardless of status or location.
- If there are changes to the document between 'Proposed' and 'Final', change control operates.

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Section 1 - Introduction

This Service Level Agreement (SLA) is effective from 01-07-2017 and replaces Version 2.0 of the SLA and shall remain in effect until amended by *open eir*¹.

This document details the service levels to which *open eir* commits with regard to the provision and repair of Next Generation Access products, hereafter referred to as NGA products. The service is at all times provided subject to the terms and conditions as set out in the published reference offer for Bitstream Plus and VUA products (“Agreement”).

The service includes the provision and repair of NGA products ordered pursuant to an Agreement being in place between *open eir* and the Operator ordering the service. The SLA relates to Unified Gateway orders (“Orders”) placed via FTP, GUI and Web-services technology.

The service described in this SLA is subject to the Industry agreed Product Description Wholesale NGA Bitstream Plus Products, Product Description Wholesale NGA VUA Products, and the NGA Bitstream Plus and Virtual Unbundled Access Industry Process Manual. This latter document defines the detailed operational process associated with the provision of NGA Products and is a representation of how the SLA parameters are supported in practice and must be read in conjunction with the SLA.

The definitions in the Agreement will apply unless explicitly stated otherwise.

1.1 SLA Metrics

open eir shall be responsible for monitoring and measuring performance metrics and shall report on the agreed metrics to the operator on a monthly basis for provision and a quarterly basis for repair. Provisioning performance reports will be provided within 10 Working Days of the end of the month. Repair performance reports will be provided within one month of the end of the reporting quarter. An outline to guidelines for payment of penalty credits is provided in [Appendix 3](#)

1.2 SLA Schedule

The SLA schedule is set out in tables in Section 2 and Section 3 of this document. Where limitations apply to any activity in this SLA, these are detailed after the table to which they apply.

All Performance Targets will apply at an Operator level per metric and penalties are not payable for metrics that are achieved. The SLA penalty regime is only valid for individual performance metrics where a minimum of **€100 penalty has been incurred for a particular SLA activity in any given month per Operator.**

¹ *open eir* is a trading name of eircom Limited, Registered as a Branch in Ireland Number 907674, Incorporated in Jersey Number 116389, Branch Address: 1 Heuston South Quarter, St. John’s Road, Dublin 8

1.3 Review

Further reviews of this Service Level Agreement shall take place in accordance with the normal process for reviews of the Agreement.

1.4 Missed Appointments

open eir reserves the right to charge the operator €30 for scheduled appointments which are not cancelled by the end of the working day prior to the appointment or where open eir attends an appointment and the end-users either not ready/not available, refuses service or where third party access is denied.

1.5 Dispute Resolution

Disputes arising shall be subject to the dispute resolution process specified elsewhere in the Agreement.

Section 2 - Traditional SLA Items

| Item | Activity Description | Performance Activity | Performance Target |
|------|----------------------------|--|--------------------|
| 1 | LNI Order: posted complete | Posted complete notification within 1 working day of the completion notification [†] | 95% |
| 2 | LNI Order: posted complete | Posted complete notification advised within 2 working days of the completion notification [†] | 99% |

Table 1, Orders for New SB-WLR PSTN Lines

The LNI orders (Items 1 and 2 in Table 1, Orders for New SB-WLR PSTN Lines) are measures for inclusion in an open eir SLA. However the LNI order is not best suited to the NGA SLA. It is recommended that it is included in the SB-WLR SLA:

| Item | Activity Description | Performance Activity | Performance Target |
|------|-----------------------------------|--|--------------------|
| 3 | P** Order: posted complete | Posted complete notification provided within 1 working day of completion notification ² | 95% |
| 4 | P** Order: posted complete | Posted complete notification provided within 2 working days of completion notification [†] | 99% |
| 5 | RR Order: rescheduled appointment | RR code under reason "Eircom" for no more than 2% of all appointments in the reporting period; | 2% |
| 6 | RR Order: rescheduled appointment | RR code under reason "non-standard" for no more than 2% of all appointments in the reporting period; excluding non in-situ | 2% |
| 7 | Appointments | Consumed Hours in current quarter | See below |

Table 2, NGA Provisioning Orders

It was agreed that the items in the above table would be treated as SLA performance targets.

² Excluding evening and weekend completions

~~open eir's capability to meet the appointment slot requirements of individual operators is a direct function of the accuracy and granularity of forecasting. Accurate forecasts of volume of discrete products, at exchange level by week/month would enable open eir to closely match supply of appointment slots to demand. In the absence of this accuracy and granularity of operator forecasts open eir proposes the following commitment which will operate for the next four quarters.~~

~~open eir makes available a quantity of appointment hours ("Appointment Hours") and NGA provisioning orders consume hours from this pool each quarter ("Consumed Hours"). open eir manages all of these appointment hours flexibly by exchange based on the forecast demand, the actual demand, the level of re-schedules required and the volume of orders that must be referred for further work before the order can be completed. open eir commits to at least meeting the same level of Consumed Hours in the current quarter, provided that demand remains within the historical (previous quarter) Consumed Hours run rate +5%², subject to there being no material change to the geographic spread or the product mix. The following table is provided as an example of the commitment, assuming that there is no material change to the geographic spread or the product mix.~~

| Consumed Hours in Previous Quarter (Q-1) | Outcome of Consumed Hours in current Quarter (Q) | Consumed Hours commitment in next Quarter (Q+1) | Note |
|--|--|---|--|
| 10,000 | 11,000 | 11,000 | Q+1 commitment increases to demand in the previous quarter |
| 10,000 | 10,000 | 10,000 | No change in demand |
| 10,000 | 9,000 | 9,000 | Q+1 commitment reduces to the offered actual demand in the previous quarter |

~~open eir may reduce the Appointment Hours where the average actual demand is less than 95% of the historical demand.~~

~~In the event that a greater number of Appointment Hours is required, then 3 months' notice is likely to be required before the NGA provisioning field staff can be supplemented with suitably trained technicians.~~

² ~~open eir proposes to monitor the Consumed Hours over the four quarters following the implementation of this commitment, to review any seasonal impact and to review the measurement period.~~

| Item | Activity Description | Performance Activity | Performance Target |
|----------------|---|---|--------------------|
| 81 | CPN Order: Completion of Change NGA Profile | Advise of the completion of order by 1700 on the first Working Day following the Working Day the request was recorded on the UG | 98% |
| 92 | CPN Order: Completion of Change NGA Profile | Advise of the completion of order by 1700 on the tenth Working Day following the Working Day the request was recorded on the UG | 100% |
| 103 | CHN Order: Completion of Change Order | Advise of the completion of order by 1700 on the first Working Day following the Working Day the request was recorded on the UG | 98% |
| 114 | CHN Order: Completion of Change Order | Advise of the completion of order by 1700 on the tenth Working Day following the Working Day the request was recorded on the UG | 100% |

Table 31, In-service Orders

It was agreed that the items in the above table would be treated as SLA performance targets.

| Item | Activity Description | Performance Activity | Performance Target |
|----------------|---|---|--------------------|
| 125 | Early Life Faults (ELF) | % of valid RAP Early Life Faults where an ELF is a fault reported within 8 working days of an NGA P** Order being completed. ELF will be as a percentage of all NGA P** Orders completed in that quarter. | <7% |
| 136 | Faults within 2 days of provision (DOA) | % of valid RAP Dead on Arrival faults where a DOA is a fault reported within 2 days of an NGA P** Order being completed | <3% |
| 147 | Repeat FNC/FNH faults | Repeat faults within 28 days | <10% |

Table 42, Repairs

It was agreed that the items in the above table would be reported items and would not be subject to SLA.

| Item | Activity Description | Performance Activity | Performance Target |
|-----------------|----------------------------------|---|--------------------|
| 158 | CEN Order: posted complete | CEN Posted complete notification within 1 working day of completion notification ⁴ | 95% |
| 169 | CEN Order: posted complete | CEN Posted complete notification within 10 working days of completion notification ⁵ | 100% |
| 1710 | CNP Order: posted complete | CNP Posted complete notification within 1 working day of completion notification ^{4,2} | 95% |
| 1811 | CNP Order: posted complete | CNP Posted complete notification within 10 working days of completion notification ^{4,2} | 100% |

Table 53, Cease service

It was agreed that the items in the above table would be treated as SLA performance targets.

The relevant exclusions in [Appendix 2](#) apply to the items in these Tables. In any measurement period, the performance items in the above Tables will only be measured where there is a minimum of 1,000 aggregate orders for Items 1 to 4 ~~and~~ 8 to 11 ~~and 15 to 18~~, per operator in a measuring period.

Standard Service Delivery performance targets are subject to :

- UG available hours as defined in the UG SLA
- Single UG Orders per line ⁶

Notes : A maximum of 2% of orders within a specific Item under measurement can be excluded for manual intervention (applies to Items 1 to 4 ~~and~~ 8 to 11 ~~and 15 to 18~~).

open eir aims to meet the performance metrics in this Section of the NGA SLA but open eir has no liability for any failure to meet a performance target.

⁴ Excluding evening and weekend completions

⁵ Excluding evening and weekend completions

⁶ e.g. Bulk migrations should be addressed bilaterally with open eir

Section 3 - Service Delivery

3.1 Service Delivery Definitions

Definitions associated with Service Delivery SLA parameters and process points relevant to this SLA are, unless indicated otherwise, as defined in the Agreement, Industry Process Manual and Bitstream Plus Product Description and VUA Product Description.

Working Hours:

Working Hours for provisioning purposes is defined as between 9:00am and 5:00pm on Working Days.

Working Day:

A Working Day is defined as a day other than a Saturday, Sunday, or Public Holiday as defined in the Second Schedule to the Organisation of Working Time Act, 1997.

Validation Date:

The date all lines of the Order have been successfully validated against open eir customer database systems. The Order status is altered from “recorded” to “validated” on the Unified Gateway on the validation date. The Operator will receive an acceptance notification for valid Orders.

Appointment Date:

Appointment Date is the original appointment date requested by an Operator on order submission via the Unified Gateway and confirmed by open eir as per the Industry Process Manual. In the event that the original appointment date is cancelled by an Operator not later than 5p.m. on the working day prior to the original appointment date and rescheduled, the Appointment Date will be the rescheduled date.

Completion:

An NGA Bitstream Plus or VUA order is deemed to be completed once open eir successfully completes the Order (or element of Order in scenario where the Operator opts to install the NTU) and when the Order status is changed to “completed” on the Gateway. The Operator will receive a completion notification from the Unified Gateway.

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Product:

A Product means singularly, each variant of the Bitstream Plus Service and VUA Service as set out in the NGA Bitstream Plus Product Description and NGA VUA Product Description, as may be updated and re-published from time to time.

Parked Time:

The times during which the SLA clock is stopped which include; -

- time not covered by the relevant SLA
- out of hours periods where resources being made available on a reasonable endeavours basis are unavailable
- circumstances as outlined in [Appendix 4](#).

Penalty Cap:

The service credits payable by eir in any 12 month period commencing on 1st July 2017 shall not exceed 1% of open eir's total revenues for the following products:

- a. Unbundled Local Metallic Path (ULMP);
- b. Combined GNP and ULMP (GLUMP)
- c. Single Billing – Wholesale Line Rental (SB-WLR)
- d. Line Sharing (LS)
- e. Standalone FTTC Bitstream Plus
- f. Standalone FTTC VUA
- g. Standalone Current Generation Bitstream (CGA SABB)

In calculating the Penalty Cap, the rental revenue for POTS based VUA or POTS based Bitstream Plus products will be used instead of the SB-WLR rental revenue for those lines in respect of which the POTS based VUA or POTS based Bitstream Plus rental revenue exceeds the SB-WLR revenue in any 12 month period commencing 1st July 2017.

3.2 ~~Standalone Appointment~~ Service Delivery Performance Metrics

~~SLA metrics in relation to service delivery appointments are covered under a separately published SLA called the "Appointment Based Service Delivery Agreement".~~

3.2.1 ~~Standalone Service Delivery Schedule~~

~~The Standalone NGA products in scope for this section of the Service Delivery schedule are:~~

~~Standalone FTTC Bitstream Plus~~

~~Standalone FTTH Bitstream Plus~~

~~Standalone FTTC VUA~~

~~Standalone FTTH VUA~~

~~open eir commits to deliver 100% of Standalone Bitstream Plus / VUA provide Orders by their agreed Appointment Date following successful validation and subject to the provisions set out in this SLA.~~

| Activity Number | Activity Description | Performance Metric | Contractual payment for not meeting Performance Metric Target |
|----------------------------|--|--|--|
| 2.1 | Delivery of NGA Standalone Services including NTU | 100% of Validated Orders by Appointment subject to exclusions in Appendix 2 | See 2.2.2 penalty calculation below |
| 2.2 | Delivery of NGA Standalone Services excluding NTU | 100% of Validated Orders by Appointment subject to exclusions in Appendix 2 | See 2.2.3 penalty calculation below |

~~Note: open eir will be exempt from penalty payment if non-delivery is subject to the conditions indicated in Appendix 2.~~

3.2.2 ~~Penalty Calculation for Standalone NGA Products including NTU installation~~

~~open eir shall be liable to pay a fixed penalty for non-compliance of delivery of service:~~

~~The penalty is calculated based on the following formula:~~

- ~~a) A flat fee of €30 will remain in place until an alternative calculation is agreed;~~
- ~~b) For the avoidance of doubt, the target is to commence installation work within the appointment and in cases where the installation is completed on the Appointment Date but outside the appointment, then open eir will be deemed to have met the performance metric. The appointment day provides flexibility at the local level for the end user / operator and the open eir technician at their mutual convenience; to agree to adjust the actual appointment time; in this case a penalty would not apply;~~
- ~~c) The rule in a.) applies to each instance of appointment missed by open eir for that order.~~

~~3.2.3 — Penalty Calculation for Standalone NGA Products excluding NTU installation~~

The penalty is calculated based on the following formula:

- ~~a) — A flat fee of €30 will remain in place until an alternative calculation is agreed.~~
- ~~b) — For the avoidance of doubt, the target is to commence installation work within the appointment and in cases where the installation is completed on the Appointment Date but outside the appointment, then open eir will be deemed to have met the performance metric. The appointment day provides flexibility at the local level for the end user / operator and the open eir technician at their mutual convenience; to agree to adjust the actual appointment time; in this case a penalty would not apply.~~
- ~~c) — The rule in a) applies to each instance of appointment missed by open eir for that order.~~

3.3 POTS-Based Service Delivery Performance Metrics

3.3.1 POTS-Based Service Delivery Schedule

The POTS-Based NGA products in scope for this section of the Service Delivery schedule are:

POTS-Based FTTC Bitstream Plus

POTS-Based FTTH Bitstream Plus

POTS-Based FTTC VUA

POTS-Based FTTH VUA

In the case of POTS-Based NGA Services for this schedule the clock only begins when the SB-WLR/PSTN line has been delivered or is already operating. The metrics in this schedule only pertains to the Bitstream Plus / VUA element of the service. open eir commits to deliver 100% of POTS-Based Bitstream Plus / VUA provide Orders by their agreed Appointment Date following successful validation and subject to the provisions set out in this SLA.

| Activity Number | Activity Description | Performance Metric | Contractual payment for not meeting Performance Metric Target |
|-----------------|---|---|---|
| 2.3 | Delivery of NGA Services including NTU | 100% of Validated Orders by Appointment subject to exclusions in Appendix 2 | See 2.3.2 penalty calculation below |
| 2.4 | Delivery of NGA Standalone Services excluding NTU | 100% of Validated Orders by Appointment subject to exclusions in Appendix 2 | See 2.3.3 penalty calculation below |

Note: open eir will be exempt from penalty payment if non-delivery is subject to the conditions indicated in Appendix 2.

3.3.2 Penalty Calculation for POTS-Based NGA Products including NTU installation

open eir shall be liable to pay on a fixed penalty for non-compliance of delivery of service.

The penalty is calculated based on the following formula:

- a) A flat fee of €30 will remain in place until an alternative calculation is agreed.
- b) For the avoidance of doubt, the target is to commence installation work within the appointment and in cases where the installation is completed on the Appointment Date but outside the appointment, then open eir will be deemed to have met the performance metric. The appointment day provides flexibility at the local level for the end user / operator and the open eir technician at their mutual convenience, to agree to adjust the actual appointment time; in this case a penalty would not apply.
- c) The rule in a.) applies to each instance of appointment missed by open eir for that order.

~~3.3.3 — Penalty Calculation for POTS-Based NGA Products excluding NTU installation~~

~~For every Working Day of delay in the provision of service against the original Appointment Date, open air shall be liable to pay a penalty for non-compliance of delivery of service.~~

~~The penalty is calculated based on the following formula:~~

- ~~a) — A flat fee of €30 will remain in place until an alternative calculation is agreed.~~
- ~~b) — For the avoidance of doubt, the target is to commence installation work within the appointment and in cases where the installation is completed on the Appointment Date but outside the appointment, then open air will be deemed to have met the performance metric. The appointment day provides flexibility at the local level for the end user / operator and the open air technician at their mutual convenience, to agree to adjust the actual appointment time; in this case a penalty would not apply.~~
- ~~c) — The rule in a.) applies to each instance of appointment missed by open air for that order.~~

Section 4 - Repair

4.1 Service Assurance Definitions

Definitions associated with service assurance SLA parameters and process points relevant to this SLA are, unless indicated otherwise, as defined in the Agreement, Industry Process Manual and Bitstream Plus Product Description and VUA Product Description.

Fault Working Hours:

Working Hours for provisioning purposes is defined as between 9:00am and 5:00pm on Working Days.

Working Day:

A Working Day is defined as a day other than a Saturday, Sunday, or Public Holiday between the hours of 9:00am and 5:00pm.

Pending Clear:

On completion of repair, a **fault ticket is given a "Pending Clear"** status on the Unified Gateway and that ticket is parked, i.e. the clock is stopped until the fault clear is either accepted by the Operator or 10 working hours from the **"Pending Clear" Unified Gateway notification has elapsed** or the Operator responds with a rejection of repair the ticket is un-parked, the clock continues and repair work recommences. On completion of repair, the **"Pending Clear" status is applied again, Operator is notified, the fault is parked and the process above is repeated.**

Repair Time:

The duration between the time a fault is received, validated and accepted by open eir in accordance with the fault reporting procedures and the time the fault is closed by open eir and marked as Pending Clear, less Parked Time.

Once the fault has either been accepted by the Operators closed or 10 working-hours has elapsed from the **"Pending Clear" notification, the fault ticket is un-parked and given a "Clear-Permanent"** status together with an associated final clear code and the fault ticket is permanently closed.

Fault:

The POTS Based Bitstream Plus and POTS Based VUA services requires that the end-user has a working PSTN line connected to the open eir network before their Bitstream Plus / VUA service can be provided. A Bitstream fault, therefore, is a problem in the open eir network which prohibits an **end-user's Bitstream Plus / VUA service,** while the end-user still has the ability to make or receive calls to or from open eir's **switched network.**

The POTS Based Bitstream Plus and POTS Based VUA covered by this SLA are defined as only those faults associated with or occurring from the Bitstream Plus and VUA Ports to the handover points in the Operator, unless excluded as defined in [Appendix 2](#).

A Standalone Bitstream Plus / VUA fault is defined as a problem in the open eir network which prohibits an end-user's Bitstream Plus / VUA service.

Valid Faults:

All faults other than those faults excluded in accordance with [Appendix 2](#), and open eir defined non-faults (clear codes 00-99), internal wiring faults and CPE faults, as described in Fault Clear Codes file on (www.openeir.ie).

Service Availability:

The annualised "in service" time of a circuit expressed in percentage terms. It is measured by:

$$\frac{[\text{Total number of hours in the year} - \text{Total number of hours Out of Service}] \times 100}{\text{Total number of hours in the year}}$$

Out of Service:

Out of Service is the number of Working Hours between the "Clear-Permanent" timestamp and fault report timestamp excluding Parked Time.

Parked Time:

The times during which the SLA clock is stopped which include; -

- a) time not covered by the relevant SLA
- b) out of hours periods where resources being made available on a reasonable endeavours basis are unavailable
- c) circumstances as outlined in [Appendix 4](#).

4.2 Standalone NGA Products

4.2.1 Standalone Repair Schedule

The NGA products in scope for this section of the repair schedule are:

- Standalone FTTC Bitstream Plus
- Standalone FTTH Bitstream Plus
- Standalone FTTC VUA
- Standalone FTTH VUA

| Activity Number | Activity Description | Performance Metric | Performance Target | Contractual payment for not meeting Performance Metric Target |
|-----------------|--------------------------------------|---------------------------------|--------------------|---|
| 3.1 | *Resolution of Standalone FTTC Fault | Repair Time: 2 Working Days | Target 84% | See Appendix 1 Article 1 |
| 3.2 | *Resolution of Standalone FTTC Fault | Repair Time: 5 Working Days | Target 93% | See Appendix 1 Article 2 |
| 3.3 | *Resolution of Standalone FTTC Fault | Repair Time: 10 Working Days | Target 100% | See Appendix 1 Article 3 |
| 3.4 | *Resolution of Standalone FTTH Fault | Repair Time: 2 Working Days | Target 73% | See Appendix 1 Article 4 |
| 3.5 | *Resolution of Standalone FTTH Fault | Repair Time: 5 Working Days | Target 92% | See Appendix 1 Article 5 |
| 3.6 | *Resolution of Standalone FTTH Fault | Repair Time: 10 Working Days | Target 100% | See Appendix 1 Article 6 |

*Aggregate Metric for VUA and Bitstream plus for Standalone Products:

Metric calculated on per Operator basis

Note: The Performance Targets and associated Penalties for activities 3.1, 3.2 and 3.3 will not be amended or reviewed for a period of three years from the effective date of this version of the NGA SLA (version 2.1) unless ComReg makes a decision to the contrary and that decision is following a consultation considering the wholesale market for such activities in the event that ComReg were to publish a consultation proposing

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automatic or other compensation by all providers of fixed line electronic communications services for customers at the retail level in respect of 100% of faults.

4.3 POTS Based NGA Products

4.3.1 POTS Based Repair SLA Metrics

The NGA products in scope for this section of the repair schedule are:

- POTS-Based FTTC Bitstream Plus
- POTS-Based FTTH Bitstream Plus
- POTS-Based FTTC VUA
- POTS-Based FTTH VUA

The SB-WLR/PSTN element of these POTS-Based products is included in the Industry SLA “Service Level Agreement - Single Billing through Wholesale Line Rental” (www.openeir.ie). The metrics for the Bitstream Plus / VUA elements of the service are outlined below.

4.3.2 POTS Based NGA Repair Schedule

| Activity Number | Activity Description | Performance Metric | Performance Target | Contractual payment for not meeting Performance Metric Target |
|-----------------|-------------------------------------|---------------------------------|--------------------|---|
| 3.7 | *Resolution of POTS based NGA Fault | Repair Time: 2 Working Days | Target 73% | See Appendix 1 Article 4 |
| 3.8 | *Resolution of POTS based NGA Fault | Repair Time: 5 Working Days | Target 92% | See Appendix 1 Article 5 |
| 3.9 | *Resolution of POTS based NGA Fault | Repair Time: 10 Working Days | Target 100% | See Appendix 1 Article 6 |

*Aggregate Metric for POTS based NGA Products:

Metric calculated on per Operator basis

4.4 Unicast

4.4.1 Unicast Repair Metrics

Core performance metrics will be determined where appropriate once experience has been obtained with the product set.

4.5 Multicast

4.5.1 Multicast Repair Metrics

Core performance Metrics will be determined where appropriate once experience has been obtained with the product set.

4.6 No Fault Found

Excess fault reports that are cleared as non-faults by open eir will be monitored for their impact on specific metrics. open eir reserves the right to charge for non-faults.

Appendix 1 - Penalty Algorithm

| Target | Actual Performance | Penalty | Associated Activity Number |
|--------------------------------|---------------------------------------|---------|----------------------------|
| 84% Repair in 2 Working Days | X% = Actual 2 Day Repair Performance | €18 | 3.1 |
| 93% Repair in 5 Working Days | Y% = Actual 5 Day Repair Performance | €36 | 3.2 |
| 100% Repair in 10 Working Days | Z% = Actual 10 Day Repair Performance | €36 | 3.3 |
| 73% Repair in 2 Working Days | X% = Actual 2 Day Repair Performance | €4 | 3.4 and 3.7 |
| 92% Repair in 5 Working Days | Y% = Actual 5 Day Repair Performance | €7 | 3.5 and 3.8 |
| 100% Repair in 10 Working Days | Z% = Actual 10 Day Repair Performance | €10 | 3.6 and 3.9 |

Faults Repaired and applicable for SLA payment for the Quarter are assembled to give “List 1”

List 1 = all tickets assessed under SLA for that period

List 2 = all tickets closed after Day 2

List 3 = all tickets closed after Day 5

List 4 = all tickets closed after Day 10

List 5 = List 2 minus List 3 – all tickets closed on days 3 through 5

List 6 = List 3 minus List 4 – all tickets closed on days 6 through 10

C(x) = count of tickets in a given list

A(x) = average ticket days in a given list

Σ(x) = cumulative ticket days in a given list

Article 1.) 84 % Penalty Calculation

Where this SLA is not met, the SLA penalty penalises repairs in working days 3 to 5 of all tickets in breach. The 84% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty

$$\text{Number of Faults subject to penalty} = C(2) - C(1) * (1 - 0.84)$$

Multiplier

$$\text{Penalty Days (multiplier)} = (\Sigma(5) - 2 * C(5) + 3C(3) + 3C(4)) / C(2) - \text{Average penalty days of all tickets in breach, where tickets closed on or after Day 6 are deemed to have breached this SLA by the maximum 3 days.}$$

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$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Article 2.) 93 % Penalty Calculation

Where this SLA is not met, the SLA penalty penalises Days 6 to 10 of all tickets in breach. The 93% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty

Number of Faults subject to penalty = $C(3) - C(1) * (1 - 0.93)$

Multiplier

Penalty Days (multiplier) = $(\sum(6) - 5C(6) + 5 * C(4)) / C(3)$ – Average penalty days of all tickets in breach, where tickets closed on or after Day 11 are as having breached this SLA by the maximum 5 days.

$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Article 3.) 100 % Penalty Calculation

Number of Faults subject to Penalty

Number of Faults subject to penalty $C(4)$ (Count of all tickets closed on or after day 11)

Multiplier

= $(\sum(4) - 10C(4)) / C(4)$

$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Article 4.) 73 % Penalty Calculation

Where this SLA is not met, the SLA penalty penalises repairs in working days 3 to 5 of all tickets in breach. The 73% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty

Number of Faults subject to penalty = $C(2) - C(1) * (1 - 0.73)$

Multiplier

Penalty Days (multiplier) = $(\sum(5) - 2 * C(5) + 3C(3) + 3C(4)) / C(2)$ – Average penalty days of all tickets in breach, where tickets closed on or after Day 6 are deemed to have breached this SLA by the maximum 3 days.

$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Article 5.) 92 % Penalty Calculation

Where this SLA is not met, the SLA penalty penalises Days 6 to 10 of all tickets in breach. The 92% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty

Number of Faults subject to penalty = $C(3) - C(1) * (1 - 0.92)$

Multiplier

Penalty Days (multiplier) = $(\sum(6) - 5C(6) + 5 * C(4)) / C(3)$ – Average penalty days of all tickets in breach, where tickets closed on or after Day 11 are as having breached this SLA by the maximum 5 days.

$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Article 6.) 100 % Penalty Calculation

Number of Faults subject to Penalty

Number of Faults subject to penalty $C(4)$ (Count of all tickets closed on or after day 11)

Multiplier

= $(\sum(4) - 10C(4)) / C(4)$

$Penalty = (\text{Number of Faults subject to penalty}) * (\text{Multiplier}) * \text{Penalty}$

Appendix 2 - Penalty Exclusions

Penalty Exclusions - Service Delivery

The payment of penalties for Service Delivery performance is subject to the following conditions:

- Delivery of POTS Based Bitstream Plus or POTS Based VUA Service is dependent on an existing in-Service PSTN line connected to the open eir network. In the case where remediation work is required on an in-service line to support NGA, the delivery will be deemed non-standard and thus excluded from penalties
- For Standalone Bitstream Plus or Standalone VUA Service delivery the exclusions defined in the SB-WLR SLA apply
- If the Operator or end-user delays the appointment or does not facilitate the appointment being completed then the appointment is exempt from the SLA calculation
- Service delivery SLA commitments for Bitstream Plus or VUA Service based on connection types other than the defined service are not guaranteed. If an Operator requests a non-standard Bitstream or VUA variant the service delivery lead-time will not be bound by this SLA (e.g., ISDN to Bitstream).

Penalty Exclusions - Service Assurance

The circuit will be deemed available to the Operator and is therefore excluded for the purposes of calculating credits if the fault or non-availability arises from or is otherwise caused or contributed to by the following circumstances:

- Where the fault is caused by, third party activities such as cable damage, or gunshot.
- Where the fault is caused by severe weather conditions such as storms, flooding, fire or lightning
- Where a fault occurrence is due to changes in non-open eir provided apparatus
- Where the fault is related to customer premises equipment
- An Operator failing to prove a fault out of their own network prior to raising a fault with open eir.
- Where a fault is reported without following the Fault Diagnosis processes, as per the IPM.
- Where the fault is not in the *open eir* network
- Planned maintenance outages
- Where a fault is reported and no fault is detected when the service is tested from end to end.
- **A failure of the Operator to pass on all the fault details provided by the Operator's customer**
- The Operator or its customer failing to operate the service in accordance with Agreement for the provision of the service
- A failure by the Operator or its customer to allow access to premises or equipment when requested
- A failure by the Operator or its customer to leave the customer equipment in the appropriate state to enable remote testing e.g. synchronisation, performance or line testing
- A failure of the Operator to report the fault in accordance with the fault reporting procedures
- A fault related to the end-user's PSTN service in the case of POTS Based Bitstream Plus or POTS Based VUA.

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- A fault occurring due to interference on the line caused as a result of an adjacent pair. Such instances will be addressed under the CLFMP.

General Exclusions

The service levels set out in this SLA will not apply where the failure of the NGA Bitstream Plus or NGA VUA Service to meet the performance targets results from:

- Failure by the Operator to adhere to any of the detailed provisions of the Product Descriptions, Industry Process Manual, Agreement, or SLA obligations.
- A breach of any part of the Agreement by the Operator.
- The suspension of the Service under the provisions of the Agreement.
- A failure in the **Operator's WEIL** backhaul service.

Appendix 3 - Guidelines for Payment of Penalty Credits

- 1) *open eir* shall provide Operators with penalty statements one month in arrears of measurement period with payment made in the next billing cycle. The applicable penalty to be paid is the difference between actual % achieved and the target %.

- 2) In the event that the Operator is of the opinion that a penalty liability has been incorrectly calculated then a claim must be submitted in writing to:

The Penalty Manager
open eir
1 Heuston South Quarter
St. John's Road
Dublin 8.

- 3) In case of a query, any supporting documentation must be supplied within ten Working Days of a request by *open eir*.

Any adjustment will be remitted by way of credit against the account associated with the claim.

Appendix 4 - Parked Time

Circumstances whereby an Order or fault cannot be progressed on behalf of an Operator, and the Order or fault is parked are outlined as follows; -

- *open eir is awaiting co-operation from the Operator with testing the service*
- **When a fault ticket receives a “Pending Clear” status, it will be parked.**
- *Where open eir is awaiting access to the end-user premises, where such access is required*
- *Where to proceed would result in a health and safety risk, avoidance of which could not have been realistically predicted by open eir.*
- *If it is requested by the Operator and/or end user*
- *Where a third party, other than open eir contracted entities, restricts open eir from working on resolution of the fault.*
- *Force Majeure, as defined in the Agreement*

Version Control History

| Version | Status | Update | Date |
|----------------------|---|---|----------------------------|
| 1.0 | Published | | 31st Oct 2012 |
| 1.0.3 | Draft | Review in conjunction with NGA Forum. | 26th April 2013 |
| 1.1 | Published | Further review following NGA Forums on 1st and 15th May | 15th May 2013 |
| 1.2 | Proposed | Proposed replacement to V1.1. Additional parameters added to SLA. New QSection 2 with Traditional SLA items sub-divided into categories. | 27th August 2014 |
| 2.0 | Proposed | Consolidated updates agreed with Industry at NGA Forum | 4th November 2015 |
| 2.1 | Proposed (Effective 1st July 2017) | Repair SLA section updated to reflect SLA Settlement between open eir and Industry agreed on 27th April 2017 | 10th May 2017 |
| V3.0 | Final | This document is based on V2.1 Implementation of Standardised Change Control. | 01/07/2017 |
| V3.1 | Proposed (Effective 1st April 2018) | This version of the document has been updated to reference the "Appointment Based Service Delivery Agreement". | 01/04/2018 |
| V4 | Final | This version of the document has been updated to reference the "Appointment Based Service Delivery Agreement". | 01/04/2018 |