
Service Level Agreement

Provision and Repair of Unbundled Metallic Path (ULMP) Line Sharing (LS) and Combined GNP and ULMP (GLUMP)



Version Control

| Version | Status | Update | Effective Date |
|--------------|--------------|--|-------------------|
| 15 | | Insertion of the PUN Metrics | 01/05/2017 |
| V16.0 | Final | This document is based on Version 15 Implementation of Standardised Change Control. | 07/06/2017 |
| <u>V17.0</u> | <u>Final</u> | <u>Changes to repair metrics</u> | <u>01/07/2017</u> |

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- Historical Document History Table located at end of Document.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.**



Table of Contents

| | | |
|-----|--|------------------|
| 1 | Product Description..... | 5 |
| 1.1 | Metrics..... | 5 |
| 2 | Provisioning and Repair Process Definitions..... | 6 |
| 2.1 | Definitions..... | 6 |
| | Valid Faults:..... | 6 |
| | Confirmed Clear Permanent..... | 6 |
| 3 | SLA Schedule..... | 7 |
| 4 | Service Level Summary for Process Points | 7 |
| 5 | Fault Repair Service Level Summary | 17 16 |
| 5.1 | ULMP Faults..... | 18 16 |
| 5.2 | Line Share Faults or ULMP Faults with Line Test Data Supplied by AS (effective 1 st September 2015) | 18 17 |
| | Appendix 1: Exclusions..... | 20 19 |
| | Service Delivery..... | 20 19 |
| | Bulk Migrations..... | 20 19 |
| | Appendix 2: Guidelines for Penalty Payments..... | 21 20 |
| | Appendix 3: Parked Time..... | 21 20 |
| | Appendix 4:..... | 22 21 |
| | Appendix 5: | 24 23 |
| | Version Control History | 27 26 |



List of Tables

| | |
|---|------------------|
| Table 1: Account \ Line Status Enquiry..... | 7 |
| Table 2: ULMP, LS and GLUMP Standard Validations Timeframes | 8 |
| Table 3: ULMP, LS and GLUMP Standard Delivery Timeframes | 12 11 |
| Table 4: ULMP and GLUMP Soft Migration Delivery Timeframes | 15 14 |
| Table 5: Fault Resolution..... | 18 16 |

1 Product Description

This SLA is effective from 1st ~~December 2016~~July 2017 and shall remain in effect until amended following agreement of the parties to such amendment, or following determination by Com Reg.

1 This document details the service levels to which open eir commits with regard to the provision and repair of Unbundled Local Metallic Path (ULMP), Line Sharing (LS) products, Combined GNP and ULMP (GLUMP) and Sub Loop Unbundling (SLU)¹ hereafter referred to as ULMP, LS, GLUMP and SLU. The services are at all times provided subject to the terms and conditions as set out in the Access Reference Offer, Annex C, Service Schedule 102, 103, 104 and 106.

2 The services include the provision and repair of ULMP, LS, GLUMP and SLU paths ordered pursuant to an agreement being in place between open eir and the Access Seeker ordering the services..

3 The services described in the SLA are subject to the industry agreed Inter-operator Process Manuals (IPMs) that define the detailed operational process associated with the provision of ULMP, LS, GLUMP and SLU. The IPMs are a representation of how the SLA parameters are supported in practice and must be read in conjunction with the SLA.

4 The definitions in Annex A of the Access Reference Offer will apply unless explicitly stated.

5 The fault repair service levels set out in the SLA are applicable to ULMP, LS, GLUMP and SLU products available at open eir exchanges where an Access Seeker has collocation facilities in place.

1.1 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 repair. Provisioning performance reports will be provided within 10 Working Days of the end of the month. Repair performance reports will be provided to Operators on a rolling monthly basis with a final file one month following the end of the quarter aligning with the penalty payment. An outline to guidelines for payment of penalty credits is provided in Appendix 2. A worked penalty calculation example can be found in Appendix 6.

¹ open eir are aligning the SLU metrics with the equivalent LLU metrics subject to review 3 months after the initial order placement and order volume review.

2 Provisioning and Repair Process Definitions

2.1 Definitions

Working Day: As defined in the ARO.

Line Fault: An LLU line fault is defined as a fault reported by a customer of an OAO, where the fault results in disrupted or degraded service.

Repair Time: The duration between the times a fault is received and accepted by open eir in accordance with the fault reporting procedures and the time the fault is closed by open eir with the Access Seeker identified as the last Unconfirmed Clear, less parked time.

- a) Unconfirmed Clear: On completion of a repair, a fault ticket receives an Unconfirmed Clear status and the ticket is parked. The clock is stopped until:- it is accepted as cleared by the Access Seeker and therefore becomes a "Confirmed Clear Permanent
- b) or 16 Working Hours from the Unconfirmed Clear notification to the Access Seeker has elapsed in which case the fault becomes a "Confirmed Clear Permanent" by default
- c) Or the clear is legitimately rejected by the Access Seeker and the repair clock is restarted.

Valid Faults: all faults other than those excluded faults in accordance with Appendix 1, and open eir defined non-faults (clear codes 00-99), internal wiring faults and CPE faults, as described in the IPM.

Confirmed Clear Permanent: If a Fault Clear has either been accepted by the Access Seeker or 16 Working Hours has elapsed from Unconfirmed Clear notification, the fault ticket is given a Confirmed Clear Permanent status. In addition, a final clear code is associated with the fault ticket and it is permanently closed.

However, if the Access Seeker responds with a rejection of the repair, within 16 Working Hours, the ticket is unparked, the clock is re-started and repair work recommences. On completion of the repair, the Unconfirmed Clear status is applied again, the Access Seeker is notified and the process above is repeated.

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



- time not covered by the relevant SLA
- or during out of hours periods where resources being made available on a reasonable endeavours basis are unavailable
- Or circumstances as outlined in Appendix 3.

3 SLA Schedule

The SLA schedule is set out in the following tables. Where limitations apply to any activity in this SLA, these are detailed after the table to which they apply. The party with the obligation in all instances is open eir.

In the event of query or dispute, the relevant dispute process will be followed.

4 Service Level Summary for Process Points

Table 1: Account \ Line Status Enquiry

| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|----------------------|--|--|---|
| 1a | DRL Order Type | Advise of completion of the accepted order within 4 working hours of the request being recorded on the UG | 92% in accordance with the performance metric | €1.59 per working hour per account up to the metric of 92% |
| 1b | | Advise of completion of the accepted order by 1700 on the first working day following the working day the request was recorded on the UG | 98% in accordance with the performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 1c | | Advise of completion of the accepted order by the tenth day following the working day the request was recorded on the UG | 100% in accordance with the performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 2a | ULE Order Type | Advise of completion of the accepted order within 4 hours of the request being recorded on the UG | 92% in accordance with the performance metric | €1.59 per working hour up to the metric of 92%. |



| | | | | |
|----|--|--|--|--|
| 2b | | Advise of completion of the completion of the accepted order by 1700 on the first working day following the working day the request was recorded on UG | 98% in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay |
| 2c | | Advise of completion of the accepted order by 1700 on the fifth Working Day following the Working Day the request was recorded on the UG | 100% in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay |

Table 2: ULMP, LS and GLUMP Standard Validations Timeframes

| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|--|--|---|---|
| 4a | Order Validation PU - Acceptance or rejection of an order for ULMP | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 4b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |



| | | | | |
|----|---|--|---|---|
| 5a | Order Validation PUI - Acceptance or rejection of an order for ULMP | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 5b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 6a | Order Validation PLS-Acceptance or rejection of an order for Line Share | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 6b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 7a | Order Validation PLB - Acceptance or rejection of an order for Line Share | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 7b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |



| | | | | |
|----|---|--|---|---|
| 8a | Order Validation CHP- Acceptance or rejection of an order for Change Pins | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 8b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 9a | Order Validation PUS - Acceptance Or rejection of a New Line or Spare Path Order | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 9b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| 5a | Order Validation MUI - Acceptance or rejection of an order for ULMP | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 5b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay |



| | | | | |
|-----|--|--|---|---|
| 9a | Order Validation MUS – Acceptance or rejection of a New Line or Spare Path Order | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 9b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay. |
| | Order Validation Convert- Acceptance or rejection of a Convert order | Advise of completion of the accepted order within 4 working hours of the request being recorded on the UG excluding any orders which require manual processing | 98% of request in accordance with performance metric | EURO 12.70 per account affected per Working Day or part thereof of delay. |
| 11a | Order Validation PUG - Acceptance or rejection of an order for GLUMP | Advise of acceptance of the order being recorded on the UG | 90% in 4 working hours | €1.59 per working hour up to the metric of 90%. |
| 11b | | | 100% in 2 working days of request in accordance with performance metric | €12.70 per account affected per Working Day or part thereof of delay |



Table 3: ULMP, LS and GLUMP Standard Delivery Timeframes

| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|---|--|--|---|
| 12 | Delivery Notification PU-Provision of ULMP on a Working Line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following Order Submission following Order Submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay |
| 13 | Delivery Notification PUI - Provision of ULMP on an in-situ Line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following Order Submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay or part thereof of delay |
| 14 | Delivery Notification PLS - Provision of Line Sharing on a Working Line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay |
| 15 | Delivery Notification PLB - Provision of Line Sharing on a Working Line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay |
| 16 | Delivery Notification CHP-Re-jumpering of the LLU service to new pins on the OAO block. | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay |



| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|---|---|--|---|
| | Delivery Notification Convert - Provision of ULMP on a former Line Share line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay |
| 18 | Delivery Notification PUS - Provision of ULMP on a New Line or Spare Path | open air propose to move to appointment based delivery following retirement of the legacy order type (PUS) in August 2015. Metric reporting on appointments met will be provided for a period of 6 months following the retirement of the PUS | 80% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |
| 19 | Delivery Notification PUG - Provision of GLUMP line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |
| 13 | Delivery Notification MUI - Provision of ULMP on an in-situ Line | Advice of completion of Accepted order by 17:00 on the fifth Working Day Following order submission | 95% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |



| | | | | |
|----|---|--|--|---|
| 18 | Delivery Notification MUS - Provision of ULMP on a New Line or Spare Path | 80% within 2 working days subject to order volume and review 3 months after order placement. When order developed on UG, metric will be aligned to other automated metrics | 80% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |
| | Order Validation SLU | 80% within 2 working days subject to order volume and review 3 months after initial order placement. When order developed on the UG, this metric will be aligned to the other automated metrics. | | |
| | SLU Delivery Notification | Advise of completion of SLU in-situ path in 5 working days. | | |



| | | | | |
|--|-----|---|--|--|
| | PUN | 100% of validated orders by appointment subject to exclusions | | <p>The penalty is calculated based on the following formula:</p> <p>a) A flat fee of €30 will apply if open eir miss this metric.</p> <p>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 slot, 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.</p> <p>c) The rule in a) applies to each instance of appointment missed by open eir for that order</p> |
|--|-----|---|--|--|

Table 4: ULMP and GLUMP Soft Migration Delivery Timeframes

| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|---|--|--|---|
| | PSU Order Type Activation of accepted ULMP provide order and notification of completion | Advice of completion of the accepted order by 1700 on the second working day following the Working Day the request was recorded on the UG. | 97% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |



| | | | | |
|--|--|--|--|---|
| | PSG Order Type Activation of accepted GLUMP provide order and notification of completion | Advice of completion of the accepted order by 1700 on the second working day following the Working Day the request was recorded on the UG. | 97% of request in accordance with performance metric | EURO 12.70 Per account Affected per Working Day or part thereof of delay. |
|--|--|--|--|---|

5 Fault Repair Service Level Summary

For the purposes of this SLA, a fault is defined as any reported condition on an ULMP/LS/SLU access network circuit which does not meet open eir Operational PSTN standards, as defined in the Access Reference Offer,

Annex C, Service Schedules 102, 103, 104 and 106, Appendix 1.

The Access Seeker is responsible to undertake initial testing to prove the fault to the open eir local loop circuit, prior to submitting a Valid Fault report as per the IPM.

The Access Seeker is also responsible to prove all faults out of their DSLAM equipment and the port associated with the line and performs CPE tests before reporting a fault, which would then be accepted by open eir.

NOTE: Once a GLUMP path has been delivered all GLUMP faults follow the ULMP Process.

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.



Table 5: Fault Resolution

5.1 ULMP Faults

| Activity Number | Activity Description | Performance Metric | Performance Target | ServiceCredit for not meeting Performance Metric Target |
|-----------------|--------------------------|------------------------------|--------------------------|---|
| 26a | Resolution of ULMP Fault | Repair Time: 2 Working Days | Target 77 84% | See Article 1 Appendix 4€18 |
| 26b | Resolution of ULMP Fault | Repair Time: 5 Working Days | Target 92 93% | See Article 2 Appendix 4€36 |
| 26c | Resolution of ULMP Fault | Repair Time: 10 Working Days | Target 100% | See Article 3 Appendix 4€36 |

Note: The Performance Targets and associated Penalties for activities 17a, 17b and 17c will not be amended or reviewed for a period of three years from the effective date of this version of the SB-WLR SLA) 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 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.

5.2 Line Share Faults ~~or ULMP Faults with Line Test Data Supplied by AS (effective 1st September 2015)~~

| Activity Number | Activity Description | Performance Metric | Performance Target | ServiceCredit for not meeting Performance Metric Target |
|-----------------|----------------------|--------------------|--------------------|---|
| | | | | |



| | | | | |
|-----|--|------------------------------|--------------------------|--|
| 27a | Resolution of Line Share Fault or ULMP Fault with Test Results | Repair Time: 2 Working Days | Target 77 84% | See Article 1 Appendix 4 4 |
| 27b | Resolution of Line Share Fault or ULMP Fault with Test Results | Repair Time: 5 Working Days | Target 92 93% | See Article 2 Appendix 4 7 |
| 27c | Resolution of Line Share Fault or ULMP Fault with Test Results | Repair Time: 10 Working Days | Target 100% | See Article 3 Appendix 4 10 |

Table 6: Statistical Reporting

| Activity Number | Activity Description | Performance Metric | Performance Target | Service Credit for not meeting Performance Metric Target |
|-----------------|---|---|----------------------------|---|
| | Submission of monthly provisioning performance metrics to the Operators | Provide performance Metrics to the operators 20 days following the end of the month. | In accordance with metric. | Default Interest rate as per Access Agreement on all penalties due. |
| | Submission of Quarterly repair performance metrics to the Operators | Provide performance metrics to the Operators on a rolling monthly basis with a final file one month following the end of the quarter aligning with the penalty payment Note: the rolling monthly file will not reflect the actual penalty amount payable. This will be included in the final file at the end of the quarter* *Further development required to facilitate monthly penalties. | In accordance with metric | Default Interest rate as per Access Agreement on all penalties due. |

Appendix 1: Exclusions

Service Assurance

The circuit will be deemed available to the Access Seeker and is therefore excluded for the purposes of calculating credits if the 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 Customer provided apparatus
- Where the fault is not in the open eir network i.e. Access Seeker non-fault
- Where a fault is reported and no fault is detected when the service is tested from end to end
- Any period of scheduled outages notified to the Access Seeker in accordance with the planned works procedure A failure by the Access Seeker or its customer to allow access to premises or equipment when requested
- The Access Seeker or its customer failing to operate the service in accordance with open eir terms and conditions for the provision of the service
- A failure of the customer to report the fault in accordance with the fault reporting procedures

Service Delivery

New Line or Spare Path Orders Only

Orders will be excluded from SLA in the event of any of the following circumstances arising:

- Customer delay
- The order requires the completion of network construction work.

Bulk Migrations

Project managed bulk migrations that are agreed between the Operator and open eir to be done outside the 10 day window are excluded from the SLA.

Non project managed bulk migrations are included in the SLA.

Appendix 2: Guidelines for Penalty Payments

open eir shall provide Access Seekers with penalty statements one month in arrears with the statement being reconciled between the parties during month 3 of the quarter with payment made in the next billing cycle.

In the event that the Access Seeker 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. Johns Road,

Dublin 8.

Appendix 3: Parked Time

Circumstances whereby a fault cannot be progressed on behalf of an Access Seeker, and the fault is parked are outlined as follows: -

- Open eir cannot get co-operation from the Access Seeker with testing the line
- When a fault ticket receives an Unconfirmed Clear status, it will be parked.
- Where an engineer is dispatched and cannot get access to the end user premises
- 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 access seeker 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

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:

Repair Service Credit Algorithm ~~--Line Share Faults or--~~ ULMP Faults ~~with Line Test Data provided by AS~~

The below targets are effective from 1st September 2015.

| Target | Actual Performance | Service CREDIT |
|------------------------------------|---------------------------------------|-----------------------|
| 77 84% Repair in 2 Days | X% = Actual 2 Day Repair Performance | € 4 18.00 |
| 92 93% Repair in 5Days | Y% = Actual 5 Day Repair Performance | € 7 36.00 |
| 100% Repair in 10 Days | Z% = Actual 10 Day Repair Performance | € 10 36.00 |

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

$\sum(x)$ = cumulative ticket days in a given list

Article 1: ~~77-84~~ % service credit Calculation (effective from 1st September 2015)

Where this SLA is not met, the SLA penalty penalises Days 3 to 5 of all tickets in breach. The ~~77~~84% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty



Number of Faults subject to penalty = $C(2) - C(1) * (1 - 0.7784)$

Multiplier

Penalty Days (multiplier) = $(\sum [5] - 2 * C(5) + 3C(6) + 3C(4)) / C(2)$ – 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.

Service Credit 1 = (Number of Faults subject to penalty) * (Multiplier) * Penalty

Article 2: 92-93 % Service Credit Calculation

Where this SLA is not met, the SLA penalty penalises Days 6 to 10 of all tickets in breach. The 9293% target mitigates the commercial impact of this article.

Number of Faults subject to Penalty

Number of Faults subject to penalty = $C(3) - C(1) * (1 - 0.9293)$

Multiplier

Penalty Days (multiplier) = $(\sum [6] - 5 * C(6) + 5 * C(4)) / C(3)$ – 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.

Service Credit 2 = (Number of Faults subject to penalty) * (Multiplier) * Penalty

Article 3: 100 % Service Credit 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 = $(\sum [4] - 10 * C(4)) / C(4)$

Service Credit 3 = (Number of Faults subject to penalty) * (Multiplier) * Penalty

Appendix 5:

open eir LLU SLA Penalty Calculation Example The following section provides an example calculation for the SLA. The example covers all activities for Provisioning Process Points ~~and~~ **Fault Repair**.

Service Level Summary for Provisioning Process Points Account / Line Status Enquiry Example

| Activity Number | Order Type | Performance Target | Total Orders Delivered | Orders Delivered Within Perf. Target | Actual Performance | Penalties | Total Days Late | Penalty Amount | Total Penalty | Note |
|-----------------|------------|--------------------|------------------------|--------------------------------------|--------------------|-----------|-----------------|----------------|---------------|----------------------------|
| 1 | DRL | 98% | 9 | 8 | 88.89% | 1 | 10 | 12.7 | 127.00 | |
| 2 | ULE | 97% | 241 | 232 | 96.27% | 2 | 2 | 12.7 | - | N/A - Minimum penalty rule |

Standard Validations Timeframes

| Activity Number | Order Type | Performance Target | Total Orders Delivered | Orders Delivered Within Perf. Target | Actual Performance | Penalties | Total Days Late | Penalty Amount | Total Penalty | Note |
|-----------------|------------|--------------------|------------------------|--------------------------------------|--------------------|-----------|-----------------|----------------|---------------|------------------------------|
| 4 | PU | 98% | 12 | 10 | 83.33% | 2 | 2 | 12.7 | - | N/A - Minimum penalty rule |
| 5 | PUI | 98% | 94 | 93 | 98.94% | 1 | 1 | 12.7 | - | N/A - Performance target met |
| 6 | PLS | 98% | 17 | 15 | 88.24% | 2 | 4 | 12.7 | - | N/A - Minimum penalty rule |
| 7 | PLB | 98% | 4 | 2 | 50.00% | 2 | 2 | 12.7 | - | N/A - Minimum penalty rule |
| 8 | CHP | 98% | 1 | 0 | 0.00% | 1 | 1 | 12.7 | - | N/A - Minimum penalty rule |
| 9 | PUS | 98% | 10 | 9 | 90.00% | 1 | 10 | 12.7 | 127.00 | |
| 10 | Conwert | 98% | 10 | 9 | 90.00% | 1 | 10 | 12.7 | 127.00 | |
| 11 | PUG | 98% | 4 | 2 | 50.00% | 2 | 10 | 12.7 | 127.00 | |

Standard Delivery Timeframes

| Activity Number | Order Type | Performance Target | Total Orders Delivered | Orders Delivered Within Perf. Target | Actual Performance | Penalties | Total Days Late | Penalty Amount | Total Penalty | Note |
|-----------------|------------|--------------------|------------------------|--------------------------------------|--------------------|-----------|-----------------|----------------|---------------|----------------------------|
| 12 | PU | 95% | 10 | 9 | 90.00% | 1 | 8 | 12.7 | 101.60 | |
| 13 | PUI | 95% | 30 | 28 | 93.33% | 1 | 1 | 12.7 | - | N/A - Minimum penalty rule |
| 14 | PLS | 95% | 10 | 7 | 70.00% | 3 | 9 | 12.7 | 114.30 | |
| 15 | PLB | 95% | 2 | 1 | 50.00% | 1 | 2 | 12.7 | - | N/A - Minimum penalty rule |
| 16 | CHP | 95% | 5 | 4 | 80% | 1 | 1 | 12.7 | - | N/A - Minimum penalty rule |
| 18 | PUS | 95% | 1 | 0 | 0.00% | 1 | 8 | 12.7 | 101.60 | |
| 19 | PUG | 95% | 1 | 1 | 100.00% | - | 0 | 12.7 | - | |

N/A - Minimum penalty rule

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 OAO.





Fault Repair Service Level Summary

| Fault # | Days to Repair |
|-----------|----------------|
| 01-79 | 1 |
| 80 – 130 | 2 |
| 131 – 161 | 3 |
| 162 – 172 | 4 |
| 173 - 174 | 5 |
| 175 - 176 | 6 |
| 177 - 180 | 7 |
| 181 | 8 |
| 182 | 9 |
| 183 | 10 |
| 184 | 11 |
| 185 | 12 |
| 186 | 13 |
| 187 | 14 |
| 188 | 15 |
| 189 | 16 |
| 190 | 17 |
| 191 | 18 |
| 192 | 19 |
| 193 | 20 |
| 194 | 21 |
| 195 | 22 |
| 196 | 23 |
| 197 | 24 |
| 198 | 25 |
| 199 | 26 |
| 200 | 27 |

| | 2,5,10 Repair SLA | 3,6,11 Repair SLA |
|---|-------------------|-------------------|
| L1 - All tickets assessed inder SLA | 200 | 200 |
| L2 - All tickets closed after day 2 (3) | 70 | 39 |
| L3 - All tickets closed after day 5 (6) | 26 | 24 |
| L4 - All tickets closed after day 10 (11) | 17 | 16 |
| L5 - L2 minus L3- all tickets closed on days 3-5 / 4-6 | 44 | 15 |
| L6 - L3 minus L4 - all tickets closed on days 6-10 / 7-11 | 9 | 8 |
| sum ticket days from list 4 | 323 | 312 |
| sum ticket days form list 5 | 147 | 66 |
| sum ticket days from list 6 | 67 | 66 |

| 2 Day Penalty | | 3 Day Penalty | |
|--|---|--|--|
| Number Of faults subject to Penalty | $L2-L1*(1-0.77)$ $70-200*(1-0.77)$ 16 | Number Of faults subject to Penalty | $L2-L1*(1-0.77)$ $39-200*(1-0.77)$ -15 |
| Penalty Days multiplier $(Sum(5)-2*(L5)+3*(L6)+3*(L4))/L2$ | $((147-2*(44)+3*(9)+3*(17))/70)$ 1.957142857 | Penalty Days multiplier $(Sum(5)-3*(L5)+3*(L6)+3*(L4))/L2$ | 2.384615385 |
| Penalty (Number of faults subject to Penalty)*(Multiplier)*Penalty | €125 | Penalty (Number of faults subject to Penalty)*(Multiplier)*Penalty | 0 |
| 5 Day Penalty | | 6 Day penalty | |
| Number Of faults subject to Penalty | $26-200*(1-0.92)$ 10 | Number Of faults subject to Penalty | $24-200*(1-0.92)$ 8 |
| Penalty Days multiplier $(Sum(5)-2*(L5)+3*(L6)+3*(L4))/L2$ | $67-5*9+5*17/26$ 4.115384615 | Penalty Days multiplier $(Sum(5)-2*(L5)+3*(L6)+3*(L4))/L2$ | $66-6*(8)+5*(16)/24$ 4.083333333 |
| Penalty | €288 | Penalty | €229 |
| 10 Day Penalty | | 11 Day Penalty | |
| Number Of faults subject to Penalty | 17 | Number Of faults subject to Penalty | 16 |
| Penalty Days multiplier $(323-10*17)/17$ | 9.000 | Penalty Days multiplier $(312-11*16)/16$ | 8.5 |
| Penalty | €1,530 | Penalty | €1,360 |



Version Control History

| Version | Status | Update | Effective Date |
|--------------|--------------|--|-------------------|
| 13 | | | 01/09/2015 |
| V2 | | Rebranded | October 2015 |
| V3 | | Updated provisioning SLA metrics. Updated sections 1, 2,3 and 4 | 01/12/2016 |
| 15 | | Insertion of the PUN Metrics | 01/05/2017 |
| V16.0 | Final | This document is based on Version 15 Implementation of Standardised Change Control. | 07/06/2017 |
| <u>V17.0</u> | <u>Final</u> | <u>Changes to repair metrics</u> | <u>01/07/2017</u> |