

Standard Interconnection Agreement



Annex G Interconnection Operations and Maintenance Manual

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1 INTRODUCTION

1.1 Background

The purpose of this Manual is to define the joint operational & maintenance procedures relating to the network of Interconnection Links between Epic and Operator. This Manual is not a legal document but supports the Interconnection Agreement and describes the mutually agreed processes, which will be used to manage the ongoing operational activity associated with the Interconnection between the two Networks.

For the avoidance of doubt the processes described relate to existing Interconnection agreements not to the implementation of new ones.

It is based on the premise that the efficient management of the physical and logical Interconnection is to the mutual benefit of both Parties.

The processes described are in general reciprocal between Epic and Operator. They address Epic's regulatory obligations towards Operator. It should be noted that whilst the text refers to Epic and Operator, that due to the reciprocity principle, these roles are interchangeable unless explicitly stated otherwise.

Where the Interconnection Agreement specifies issues relating to operation and maintenance, such issues shall be dealt with in accordance with the provisions of this Manual.

In the event that there is any conflict with the provisions of this Manual and the Main Body of the Interconnection Agreement, then the said Main Body shall have precedence.

1.2 The Status of this Manual

This is a working document and as such both Parties recognise that it shall have free circulation to all relevant staff in both organisations.

1.3 Definitions

For the purposes of this Manual, a reference to a Clause or Appendix unless stated otherwise is to a Clause or Appendix of this Manual. Words and expressions have the meaning given in Annex A of the Interconnection Agreement.

2 SCOPE

This Manual deals with the normal operations and maintenance activities, which arise from the operation of an Interconnection as agreed and defined in the Interconnection Agreement.

The activities, which are covered by this Manual, are divided into the following categories:

2.1 Forecasting Process

This process describes the mechanism for producing and reviewing the Forecasts.

2.2 Pre-Provisioning Processes

These processes relate to the format and process for the placement of orders for Interconnection elements and Interconnection Services as defined in the Interconnection Agreement.

2.3 Provisioning Processes

These processes relate to the mechanism for the implementation of the various Interconnection elements and Interconnection Services ordered using the processes described in the Pre-Provisioning section.

2.4 Post Provisioning Processes

The Post Provisioning Processes describe the mechanisms for dealing with the operational issues relating to the in-service Interconnection. These items include fault reporting & resolution, performance monitoring, planned outages etc.

2.5 Billing Processes

The Billing Processes describe the mechanisms and procedures for the Interconnection payment system.

2.6 Miscellaneous Processes

This section deals with various miscellaneous processes that do not fall within the above categories.

3 FORECASTING PROCESS

3.1 General

In the period leading up to commencement of service, Operator must provide Epic with a Forecast of capacity requirements. This Forecast of capacity requirements will be in terms of the “In Service Capacity” at the end of any particular Forecast period. Following commencement of service and for the duration of the Interconnection Agreement, Operator shall submit Forecasts to Epic at three monthly intervals. Each Forecast shall cover all Interconnection Services expected to be “In Service” by the close of the Forecast period, and the Forecast will be used by both Parties to:

- plan resources in advance
- provide the Core Network facilities necessary to support future Interconnection Services;
- and activate the required Core Network capacity in the correct time frame to meet the demand in the Forecast.

3.2 Forecasting Process

In order to compile a Forecast, Operator calculates the quantity of Interconnection Links expected to be required in the future. More specifically, a Forecast shall include the cumulative quantity of simultaneous SIP channels expected to be required: within 3 months, within 6 months, within 9 months, within 12 months, within 15 months and within 18 months. These three-month periods shall start on the following designated dates: 1 January, 1 April, 1 July and 1 October.

Naturally, Forecasts are expected to be more accurate for the designated dates that are closer to the date when the Forecast is compiled. As such, the maximum error that can be tolerated shall be as follows:

Period	Months into the future from the date of compilation of forecast	Maximum error tolerable between forecast and actual quantity of channels
1	3	±0%
2	6	±0%
3	9	±10%
4	12	±20%
5	15	±30%
6	18	±40%

For example, if Operator compiles a Forecast on February 2024 and expects to start operations with 100 SIP channels and grow with 20 SIP channels every 3 months, then the Forecast would be as follows:

Operator Name					
Date when this forecast was compiled					
Period	Designated date	Max Error Tolerable	Details of Interconnection Links		
			Cumulative Quantity of SIP Channels	Address at Epic	Address at Operator
1			100	Address X	Address Y
2			120	Address X	Address Y
3			140	Address X	Address Y
4			160	Address X	Address Y
5			180	Address X	Address Y
6			200	Address X	Address Y

If Operator provides Forecasts that have an error that is greater than the maximum tolerable error shown above, Epic reserves the right to claim damages and not to honour the obligations of delivery target dates set out in the Service Level Agreement at Annex D of the Interconnection Agreement.

The compilation of Forecasts by Operator shall be done every 3 months i.e. every 3 months; Operator shall re-compile the Forecast for the subsequent 18 months in the form shown above. This rolling Forecast will ensure that errors in the Forecasts are minimised.

Forecasts shall be compiled and sent to Epic no later than 10 Working Days before the first designated date (i.e. in the example described above, the Forecast would be sent to Epic 10 days before 1 April 24). If Forecasts are not received by this target date, and Operator and Epic shall not be able to agree on another date, then the case shall be treated as a Dispute, which shall be resolved in accordance with the resolution procedure laid down in Clause 18 of the Main Body of the Interconnection Agreement.

4 PRE-PROVISIONING PROCESSES

The Pre-Provisioning Processes describe the mechanisms for the ordering of Interconnection Services or for the modification or augmentation of the in-service Interconnection.

These processes shall be laid down by the Service Level Agreement, in Annex D of the Interconnection Agreement.

Moreover, the following shall also apply:

4.1 Order Format

All orders for new or additional Interconnection Links and/or SIP channels and additional services shall be placed using the Order form for Interconnection Links as per Appendix 2.

4.2 Order Process

Operator will complete and send the Order Form to Epic. If the order form is incomplete, it will be returned to Operator with the reason for incompleteness stated. Operator may revise or amend the order and re-submit it. If this does not occur within a further 5 working days, the order will be deemed to have been cancelled.

5 PROVISIONING PROCESSES

5.1 Introduction

These processes relate to the mechanism for the implementation of the various Interconnection services ordered using the processes described in the Pre-Provisioning section.

These processes shall be those laid down by the Service Level Agreement, in Annex D of the Interconnection Agreement.

Moreover, the following shall also apply:

5.2 Provision of Interconnection Links

Epic will specify which of the tests detailed in the Technical Manual, will be used for the testing of the Interconnection Links. Testing shall be done on a mutually agreed date. When testing is completed to the satisfaction of Epic, Epic shall notify Operator that the testing of the Interconnection Links has been successfully completed. At this point the Interconnection Links shall be deemed to be ready for service and the commissioning form included under Appendix 2 shall be signed by both Parties. **Full billing of the new provisioned service shall start on the date when both Parties sign the commissioning form included under Appendix 2.** If Operator fails to sign, then charging shall start anyway from a date that is 10 days after Epic notifies Operator that tests have been successfully completed.

If the results of the testing are not acceptable to Epic, there shall then follow a mutually agreed time period where both Parties shall attempt to repair faults and re-test the unacceptable aspects of the service. If a mutually agreeable solution is not found, then the case shall be considered as a Dispute and Clause 18 of the Main Body of the Interconnection Agreement shall apply.

6 POST-PROVISIONING PROCESSES

6.1 Introduction

The post provisioning processes describe the mechanisms for dealing with the operational issues relating to the in-service Interconnection. These items include fault reporting and resolution, performance monitoring, and Network Alterations including planned maintenance.

These processes shall be those laid down by the Service Level Agreement, in Annex D of the Interconnection Agreement.

Moreover, the following shall also apply:

6.2 Alarm Thresholds

The Epic Interconnection Nodes shall trigger an alarm in the event of failure by the remote peer to respond to a number of consecutive SIP OPTIONS requests. The occurrence of such an alarm will result in the blacklisting of the respective SIP trunk until receipt of further SIP requests from the remote peer or through manual intervention. Such an alarm shall be considered as a fault that adversely affects end users and shall be dealt with according to the timescales set in Annex D of the Interconnection Agreement.

6.3 Fault Reporting Procedures

In the event that a fault is discovered by either Party, a trouble ticket in the form specified in Appendix 3 shall be compiled and sent to the other Party. The fault shall be considered rectified when the Party reporting the fault confirms in writing to the other Party that the case may be considered closed. The Party receiving the trouble ticket shall provide a written acknowledgement to the ticket with a corresponding ticket reference.

6.4 Planned Maintenance Procedures

If either Party intends to carry out any planned work which may affect the Interconnection, then the originating Party must notify the other Party of the planned work as specified in Appendix 11, using the "Notification of Planned Maintenance" form in Appendix 4.

6.5 Implementation of Network Alterations

Both Parties will have to mutually agree on the required timescales to complete the implementation of a Network Alteration. If the results of the testing following the agreed Network Alterations are not acceptable, there shall then follow a mutually agreed time where both Parties shall attempt to repair faults and re-test the unacceptable aspects of the service. If a mutually agreeable solution is not found, then the case shall be considered as a Dispute and Clause 18 of the Main Body of the Interconnection Agreement shall apply.

6.6 Network Management

6.6.1 General Network traffic management

6.6.1.a. Network traffic management is the function of supervising the Network and taking action when necessary to control the flow of traffic. The objective of Network management shall be to enable as many Calls as possible to be successfully completed through the application of the general principles laid down in Clause 6.6.1.b below. Network management assumes that the Network is adequately engineered to meet the normal levels of traffic.

6.6.1.b. The general principles to be adopted by both Parties are:

- To make use of available trunks during periods of outage, such that after negotiation, some or all of the affected traffic may be re-routed, where capacity permits, to alternate routes for completion.
- To identify and reduce, as close to their source as possible, Call attempts which are likely to be ineffective because of a situation in the Network, such as a failure, to allow trunk capacity to be available for Call attempts which have a higher probability of being effective.

6.6.1.b.1. To inhibit congestion and prevent its spread such that if a large increase in Call attempts results in congestion, controls shall be applied to inhibit the congestion by removing those Call attempts, which have a low chance of resulting in a successful Call (from the congested node).

6.6.2 Network management actions

The application or removal of Network management controls shall be based on reported faults and planned outages. This may also include Mass Calling Events as described hereunder. Performance data shall also be used to measure the effect of any Network management control taken, and to indicate when a Network management control should be modified or removed. Network management actions are divided into two categories:

- "Expansive" actions, intended to make available lightly loaded parts of the Network to traffic experiencing congestion;
- "Protective" actions, intended to remove traffic with a low probability of resulting in successful Calls from the Network during congestion.

The first choice response to a Network problem shall be an expansive action. Protective actions shall be applied if expansive actions are not available or not effective.

6.6.3 Expansive actions

6.6.3.a. Expansive actions involve the re-routing of traffic from trunk groups experiencing congestion to other parts of the Network which are lightly loaded with traffic by performing one of the following actions:

- Establishing temporary alternative routing arrangements in addition to those normally available;
- Where there is more than one access point gateway, temporarily reorganising the distribution of the affected traffic or services.

6.6.4 Protective actions

6.6.4.a. Protective actions involve removing traffic from the Network during congestion which has a

low probability of resulting in successful Calls. Such traffic shall be removed as close as possible to its origin, thus making more of the Network available to traffic, which has a higher probability of success.

6.6.4.b. Protective actions that may be taken include:

- Temporary removal of trunks from service. This action may be taken when a distant part of the Network is experiencing serious congestion.

6.6.4.b.1. Special instructions to other Parties – For example, such instructions may require that only a limited number of attempts (or none at all) be made to set up a call via a congested trunk group or node, or to a particular destination experiencing congestion.

- Inhibiting direct traffic – This action reduces the traffic accessing a trunk group in order to reduce the loading on the distant Network.
- Inhibiting traffic to a particular destination (code blocking or Call gapping) – This action may be taken when it is known that a distant part of the Network is experiencing congestion.

6.6.5 Actions during disasters

In the event of disasters, whether man-made or natural, that result in damage to the Network, a single point of contact for Network-related information shall be established to prevent confusion, duplication of effort, and to ensure an orderly process of returning communications to normal. The single point of contact shall be the official responsible for business continuity within the Party or Parties affected by the disaster.

6.6.6 Process for Notification or Request for Network Management action

- 6.6.6.a. When either Party wishes to initiate Network management action or request the other Party to apply an action on its behalf, it shall contact the other Party via email or phone and follow the process agreed between the Parties. The Parties shall use the contact details as listed in Appendix 11: of this Annex G for any request/notification of Network management actions.

6.6.7 Mass Calling Events

- 6.6.7.a. Mass Calling Events can have catastrophic effects on both the Interconnection and one or both Parties' Networks. As such both Parties will endeavour as far as possible to ensure that end users generating Mass Calling Events provide adequate notice of such events and to disseminate this information as outlined below.
- 6.6.7.b. Where an event terminating on one Network which has not been notified causes quality degradations in the other Network, both Parties reserve the right to block future access to the terminating number(s) in question.
- 6.6.7.c. For events which cannot be accurately forecast (competitions etc.) then the terminating numbers assigned to the end users will be from a range designated for "bursty" traffic and for which generic Call management procedures may be put in place e.g. Call gapping.

6.6.8 Mass Calling Event Procedures

Advance notice of Mass Calling Events will be given using the form in Appendix 7:. At least 10 Working Days' notice is required.

6.7 Quality of Service and Traffic Performance

6.7.1 Quality of Service and Traffic Performance Reporting

- 6.7.1.a. Quality of service statistics and traffic performance measurements shall be exchanged between both Parties for all in-service Interconnection Links. The measurements shall be exchanged on a monthly or quarterly basis unless agreed otherwise between both Parties.
- 6.7.1.b. The quality of service report will be produced by each Party for use in the Operations and Maintenance Forum, as described hereunder.

6.7.2 Quality of Service and Traffic Performance Reviews

- 6.7.2.a. Reviews of the quality of service and traffic performance shall take place as part of the activities of the Operations and Maintenance Forum, as described hereunder.
- 6.7.2.b. Where the busy hour traffic on any Interconnection route exceeds 70% of capacity, this shall prompt a joint review by the Operations and Maintenance Forum of the capacity on the route in question.

6.8 Operational Performance

The mechanism for reporting operational performance statistics shall be the Operations and Maintenance Forum and is described in Appendix 10.

7 BILLING PROCESS

7.1 Introduction

These processes relate to the production of Interconnection bills and to the testing, for billing purposes of an Interconnection Link.

7.2 Production of Interconnection Bills

The Billing Process shall be that laid down in Annex B of the Interconnection Agreement.

7.3 Billing Test Process

- 7.3.1.a. Epic and Operator shall agree on a set of test procedures aimed to validate the call handling and billing information that will be generated by both sides for the purpose of interconnect billing.
- 7.3.1.b. The test procedures to use shall be in line with the billing test procedures defined under section 8.1.2 of Annex H of this Interconnection Agreement.
- 7.3.1.c. Once both Parties reach agreement on the reconciliation process, the billing tests will be signed off and the route opened for traffic.
- 7.3.1.d. All aspects of the Billing tests will be co-ordinated by the respective Interconnection Commercial and Technical contact points listed under Appendix 11:.

8 MISCELLANEOUS PROCESSES

8.1 Opening or Modification of Number Ranges

8.1.1 General

This Clause details the process for the opening of access to new number ranges within the Epic Network.

The process for opening of access to new number ranges within the Epic Network for local operators shall be as mandated by the MCA, as may be amended from time to time.

8.1.2 Number Ranges Accessible via the Operator Network

- 8.1.2.a. Operator shall submit a request utilizing the form attached at Appendix 12: for the opening of a new number range, which they have obtained from the MCA, within the Epic Network via the contact point specified in Appendix 11:.
- 8.1.2.b. The request shall detail the number range, the Operator node it is mapped to and the date that it will be active on the Operator Network. Each requested number range shall contain at least **one test number** to allow verification of the number range implementation. This test number must be specified at the time of the request to open the range.

- 8.1.2.c. Epic and the Operator shall adhere to the timeframes as established in the National Numbering Conventions as published and as may be amended by the Malta Communications Authority from time to time, for the opening of a new number range.

8.1.3 Number Ranges Accessible via the Epic Network

- 8.1.3.a. Epic shall issue an update detailing new Epic number ranges accessible via its Network together with activation dates and mapping to Interconnection Nodes.
- 8.1.3.b. The Operator shall take the necessary action to allow its end users to access the new Epic number ranges, provided that Operator is entitled to do so by virtue of the Service Schedules listed in Annex C of the Interconnection Agreement.
- 8.1.3.c. The Operator and Epic shall adhere to the timeframes as established in the National Numbering Conventions as published and as may be amended by the Malta Communications Authority from time to time, for the opening of a new number range.

8.2 Technology Changes Which Affect the Interconnection

8.2.1 Software or hardware changes

Technology changes in either software or hardware which affect the technical parameters of the Interconnection must be forecasted in the Network Plan.

8.2.2 Process for implementation

- 8.2.2.a. The timescales and process for the implementation of such changes must be requested via the contact points listed in Appendix 11:. The request will be acknowledged within two weeks. Examples of these changes are:
 - 8.2.2.a.1. Upgrades to software in network elements such as gateways or transmission systems.
 - 8.2.2.a.2. Upgrades to software in network monitoring or management systems.
 - 8.2.2.a.3. Upgrades to operational support systems such as provisioning or Billing Systems.

8.3 Health and Safety

Both Parties shall comply with (i) any statutory national safety regulations that are applicable from time to time (ii) any specific Epic or Operator health and safety practices that may be applicable, including any site-specific requirements (iii) all Epic internal health and safety guidelines, which shall be complied with at all times by both Parties.

9 OPERATIONS & MAINTENANCE FORUM

The Operations & Maintenance Forum shall be composed of technical representatives of both Parties. It shall meet at least once every quarter as a minimum to discuss all technical issues related to the Interconnection Agreement. Additional 'emergency meetings' may also be held between the two Parties as may be necessary.

The Operations and Maintenance Forum may further review and refine the operations and maintenance processes as may be necessary to enable targets to be met.

10 APPENDICES

APPENDIX 1: USAGE GUIDE

FORECAST Forms for each Interconnection Node and each Point of Interconnection

10.1. These forms are to be used to generate the Forecasts for the gateway and the transmission requirements for Interconnection.

TRAFFIC/TRANSMISSION FORECAST

Interconnection Links required to carry the traffic between the Epic Network and the Operator Network.					
Operator					
Date when this forecast was compiled					
Period	Designated date	Maximum Error Tolerable	Details of Interconnection Links		
			Cumulative Quantity of Simultaneous Channels	Address at Epic	Address at Operator
1		±0%			
2		±0%			
3		±10%			
4		±20%			
5		±30%			
6		±40%			

APPENDIX 2: ORDER/COMMISSIONING FORMS FOR INTERCONNECTION LINKS

Order/Commissioning Forms for Interconnection Links

These forms are to be used for the ordering/commissioning of new Interconnection Links and the rearrangement or cessation of existing Interconnection Links

A number of possibilities exist:

10.2 New Epic Sited Interconnection Links

In this case, the transmission information portion of the form should contain the required Epic Interconnection Node and the address of Operator's Point of Interconnection. For new Points of Interconnection, the date at which site access will be available to Epic should be stated. For Points of Interconnection served by diversity routes, the routing of the Interconnection Links should be specified in the comments field. Any special arrangements for site access should also be included in this field.

The routing information portion of the form should contain Operator Interconnection Node and the Epic Interconnection Node.

Section 2 of the form should be completed.

10.3 Re-arrangement of the existing Interconnection Links

10.3.1 Transmission change with no routing change:

In this case, the routing portion of the form is not required to be completed.

10.3.2 Transmission and routing change:

In this case, both transmission and routing portions of the form should be completed. The interconnection link references, the gateway reference and the number of channels affected should be stated.

Section 2 of the form should be completed for each scenario.

10.4 Cessation of existing Interconnection Links

Only Section 1 of the form should be completed quoting the trunk references.

ORDER FORM FOR INTERCONNECTION LINKS

(Section 1).

Order Details - sent by Operator to Epic.

To: [Epic Order contact point]		From: [Operator Order contact point]	
Date:		Operator Reference No.:	
Order Type:			
Provide ☐	Re-arrangement ☐	Service Termination ☐	
Signed on behalf of Operator			

Transmission Information

Type of Interconnection:	
A-End (Epic Node – IP Address and SIP Port):	
B-End (Point of Interconnection – IP Address and SIP Port):	
Date when the site is accessible to Epic	
New B-End (In case of Rearrangement – IP Address and SIP Port):	
Trunk Group ID (In case of Rearrangement – IP Address and SIP Port):	
Number of Interconnection Links:	
Comments:	

Routing Information

Epic Interconnection Node:	
Operator Interconnection Node:	
Operator's new Interconnection Node (In case of Rearrangement):	
Trunk Group ID(In case of Rearrangement):	
Number of Interconnection Links:	
Number of channels:	
Comments:	

Order details (to be completed by Epic)

Account Number:	IP Address
Service Order Number:	SIP Port

Signed on behalf of Epic:	Date:
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ORDER FORM FOR INTERCONNECTION LINKS (Section 2).

Operator Interconnection Node Name		
Operator Interconnection Node IP Address and SIP Port		
Epic Interconnection Node Name		
Epic Interconnection Node IP Address and SIP Port		
Traffic direction (With respect to Epic)		
Traffic Overflow: Choices for Originating Number Ranges	First Choice	
	Second Choice	
	Final Choice	

(To be completed by Epic)

Epic Interconnection Link Designations	
Epic Route Name	
Epic Interconnection Link Designations	Epic IP Address and SIP Port

Epic Interconnection Link Designations	Epic IP Address and SIP Port

Proposed Commissioning Form for Interconnection Link

[This form is to be filled in immediately on the completion of the agreed technical tests by the respective technical Parties, and shall mark the start of the Billing Process by Epic for the Interconnection Service concerned]

Completion of Works form with respect to Operator	Operator Order ref.	
	Order Dated:	
Date of Completion:		
Work Type: New Service Re-arrangement ☐ ☐ This is to certify that all works related to this order have now been completed to the satisfaction of Operator in accordance with all established conditions and technical requirements. The date of signature of this commissioning form is the date on which the Billing Process begins		
Signed on behalf of Operator		
Signed on behalf of Epic		
Date of signing of Commissioning form		

APPENDIX 3: INTERCONNECTION TROUBLE TICKET

Interconnection Trouble Ticket

The form in this section should be used for the reporting of faults/failures relating to the Interconnection.

10.5 Faults may be advised by phone in parallel to e-mail the form, however the e-mail form will be the official trouble reporting mechanism.

INTERCONNECTION TROUBLE TICKET

Trouble Ticket Opening Information

Ticket Opened by (name):			
Ticket Opened on (date):		Ticket Priority:	
Ticket Opened at (time):		Ticket Status:	
Acknowledgement Time:			
Operator Ticket Reference:		Epic Ticket Reference:	

Designation Information

Time of Fault Start:	
Description of Fault:	
Interconnection Link Affected :	
Interconnection Path (s) Affected :	
Services Affected :	
Proportion of Calls Affected :	
Initial Response :	
Time of Identification of Fault :	
Update Number []	(An entry shall be made for each update)
Time when the Fault ends:	Answer Code:
Ticket Answered by:	Ticket Accepted by:
Ticket Answered on:	Ticket Accepted on:
Ticket Answered at:	Ticket Accepted at:
Nature of Fault Clearing:	

Trouble Ticket Closing Information

Ticket Closed by (name):	
Ticket Closed on (date):	
Ticket Closed at (time):	

APPENDIX 4: NOTIFICATION OF PLANNED MAINTENANCE

Notification of Planned Maintenance

The form in this section should be used for the notification of planned maintenance activities relating to the Interconnection.

10.6 The type of actions which require to be notified are activities directly affecting the Interconnection together with activities in one Party's Network at node level which will impact on the ability of users directly connected to that Network to access Interconnection Services on another interconnected Network.

NOTIFICATION OF PLANNED MAINTENANCE

To:		Reference Number:
From:		Date:
Address:		
Address:		
Telephone No:		

Engineering work is due to be carried out on the following Interconnection Link /Node and will necessitate the following break in service: -

Interconnection Link(s) Affected:

Interconnection Node(s) Affected:

Break Description:

Start Date & Time of Break:

Finish Date & Time of

Break:

Duration of Break:

Comments:

Originator's Initial:

Issue:

Received by:

Date:

Amendment Agreed by:

Date:

Engineering work completed as planned:

Signed:

Date:

APPENDIX 5: FAULT RESOLUTION AND ESCALATION TIMESCALES

10.7 The procedure and commitments related to fault rectification are set out in Annex D of the Interconnection Agreement and are summarised below for ease of reference.

Fault type	Initial Response	Status Updates			
Critical Faults	60 Minutes from when the fault is reported in accordance with Annex D of the Interconnection Agreement	every 60 minutes			
Non-Critical Faults	1 Working Day from when the fault is reported in accordance with Annex D of the Interconnection Agreement	every Working Day			

APPENDIX 6: NOTIFICATION/REQUEST FOR NETWORK MANAGEMENT ACTION

10.8 The Parties shall use the contact details as listed in Appendix 11: of this Annex G for any request/notification of Network management actions.

APPENDIX 7: NOTIFICATION OF MASS CALLING EVENT

10.9 The form in this section should be used for notification of Mass Calling Events as detailed in the body of this Manual.

Details

From: [Epic/Operator *]		To: [Operator/Epic*]	
Date:		Reference No.:	
Details of Event:			
Start Date			
Start Time:			
End Date:			
End Time:			
Calling Area/Point of Interconnection affected			
Destination Number (s)			
Expected Volume			
Notes:			
Signed on behalf of Epic/Operator *			

APPENDIX 8

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APPENDIX 9

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APPENDIX 10: TYPICAL OPERATIONAL PERFORMANCE REPORT

10.10 The form in this Appendix is a template for the report to be produced as input to the Operations and Maintenance Forum.

TYPICAL OPERATIONAL PERFORMANCE REPORT

Period From: _____ to _____

Part A: Fault Reporting

Reported Faults:

Fault Severity Level	Number of faults reported	Number of faults cleared	Average time to clear	% cleared within 12 hrs	% cleared within 24 hrs	% cleared within 48 hrs
A						
B						

Part B: Planned Maintenance

	Epic	Operator
Number of planned maintenance activities notified		
Number of planned maintenance activities started as planned		
Number of planned maintenance activities completed on target		
Number of planned maintenance activities not completed on target		
Number of urgent planned maintenance activities		
Number of unplanned maintenance activities		

Part C: Service Delivery

Service	Target Delivery Time	Quantity due for Delivery during period	Quantity delivered during period	% delivered within target time	% delivered outside target time	Quantity Outstanding outside target time

APPENDIX 11: DIRECTORY OF CONTACT POINTS

The details contained in this Appendix shall be compiled and agreed between Epic and Operator.

10.11 The contact points information shall include – for each contact person in the directory:

- Name
- Title
- Mailing Address
- Contact Phone numbers (mobile + fixed line)
- E-mail information.

Contact Pt.	Contact Details	Epic	Operator
Main Technical Contact: For issues/decision related to: • Control/ amendments to Technical Documents • Technology changes, which affect the Interconnection. • Fault Escalation – Managerial Contact (level 2)	Name		
	Title		
	Mailing Address		
	Phone		
	Mobile		
	E-Mail		
Forecast, Provisioning and Number Changes: • Forecast of interconnect traffic • Provisioning of new interconnect links • Number changes notification affecting interconnection	Name		
	Title		
	Mailing Address		
	Phone		
	Mobile		
	E-Mail		
Planned Maintenance & Fault handling • Single Pt. of Contact (Spoc) for fault handling and trouble reporting	Name		
	Title		
	Mailing Address		
	Phone		
	Mobile		
	E-Mail		
Fault Escalation • Fault Escalation – Technical Contact (level 1)	Name		
	Title		
	Mailing Address		
	Phone		
	Mobile		
	E-Mail		
Commercial Contact For issues related to: • Ordering of interconnect services • Update on international access information			

Contact Pt.	Contact Details	Epic	Operator
All Billing issues			

APPENDIX 12: OPERATOR NUMBER RANGE ACTIVATION REQUEST TEMPLATE

ACTIVATION REQUEST TEMPLATE

EPIC Name	<i>Operator Malta Limited</i>	
Contact details of applicant	<i>Numbering Manager</i>	
	<i>Postal Address</i>	
	<i>Phone Number</i>	
	<i>e-mail</i>	
Date of request		
Requested completion date		
Activation to cover period		
Terminating Point(s) of Interconnection on the Operator Network		

Epic only: -

Epic Reference Number	
Request Status	
Epic Point of Interconnection / Routes	
Service Schedule	

Number Range(s) Details

Access Code	Number Range	Service Designation	Number Range Digit Length	Test Number(s) within the range	Quantity of Numbers within the specified range

