

Reference Access and Interconnection Offer

Annex D Interface Testing Procedures

Table of Contents

1	General	3
2	Tests on digital 2 Mbps Circuits	4
3	Call Completion Tests	5
4	Charging Tests	6
5	Confidence Testing	7

1 General

- 1.1 The following tests are in addition to any interoperability tests which may be required to ensure the basic interoperability of the generic software used by each Party.
- 1.2 The following tests are performed each time a new Point Of Interconnection is established or additional capacity is added to an existing route.

2 Tests on digital 2 Mbps Circuits

2.1 Below are described all tests on digital 2 Mbps circuits that are dynamic and out of service.

2.2 Error performance measurements accordingly to G.826 ITU-T.

2.2.1 Error Performance measurements will be performed end to end for E1 circuits provided over transmission systems in order to comply with ITU-T Recommendations: G.826.

2.2.2 End-to-end error performance objectives for a 27,500 km international digital HRP at or above the primary rate are:

- (a) Rate 2.048Mbps
- (b) Bits/block 2048
- (c) Errored Second Ratio - ESR 0.04
- (d) Severely Errored Second Ratio- SESR 0.002
- (e) Background Block Error Ratio- BBER 2×10^{-4} (Note 1)

NOTE 1 – For systems designed prior to 1996, the BBER objective 3×10^{-4} .

2.2.3 The allocation for the error performance objectives to the national portion of the end-to-end path will be done according to G.826 Recommendation.

2.2.4 The duration of the above test is at least 24 consecutive hours.

3 Call Completion Tests

3.1 The Signalling SS7

3.1.1 All of the following tests will be performed with test calls from Omantel's Network to the Requesting Party's service platform, and, if applicable, vice versa, according to the Services provided by the two Networks.

3.1.2 The following tests will be performed in respect of all types of digital exchanges which are operated by Omantel and which are available for the establishment of access services and in respect of equipment of the Requesting Party which will be used for the purposes of the Class II Services.

3.2 Call Routing

3.2.3 The correct data routing configuration is checked by performing relevant test calls. The Parties will agree on relevant tests according to the set-up of the Requesting Party. The following tests are only examples of the tests that could be performed:

- (a) Calls originating from Operator's Network and terminating in the Omantel's Network at all Point of Interconnections.
- (b) Calls originating from Operator's Network and transiting through Omantel's Network and terminating in a Third Party's Network.
- (c) Calls originated from Omantel's Network and terminated in the Requesting Party's Network at all Point of Interconnections.

4 Charging Tests

- 4.1 The Parties commit cooperate in good faith in testing and ensuring the accuracy of their respective billing systems which process calls that are subject to Interconnection.
- 4.2 In order to ensure accurate charging of the Services provided, according to the Agreement the following tests will be performed:
 - 4.2.1 For all interconnect call cases specified in Annex C and its sub Annexes the transmission/ reception of the charging parameters will be checked bilaterally.
 - 4.2.2 The error-free charging registration in files (Volume of calls and total duration in min.) per service for peak and off-peak time will be checked.
 - 4.2.3 The comparison of charging files between both Parties in order to ensure the matching of record, if applicable.
 - 4.2.4 The accuracy of the output from the Billing Systems shall in each case be tested according to a schedule of tests agreed between the parties. All services shall be tested for all Points of Interconnection for Peak and Off Peak periods. An agreed batch of Call Records shall be passed through both Parties' Billing Systems and the resulting output compared to ensure that both Billing Systems are accurately processing the call records.
 - 4.2.5 If applicable: The accuracy of the information provided by each Party regarding the total volume of traffic during the billing period which is exchanged periodically between the parties in order to settle payments.

5 Confidence Testing

- 5.1 The confidence tests shall start after the common technical test for interconnection has been completed. During one month starting from the time interconnection becomes operational the Parties shall monitor the signalling traffic and the Services traffic in order to see that the standards in this Annex are being met.
- 5.2 For SS7 the Parties shall verify the messages are sent only for the agreed destinations and for the agreed Services and meet the resilience criteria.