

BT PPC STANDARD HANDOVER AGREEMENT

ANNEX A

PLANNING AND OPERATIONS

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1. DEFINITIONS

1.1 In this Annex and the Appendices, a reference to a paragraph or Appendix, unless stated otherwise, is to a paragraph or appendix of this Annex. Words, abbreviations and expressions have the meanings given in Annex D.

2. GENERAL

2.1 This Annex details the planning and operational principles for the provision of ISH Links and CSH Links, and provides the technical basis for the Specifications and for the Manuals. The Manuals provide procedures for the provision and testing of ISH Links and CSH Links Capacity (Provisioning Manual) and operations and maintenance (Operations and Maintenance Manual).

2.2 The details of the ISH Links and CSH Links and the plans for future developments shall be recorded in the Technical Master Plan. The Customer Service Plan shall contain details of the points of contact within the Operator's and BT's organisation. The Parties shall endeavour to keep these documents up to date.

2.3 Appendix B is a diagrammatic representation of the In Span Handover arrangements; Appendix C is a diagrammatic representation of the Customer Sited Handover arrangements; Appendix D is a diagrammatic representation of the Partial Private Circuit arrangements. Appendix E is a diagrammatic representation of the ISH and CSH Facility Mux arrangements. The four diagrams are included in this Annex for illustration purposes only.

3. NETWORK INFORMATION

3.1 Insofar as not previously provided, BT shall provide to the Operator as soon as reasonably practicable (and in any event not more than 20 Working Days from the date of this Agreement) the name, address, (including postcode), and grid reference of each transmission node existing at the date of this Agreement available for ISH Links and from which CSH Links are served (BT Serving Nodes). BT shall at the Operator's request provide to the Operator a map of BT's network within the United Kingdom which clearly illustrates and labels the geographic location of each BT tier 1, tier 1.5, tier 2 and tier 3 node.

3.2 In addition to the requirements set out in paragraph 4 of the main body of this Agreement, BT will provide the Operator with information on any proposed introduction, closure, replacement of, or modification to, any transmission nodes referred to in paragraph 3.1, and the individual services that will be affected, as soon as practicable and, in any event, not less than six months prior to the implementation of such introduction, closure, replacement or modification.

4. LOCATION OF POINTS OF HANDOVER

- 4.1 Points of Handover may be constructed at transmission nodes suitable for ISH Links, or at Operator sites served from these transmission nodes for CSH Links, pursuant to paragraph 3.

5. HANDOVER LINK ARCHITECTURE

- 5.1 ISH Links and CSH Links shall be transmission systems using SDH technology, where the interfaces are set out in the Cable Specification and the Generic SDH Interface Specification.

5.2 ISH Links

(a) Configuration

Optical path protection is provided as standard, but may be physically realised by a single cable and footway box unless the Operator has ordered additional Resilience under Schedule 02.

(b) Equipment

The manufacturer and type of equipment that BT shall use conforms to the Generic SDH Interface Specification; the Operator may use any equipment that conforms to the Generic SDH Interface Specification and is of the same line rate as that used by BT.

(c) Management

Neither Party shall exercise management control of the other Party's Add Drop Multiplexor. In particular, the transmission messages to the other Party via the Data Communications Channel (DCC) in the Add Drop Multiplexor section overhead shall be inhibited.

(d) Operational Procedures

Operational procedures for the provision of ISH Links are described in the Provisioning Manual and their maintenance is described in the Operations and Maintenance Manual.

(e) Path Protection/MSP

As standard, all SDH VC paths shall terminate on a single multiplexor at the BT transmission node.

6. HANDOVER CAPACITY PROFILES AND ADVANCE CAPACITY ORDERS

- 6.1 Before placing Capacity Orders, the Operator shall (subject to paragraph 6.2 below) supply BT with Capacity Profiles in relation to Capacity Provision for all existing and proposed Points of Handover (which for the purposes of this Annex A and the Capacity Profile and Advance Capacity Order shall be deemed to refer to the BT Serving Node at the curtilage of which ISH is located and from which ISH Extension or CSH is served).
- 6.2 Capacity Profiles for Capacity Provision shall be on a rolling one year basis and provided on forms as described in the Provisioning Manual. The first three months of each Capacity Profile shall form an Advance Capacity Order pursuant to paragraph 7.
- 6.3 Subject to clause 6.6, each Capacity Profile shall be presented to BT at three months intervals, ~~not less than 15 Working Days before the relevant Technical Review Meeting~~. The Advance Capacity Order for any three months period shall not vary from the previous Capacity Profile forecast for such period by more than 10% (by volume) below or 20% (by volume) above; the element of the Capacity Profile for the succeeding three months period shall not vary from the previous Capacity Profile forecast for such succeeding period by more than 30% (by volume) below or 30% (by volume) above. In calculating any increase to the Advance Capacity Order or the Capacity Profile, the final total shall if not an integer, be rounded up to the nearest integer; in calculating any decrease to the Advance Capacity Order or the Capacity Profile, the final total shall, if not an integer be rounded down to the nearest integer.
- 6.4 Each Capacity Profile shall be reviewed ~~by BT at the relevant Technical Review Meeting~~. Where agreed it will be confirmed in writing within 10 Working Days by the authorised representatives of each Party to signify their intention to commit to the Advance Capacity Order.
- 6.5 If the Parties fail to agree a Capacity Profile (or part thereof), then either Party may notify the other in writing of a Dispute. Only those portions of an Advance Capacity Order that have not been agreed shall be a Dispute.
- 6.6 Where the Operator requests and BT agrees (such agreement not to be unreasonably withheld), the Capacity Profile may be presented to BT after the beginning of the relevant three months interval. In this case, the Advanced Order Commitment must be submitted to BT in accordance with paragraph 3 of Annex C, Schedule 03. At a later date, within the relevant three monthly interval, the outstanding Capacity Profile portion may be presented to BT on a whole monthly basis in advance only. The submission shall form an Advance Capacity Order pursuant to paragraph 7 for the remaining portion of the three monthly interval. The Advanced Order Commitment will not change on submission of the Capacity Profile within the relevant (3) three month interval. The Advance Capacity Order shall be

presented to BT with the accompanying Advanced Order Commitment. The submission of the Advance Capacity Order shall be in accordance with Paragraph 6.3, 6.4 and 6.5 of Annex A for the comparative interval.

7. HANDOVER CAPACITY ORDERS

7.1 Capacity Ordering

7.1.1 In an ACO Period the Operator may place Capacity Orders up to 120% of the amount of the aggregate Capacity shown in the relevant Advance Capacity Orders for each Point of Handover. Within this limit BT shall provide such Capacity within the Requisite Period time scales in accordance with paragraph 8. In calculating Capacity Order volumes for such assessment, the final total representing 120% of the amount of the aggregate Capacity shown in the relevant Advance Capacity Orders for each Point of Handover shall be rounded down if not an integer. For any Orders in excess of 120% of the amount of the aggregate Capacity shown in the relevant Advance Capacity Orders for each Point of Handover, the provisions of paragraph 3.21 of Annex E shall apply

7.1.2 In an ACO Period the Operator shall place Capacity Orders for a minimum of 80 per cent of the aggregate Capacity specified in the relevant Advance Capacity Orders for each Point of Handover. Subject to paragraph 7.1.3, failure by the Operator to place such Capacity Orders shall result in under-commitment charges being paid by the Operator in accordance with paragraph 1 of Appendix A.

7.1.3 If no Advance Capacity Order is provided by the Operator then the provisions of paragraph 3.24 of Annex E shall apply.

7.1.4 Each Capacity Order will be in the form set out in the Provisioning Manual and shall include all the information required by that form.

8. HANDOVER CAPACITY ORDER TIMESCALES

8.1 Timescales for Provision of Capacity for In Span Handover

The time-scales for the provision of Capacity are set out in Annex E and are subject to the provisions set out in Schedule 02.

8.2 Time-scales for Provision of Capacity for Customer Sited Handover

The time-scales for the provision of Capacity are set out in Annex E and are subject to the provisions set out in Schedule 01.

8.3 Cancellation of ISH Link/CSH Link Order

At any time prior to the Ready for Service Date for CSH Links or the Ready for Test Date for ISH Links the Operator may by written notice to BT cancel

a Capacity Order it placed. If a Capacity Order is cancelled less than 26 Working Days before the scheduled Ready for Service Date/scheduled Ready for Test Date, the Operator shall pay a cancellation charge as specified from time to time in the Carrier Price List.

8.4 Removal of ISH/CSH Capacity

8.4.1 Subject to Schedules 01 and 02 as appropriate, if the Operator requires the removal of Capacity, an order identifying the Capacity and the date from which it is no longer required (a “removal order”) may be placed by the Operator on BT. BT will remove the Capacity not later than 30 Working Days from the date of receipt of the removal order and a removal certificate shall be issued to the Operator on completion of the removal work.

8.4.2 For the avoidance of doubt, if payment for Capacity removed pursuant to this paragraph 8 has not been made at the time of such removal such payment shall remain due and payable. Rental payments shall be payable by the Operator up to the earlier of the date of completion of the removal work or 30 Working Days from the date of receipt of the removal order.

~~9. TECHNICAL REVIEW MEETINGS~~

~~9.1 The first Technical Review Meeting shall occur at either Party's written request not later than three months from the receipt of the first Capacity Profile. Subsequent Technical Review Meetings shall occur at no greater than three monthly intervals thereafter, not less than 10 Working Days prior to the start of the relevant three month ACO/Order Commitment period next following.~~

~~9.2 At Technical Review Meetings the Capacity Profile referred to in paragraph 6 shall be discussed and agreed~~

~~9.10. TRANSMISSION~~

~~9.110.1 ISH Links~~

ISH Links shall employ digital technology operating in accordance with, if appropriate, the Generic SDH Interface Specification. The Operator shall provide synchronisation for the equipment associated with the ISH Link.

~~9.210.2 CSH Links~~

The CSH tributary interface shall employ digital technology Operating in accordance with the Generic SDH Interface Specification. The electrical interface conforms to ITU-T recommendation G.703 and is neither timed nor structured.

1011. PERFORMANCE STANDARDS

BT shall provide its part of the ISH Link or CSH Link such that the performance of its part meets or exceeds that set out in the following ITU-T recommendations: G.823, G.825, G.958, M.2100 and M.2101.

1112. OPERATIONS

11.112.1 General

~~12.1.1~~11.1.1 Each Party shall be responsible for the safety and operation of its own System.

~~12.1.2~~11.1.2 The Operations and Maintenance Manual details the responsibilities, methods and procedures for the operation and maintenance of the interconnection of the Systems. Details of contacts are given in the Customer Service Plan.

12.211.2 Service Restoration

The service restoration procedures are set out in the Operations and Maintenance Manual.

12.311.3 Planned Maintenance/Works

BT shall provide not less than 10 Working Days notice of any standard planned maintenance which may affect service under this Agreement. BT shall co-operate with the Operator and use its reasonable endeavours to minimise disruption. BT's preferred hours for carrying out planned maintenance is after 00:00 and before 06:00.

12.411.4 Emergency Maintenance Work

For Emergency Maintenance Work, BT will give as much advance notice as is reasonably practicable in the circumstances and the reasons for the Emergency Maintenance Work. For the avoidance of doubt, clause 12.3 does not apply to Emergency Maintenance Work.

APPENDIX A

COMMERCIAL

1. UNDER-COMMITMENT CHARGES

1.1 Where an Operator places Capacity Orders for a Point of Handover for the period corresponding to that of the Advance Capacity Order, which total less than its Advance Capacity Order for the Point of Handover, the Operator shall be liable to pay a charge equal to A on the Due Date, where A is calculated in accordance with 1.2 below:

1.2

$$A = [(80\% \text{ of } B) - C] \times D$$

Where:

A = the under-commitment charge payable

B = the total Capacity Provision by number of VC4 equivalent units specified in the relevant Advance Capacity Order in respect of each Point of Handover;

C = the number of VC4 equivalent units ordered during the relevant ACO Period in respect of each Point of Handover, but does not include cancellations of Capacity Orders made during or after the relevant ACO Period, but does include any Capacity Order cancelled as a result of the inability of BT to secure consents for CSH Links;

D = £2,490

APPENDIX E

DIAGRAM OF ISH FACILITY MUX

It should be noted that this diagram illustrates the use of an STM4 line system using a SMA 4 Facility Mux. The same principal of connections applies to an STM-16 line system using either SMA16 or MSH51c Facility Muxes although the mux tributaries and carding will be different.

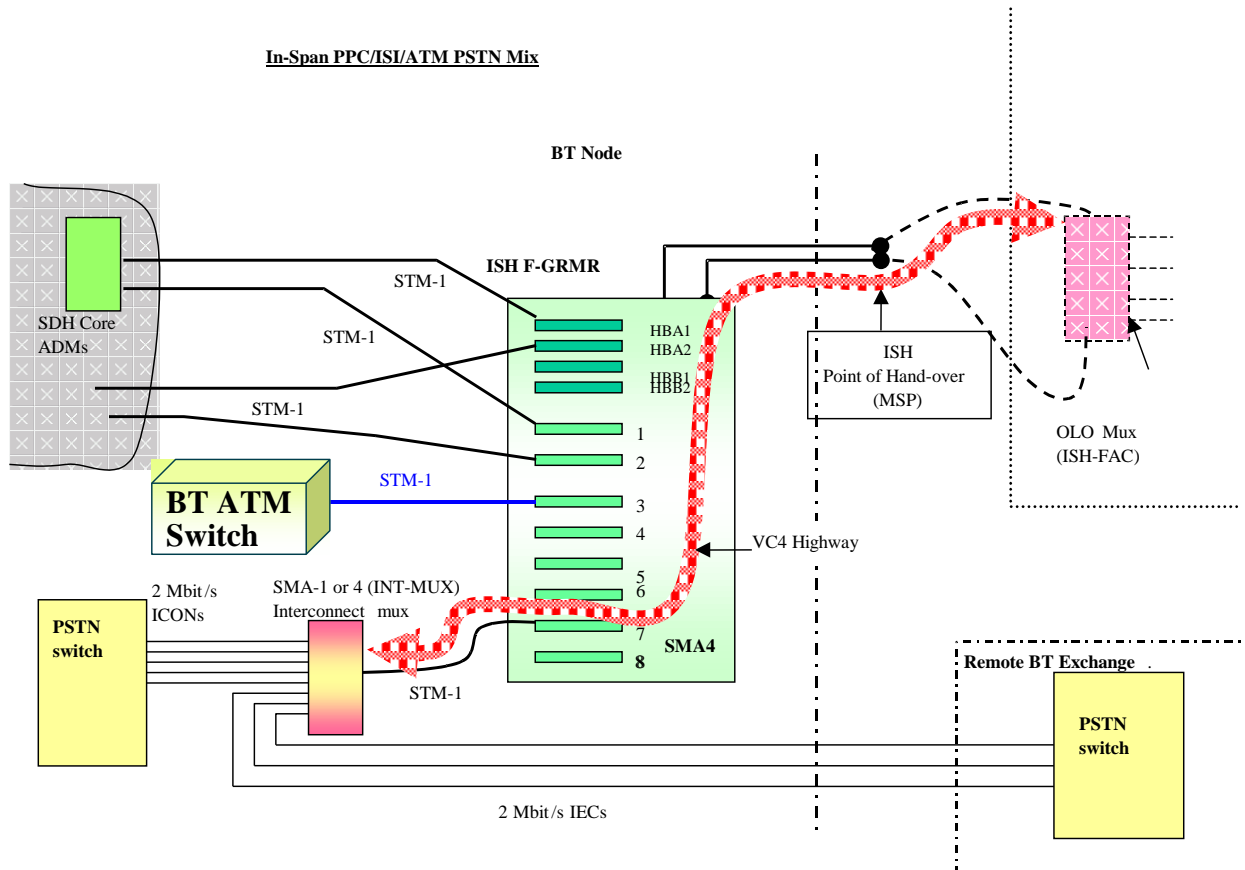


DIAGRAM OF CSH FACILITY MUX

It should be noted that this diagram illustrates the use of an STM16 line system using a SMA 16 Facility Mux. The same principal of connections applies to an STM-16 line system using a MSH51c Facility Mux and an STM-4 line system using an SMA4 Facility Mux although the mux tributaries and carding will be different.

Figure 2: PPC/ATM/PSTN CSH Mix - Protection configuration

