SCHEDULE 1 In span Interconnect ("ISI"), Third Party ISI & Interconnect Extension Circuits

1. Definitions

1.1 In this Schedule 1, a reference to a paragraph or Appendix, unless stated otherwise, is to a paragraph or Appendix of this Schedule 1. Words and expressions have the meaning given in Clause 1, except as shown below:

"2Mbit/s ISI Interconnect Link"	an Interconnect Link comprising a 2Mbit/s Path (within an ISI Interconnect Link), two Intrabuilding Links, Multiplexor service and as appropriate, a Signalling Link and/or one or two Interconnect Extension Circuits;
"Additional Link"	a Link, being part of an Interconnect Link, between a Third Party Operator building, and an Operator building, or (as the context requires), a KCH building;
"Existing Link"	an ISI Interconnect Link between KCH and a Third Party Operator;
"LTE"	means line terminating equipment;
"Path Protection"	the facility of two transmission paths providing a particular ISI Interconnect Link whereby the failure of one transmission path causes the transmission of the ISI Interconnect Link to switch to the alternative;
"Third Party Interconnect"	interconnect using a Third Party ISI Interconnect Link.
"Third Party Interconnect Agreement"	either:
	 (a) an agreement between KCH and a Third Party Operator pursuant to Condition 45 as it applies from time to time of the KCH Licence or the equivalent Condition of the Third Party Operator licence; or
	(b) an agreement between the Operator and a Third Party

Operator pursuant to the Condition

equivalent to Condition 45 of the KCH Licence contained in either the Operator or Third Party Operator licences;

"Third Party ISI Interconnect Link" an ISI Interconnect Link comprising one or more 2 Mbit/s ISI Interconnect Links within an Existing Link and an Additional Link.

2. Description of Service

- 2.1 This Schedule 1 applies to the joint provision by the parties of In span Interconnect and/or Third Party ISI Interconnect Links, the provision by either Party of an IEC and the provision by KCH of Path Protection.
- 2.2 In span Interconnect (ISI) is the provision jointly by each party of an Interconnect Link by the provision of an ISI Interconnect Link and 2Mbit/s ISI Interconnect Links, such Link having its Point of Interconnection on the public highway or, subject to the parties' agreement, on a prospectively maintainable public highway, with portion of the Interconnect Link being provided by each party on its side of the Point of Interconnection.
- 2.3 For the purposes of this Schedule 1, "unidirectional Calls" shall be those Calls for which a party has responsibility pursuant to Annex 2 paragraph 6.1.3.

3. General

- 3.1 Upon a party's (the "Requesting Party") request, the other party shall, in accordance with the provisions of this Schedule 1 and Annex 2 and Annex 3, provide the relevant portion of the ISI Interconnect Links using SDH technology (subject to that other party supporting the technology or continued use of existing technology).
- 3.2 The Point of Interconnection of an ISI Interconnect Link is the point where a party's duct is joined to the wall of the other Party's jointing chamber, or other agreed location.
- 3.3 The Point of Interconnection of an ISI Interconnect Link or a Third Party ISI Interconnect Link shall not be located at such distance from the other party's Switch Connection that signal regeneration is required to be carried out by such other party.
- 3.4 Forecasting, technical interfaces and their application, provisioning leadtimes and test procedures are specified in Annex 2 and Annex 3.

4. Provision of In-span Interconnect ("ISI")

- 4.1 A party (the "Requesting Party") may request an Interconnect Link to convey Calls (a) from the "Requesting Party's" System; or (b) both to and from its System; or (c) to the "Requesting Party's" System.
- 4.2 The parties shall agree the number of pairs of fibres or other agreed technology to be equipped within the ISI Interconnect Links to take account of the forecast requirement for 2Mbit/s ISI Interconnect Links. The parties shall co-operate to ensure that the capacity of the ISI Interconnect Link is augmented from time to time to meet both parties' forecast transmission capacity requirements.
- 4.3 Procedures for the installation of the Interconnect Link and of the 2Mbit/s ISI Interconnect Links are described in the Provisioning Manual and ongoing maintenance arrangements are described in the Operations and Maintenance Manual.
- 4.4 2Mbit/s ISI Interconnect Links shall be ordered in accordance with Annex3. The timescales for the provision of 2Mbit/s ISI Interconnect Links are detailed in Annex 3 paragraph 5.
- 4.5 The "Requesting Party" shall nominate the other party's Switch Connection in accordance with the provisions of Annex 3.
- 4.6 The ISI Interconnect Link shall be established by the "Requesting Party" installing its cable to the other party's jointing chamber (at, subject to paragraphs 4.7 and 4.10, a precise physical location agreed between the parties) where it shall be:
- 4.6.1 jointed to the other party's cable in the jointing chamber; or
- 4.6.2 handed over to the other party to be drawn by the other party into:
 - (a) that other party's building, (which shall be the building housing the Switch Connection, (except if an IEC is provided under paragraph 7, when the other Part's building is ascertained pursuant to paragraph 7.4)); or
 - (b) another jointing chamber,

if the "Requesting Party's" cable meets the standard specified in the Provisioning Manual.

- 4.7 If, pursuant to paragraphs 4.10.2 and/or 4.11, the parties locate the jointing chamber at a distance which is greater than 100 metres from the other party's curtilage of the building housing the LTE of the ISI Interconnect Link, the "Requesting Party" shall pay for:
- 4.7.1 duct charges (if any); and

4.7.2 ISI Interconnect Link rental charges on the distance which is more than 100 metres from the other party's curtilage aforesaid

subject to the provisions of paragraph 12.4, in accordance with the relevant charges specified from time to time in the Kingston Interconnection Price List.

- 4.8 Subject to paragraphs 4.7 and 4.10:
- 4.8.1 the jointing chamber for an ISI Interconnect Link shall be provided, owned and maintained by the other (i.e. the non "Requesting Party") party at its own expense; and
- 4.8.2 each party will provide, own, maintain and be responsible for all ducting, plant and equipment and will bear its own costs for the ducting, cabling and maintenance of the ISI Interconnect Link on its side of the Point of Interconnection; and
- 4.8.3 if continuous cable is used, the "Requesting Party" hereby agrees that ownership of that part of the cable on the other party's side of the Point of Interconnection passes to the other party.

ISI Interconnect Links for both parties

- 4.9 If the requested ISI Interconnect Link is to contain 2Mbit/s ISI Interconnect Links conveying unidirectional traffic in different directions the parties shall, not more than 20 Working Days from the date of written request, endeavour to agree the location of the jointing chamber required for the Point of Interconnection.
- 4.10 If pursuant to paragraph 4.9 the parties fail to reach agreement:
- 4.10.1 a party may request an ISI Interconnect Link to convey unidirectional Calls from or to the "Requesting Party's" System; or
- 4.10.2 the "Requesting Party" may nominate the location of the jointing chamber required for the Point of Interconnection and if such nomination is agreed, the "Requesting Party" shall pay the charges specified from time to time in the Kingston Interconnection Price List being the charges in respect of (a) an ISI Interconnect Link, (b) duct, (c) bi-directional Signalling Link Set and (d) each 2Mbit/s ISI Interconnect Link

and if not later than 20 Working Days from the date of such written request no agreement is reached on the location of the jointing chamber, either Party may notify a Dispute.

ISI Interconnect Links for one party

- 4.11 Unless otherwise agreed, if the requested ISI Interconnect Link is to convey unidirectional Calls from or to the "Requesting Party's" System:
- 4.11.1 the location of the jointing chamber required for the Point of Interconnection for such ISI Interconnect Link shall be on the public highway immediately outside the curtilage of the building referred to in paragraph 4.6.2;
- 4.11.2 the "Requesting Party" shall pay the charges specified from time to time in the Kingston Interconnection Price List being the charges in respect of (a) an ISI Interconnect Link, (b) duct, (c) unidirectional Signalling Link Set and (d) each 2 Mbit/s ISI Interconnect Link.

5. Path Protection requested by the Operator

- 5.1 For an ISI Interconnect Link the Operator may request, and KCH shall provide, Path Protection using:
 - (a) a single KCH jointing chamber with a single cable and two separate pairs of fibre in that cable; or
 - (b) a single KCH jointing chamber with two separate cables; or
 - (c) two separate KCH jointing chambers with two separate cables into those KCH jointing chambers; and

a suitable transmission switching mechanism, as described in Annex 2, without a change to the cable or cables connected to the Switch Connection.

- 5.2 If the Operator requests Path Protection using two jointing chambers KCH shall endeavour to use a suitable existing jointing chamber (the "protection jointing chamber").
- 5.3 If a suitable protection jointing chamber cannot be identified or used, at the Operator's request KCH shall provide a written quotation for the installation by KCH of the protection jointing chamber.
- 5.4 If the quotation referred to in paragraph 5.3 is accepted, KCH shall install the protection jointing chamber for the second cable.
- 5.5 For the avoidance of doubt, the protection jointing chamber shall be installed, owned and maintained by KCH.

6. Provision of Third Party ISI

- 6.1 Subject to an Interconnect Link having been provided pursuant to this Agreement, a party (the "Requesting Party") may, pursuant to the terms of this Schedule 1, request, and the other party shall, subject to the provisions of this Schedule 1, agree to the installation of a Third Party ISI Interconnect Link.
- 6.2 2Mbit/s ISI Interconnect Links provided pursuant to this paragraph 6 shall be ordered in accordance with Annex 3. The timescales for the provision of 2 Mbit/s ISI Interconnect Links are detailed in Annex 3.
- 6.3 The "Requesting Party" shall obtain agreement of the Third Party Operator to use an Existing Link as part of the Third Party ISI Interconnect Link.
- 6.4 The "Requesting Party" shall provide and/or procure the provision and maintenance of the Additional Link, whether by the Third Party Operator or, if the "Requesting Party" is the Operator, and subject to contract, by KCH.
- 6.5 The other party shall assume no obligation under this Agreement for the Existing Link. In particular, but without limitation, the other party shall have no liability to the "Requesting Party" if the Existing Link be taken out of operation in accordance with the Third Party Interconnect Agreement.
- 6.6 The "Requesting Party" shall:
- 6.6.1 comply with the provisions of paragraphs 3 and 4 above, as if the Additional Link was provided by the "Requesting Party" under paragraph 4; and
- 6.6.2 ensure that sufficient arrangements are in place between the "Requesting Party" and the Third Party Operator to enable the "Requesting Party" so to comply; and
- 6.6.3 have no obligation to the other party for the Existing Link save as expressly provided in this Agreement.
- 6.7 The Third Party ISI Interconnect Link shall, for the purposes of the respective rights and obligations of the parties under this Agreement be deemed to be an ISI Interconnect Link and that portion on the Operator's side of the Point of Interconnection shall be deemed a part of the "Requesting Party's" System. This provision shall not be construed to extend the area covered by the "Requesting Party's" System beyond the boundaries set out in that Party's Licence.

7. Provision of Interconnect Extension Circuits ("IECs")

- 7.1 In accordance with this paragraph 7, a party may request and the other party shall provide an Interconnect Extension Circuit, from a building referred to in Annex 3 Part 5 to a Remote Switch Connection.
- 7.2 IECs shall comply with the Specifications applicable to the provision of Links. A party shall provide IECs with SDH technology.
- 7.3 The following table specifies the available connections for KCH IECs from particular ISI termination points:

ISI link terminating point	DLE serving the Operator Licensed Area (Notes 1 and 3)	Parent KCH Exchange (Notes 2 and 3)	Dependent DLE	Tandem Exchange not being a parent KCH Exchange
KCH DLE	No	Yes	Not Applicable	No
KCH Tandem Exchange	Yes	Yes	Yes	No
KCH transmission node	Yes	Yes	Not Applicable	No

Note 1: Provided that the KCH DLE:

- (a) is located in the same or adjacent KCH Charge Group to the Point of Interconnection; and
- (b) supports KCH Customers in the Operator Licensed Area; and
- (c) has an existing direct Traffic Route with that termination point. (Not applicable where the ISI Link termination point is a KCH transmission node).
- Note 2: The parent KCH Exchange must have a direct connection to a DLE serving the Operator Licensed Area and that DLE must be located in the same or adjacent charge group to the Point of Interconnection.
- Note 3: For the purpose of the provision of IEC's only, the Operator Licensed Area shall include any areas notified to KCH in writing, which are continuous geographical areas (or areas that would be continuous but for separation by a tract of water no more than 8 Kilometres wide), which are subject to Third Party Operator Licences and where the Third Party Operators are associated companies of the Operator.
- 7.4 Operator IECs shall be available between any building referred to in Annex 3 to a Remote Switch Connection.

- 7.5 Subject to the provisions of Annex 3, if the transmission capacity at a building is exhausted and additional capacity for an IEC is requested by a "Requesting Party", the other party shall use its reasonable endeavours to provide the additional capacity as soon as reasonably practicable and shall notify the "Requesting Party" of the anticipated date of such provision.
- 7.6 If a party notifies the other party pursuant to Clause 9 that a building is no longer available for establishing IECs to Remote Switch Connections, the other party may continue to order IECs from that building for the then current ACO Period under the then current Advance Capacity Order or such longer further period as the parties may agree in writing. Thereafter the first party shall not be obliged to provide an additional IEC from that building.

8. Signalling

- 8.1 When ordering the first 2Mbit/s ISI Interconnect Links between a specific KCH Switch Connection and a specific Operator Switch Connection the "Requesting Party" shall order a Signalling Link Set, or in accordance with the provisions of Annex 2 paragraph 7, a Single Signalling Link, and specify the Route Type(s).
- 8.2 Where a Single Signalling Link exists, the "Requesting Party" shall order an additional Signalling Link to complete a Signalling Link Set if the total number of 2Mbit/s Interconnect Links between a specific KCH Switch Connection and a specific Operator Switch Connection exceed 6 2Mbit/s ISI Interconnect Links.
- 8.3 The "Requesting Party" shall order an additional Signalling Link Set if the total number of 2Mbit/s Interconnect Links between a specific KCH Switch Connection and a specific Operator Switch Connection exceed 40 2Mbit/s ISI Interconnect Links or multiples of 40 2Mbit/s ISI Interconnect Links.
- 8.4 An order for a Signalling Link shall include an order for an Intrabuilding Link and an order for a Signalling Link Set shall include an order for two Intrabuilding Links.

9. Route Types

9.1 Each Traffic Route is provided with a Route Type. Where a party orders an additional Route Type it shall specify the required Traffic Types.

10. Rearrangements

10.1 The "Requesting Party" may request in accordance with Annex 3 paragraph 6 the rearrangement of Intrabuilding Links on its side of the Point of Interconnection or in the building housing the other party's Switch Connection.

11. Private Circuits from a Point of Interconnection (PCPOC)

- 11.1 Subject to an Interconnect Link having been provided pursuant to this Schedule 1, if the Operator orders PCPOCs on the terms and conditions referred to in KCH's retail conditions for private service and contained in the relevant order form, the provisions in Annex 3 and Annex 4 Part B paragraph 1.2 shall apply.
- 11.2 The Operator shall ensure that its Customers report any faults or problems to the Operator and not to KCH. If the Operator or its Customers detect a fault on a PCPOC the Operator shall investigate such fault and ascertain if the fault is in the PCPOC provided by KCH. In reporting a fault the Operator shall provide such information as KCH may reasonably require, including:
- 11.2.1 the identity of any associated faults on Interconnect Links at the same Point of Interconnection;
- 11.2.2 details of the relevant Operator's staff and co-operation procedure if work is to be undertaken outside normal working hours.

12. Charging

- 12.1 Subject to the provisions of this paragraph 12 for each provision by one party to the other of ISI Interconnect Links, 2Mbit/s ISI Interconnect Links and associated works (including the Multiplexor service and IECs), the "Requesting Party" shall pay to the other party the appropriate charges specified from time to time in the Kingston Interconnection Price List.
- 12.2 The connection and rental charges shall be due on the earlier of the relevant RFS Date or 30 days after the relevant RFT Date. Subsequent rental charges shall be payable in accordance with the periodicity specified from time to time in the Kingston Interconnection Price List.
- 12.3 In addition to the charges specified from time to time in the Kingston Interconnection Price List, each party shall, if applicable, make the additional payments specified in Annex 4.
- 12.4 Rental for an ISI Interconnect Link shall be payable according to the following table:

CLASSIFICATION OF ISI INTERCONNECT LINK	RENTAL PAYABLE
Unidirectional Call	As set down in the Kingston Interconnection
Conveyance (Note 4)	Price List (Note 5).
(paragraph 4.11.2)	
Bi-directional Call Conveyance	None payable.
(Agreed Location) (Note 4)	
(paragraph 4.6)	
Bi-directional Call Conveyance	С
(Location not agreed but	R = P x
nominated) (Note 4) (paragraph	L
4.10.2)	
	Where:
	R is the rental payable,
	<i>P</i> is the rental price set down in the
	Kingston Interconnection Price List
	(Note 5),
	C is the number of 2Mbit/s ISI
	Interconnect Links conveying the Calls
	of the Party who requested the ISI
	Interconnect Link (Note 4);
	and
	L is the total number of 2Mbit/s ISI
	Interconnect Links provided on that ISI
	Interconnect Link.

- Note 4: For the purpose of this table, Route Types involving the conveyance of Calls to one party, when those Calls are deemed to be that party's Calls (by way of example Indirect Access Calls), shall not be taken into consideration when determining ISI Interconnect Link classification.
- Note 5: In this Schedule 1 references to the charges specified in the Kingston Interconnection Price List are those specified from time to time.
- 12.5 An Intrabuilding Link charge applies to each order for a 2Mbit/s Interconnect Link. If an Intrabuilding Link contains a Signalling Link which supports unidirectional traffic the charge for that Intrabuilding Link is included in the Single Signalling Link, or Signalling Link Set, charge as the case may be.
- 12.6 There are two different Signalling Link Set charges in respect of an ISI Interconnect Link, namely, a charge for such a Link conveying unidirectional traffic (including Indirect Access Calls, notwithstanding such Calls being conveyed in the opposite direction,) and a charge for such a Link carrying bi-directional traffic.
- 12.7 The Single Signalling Link or Signalling Link Set charge includes one single Route Type. Charges for additional Route Types are payable as specified from time to time in the Kingston Interconnection Price List.
- 12.8 A Multiplexor service charge applies to each order for a 2Mbit/s ISI Interconnect Link.

12.9 The IEC charge applies to each order for a 2Mbit/s ISI Interconnect Link, which order includes an IEC. The "Requesting Party" shall pay the charges for the provision of an IEC.

12.10 **Path Protection Provided by KCH**

- 12.10.1 Subject to the following paragraphs 12.10.2 to 12.10.6, the Path Protection charges shall be the sum of the relevant charges specified from time to time in the Kingston Interconnection Price List.
- 12.10.2 Charges for Path Protection shall be the sum of the following relevant component charges:

		PATH PROTECTION		
Type of	Component	Single Cable	Two Cables	Two Cables
Technology	Chargeable	Single Jointing	Single Jointing	Two Jointing
	-	Chamber	Chamber	Chambers
SDH	A	n/a	n/a	n/a
	В	n/a	n/a	YES
	С	n/a	n/a	YES
	D	n/a	YES	YES
	E	n/a	YES ⁶	YES ⁶

Note 6: Two splices may be required.

Where:

<u>Component</u>	Charge
A	 transmission switching equipment
В	 second (protection) jointing chamber
С	= duct
D	= cable
E	= cable splice

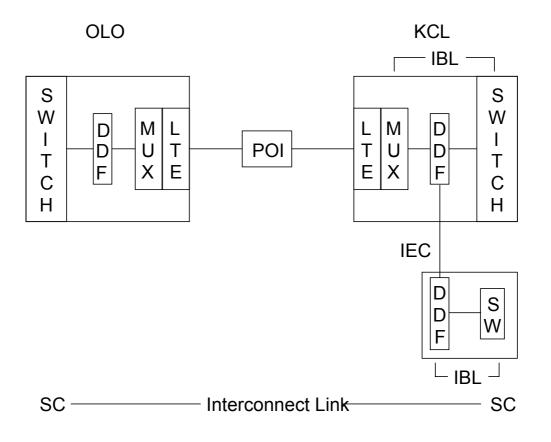
- 12.10.3 Each cable splice required for the provision of Path Protection has a separate charge.
- 12.10.4 Connection and rental charges shall be payable for each ISI Interconnect Link used for Path Protection. Rental shall be payable for a minimum of 12 months. Subject to payment being made for the then current minimum period of 12 months, rental charges shall be payable until the Operator requests KCH in writing to cease that Path Protection.
- 12.10.5 If the Operator requests Path Protection on a particular ISI Interconnect Link and:
 - (a) the ISI Interconnect Link is the sole Interconnect Link between the specific KCH Switch Connection and the specific Operator Switch Connection; and
 - (b) there is no other Interconnect Link between that specific Operator Switch Connection and any other KCH Switch Connection;

no charge for Path Protection on that particular ISI Interconnect Link shall be payable by the Operator while KCH uses that ISI Interconnect Link as the sole Interconnect Link to convey Calls to that specific Operator Switch Connection.

- 12.10.6 If one or more of the conditions of paragraph 12.10.5 cease to apply, the rental charges specified from time to time in the Kingston Interconnection Price List for the particular ISI Interconnect Link will be payable pursuant to paragraph 12.10.4.
- 12.11 For the provision of PCPOC the Operator shall pay the charges set out from time to time in the KCH Retail Price List.

APPENDIX 1.1

IN-SPAN INTERCONNECT AND INTERCONNECT EXTENSION CIRCUITS



APPENDIX 1.2 THIRD PARTY INTERCONNECT

