TELKOM REFERENCE INTERCONNECTION OFFER

INTERCONNECTION AGREEMENT (SS7 Signalling)

between

TELKOM SA LIMITED

and

THE LICENSEE

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INTERCONNECTION AGREEMENT

1. INTRODUCTION

Telkom and the Licensee have been licensed to establish and operate an ECN in the Territory, and the Parties wish to record the terms and conditions of their agreement in terms of which their respective ECN's are to be interconnected to one another so as to enable Messages to be conveyed to and from such ECN's, as well as matters ancillary thereto.

2. DEFINITIONS AND INTERPRETATION

2.1 Definitions

In this Agreement, unless inconsistent with or otherwise indicated by the context, the following words shall have the meanings ascribed to them below -

2.1.1	"Accounting Period"	means a period of 1 (one) calendar month, commencing as close as is reasonably practicable to 00:00 on the first day of each calendar month and terminating as close as is reasonably practicable to 23h59 on the last day of each calendar month, except for the first such Accounting Period which shall commence, unless otherwise agreed between the Parties in writing, on the Commercial Date;
2.1.2	"Agreement"	means this interconnection agreement together with all appendices and schedules attached to it;
2.1.3	"Authority"	shall have the meaning ascribed to it in the EC Act;
2.1.4	"Billing Information"	means information in respect of Calls made by or to Customers of a Party during a particular Accounting Period,

comprising details of the total duration in actual elapsed minutes and seconds of all Calls contemplated in the Agreement including the called telephone number, date and time of any calls regardless of whether or not Interconnect Fees are payable by the Parties to one another in respect thereof. Billing Information shall also include such information as is necessary to ascertain the charges payable by each Party under this Agreement;

2.1.5 "Business Day"

means any day except a Saturday, Sunday or Government specified national public holiday in the Territory;

2.1.6 "Call"

means a connection through an ECN, the object of which is the carriage and successful delivery of a Message from the electronic communications equipment from which such Message emanates, either to electronic communications equipment by which such Message is to received, or to electronic communications equipment or to any other facility or equipment, which provides an automatic response if connection cannot be effected to such electronic communications equipment;

2.1.7 "Commercial Date"

means the date from which Calls shall be routed between the Parties' ECNs for commercial purposes, which date shall be agreed between the Parties in writing;

2.1.8 "Confidential Information"

means, without limiting the generality of the term:

2.1.8.1	information relating to the Disclosing Party's strategic objectives and planning for both its existing and future needs;		
2.1.8.2	information relating to the Disclosing Party's business activities, business relationships, products, services, customers and clients (including that of its associated or affiliated companies);		
2.1.8.3	information contained in the Disclosing Party's software and associated material documentation.		
2.1.8.4	technical, scientific, commercial, financial and market information, know-how and trade secrets;		
2.1.8.5	data concerning business, relationships, architectural information, demonstrations, processes and machinery;		
2.1.8.6	plans, designs, drawings, functional and technical requirements and specifications; and		
2.1.8.7	information concerning faults or defects in the Disclosing Party's systems, hardware and/or software or the incidence of such faults or defects; but excluding information or data which:		
2.1.8.7.1	is lawfully in the public domain at the time of disclosure to the Receiving Party;		
2.1.8.7.2	subsequently becomes lawfully part of the public domain by publication or otherwise through no fault or breach on		

the part of the Receiving Party;

2.1.8.7.3

the Receiving Party can demonstrate to have had rightfully in its possession prior to disclosure to the Receiving Party;

2.1.8.7.4

the Receiving Party rightfully obtains form a third party who has the right to disclose such information;

2.1.8.7.5

is independently arrived at or developed by the Receiving Party separate and independent from the disclosure made by the Disclosing Party;

2.1.8.7.6

is disclosed by the Receiving Party to satisfy an order of a court of competent jurisdiction or to comply with the provisions of any law or regulation in force from time to time; provided that in these circumstances, the Receiving Party shall advise the Disclosing Party to take whatever steps it deems necessary to protect the interest in this regard; provided further that the Receiving Party will disclose only that portion of the information which it is legally required to disclose and the Receiving Party will use its reasonable endeavours to protect the confidentiality of such information to the widest extent the possible in circumstances;

provided that the onus shall at all times rest on the Receiving Party to establish that such information falls within the exceptions contained in clauses 2.1.7.1 to 2.1.7.7 and provided further that information disclosed in terms of this

Agreement will not be deemed to be within the foregoing exceptions merely because such information is embraced by more general information in the public domain or in a Party's possession. Any combination of features will not be deemed to be within the foregoing exceptions merely because individual features are in the public domain or in a Party's possession, but only if the combination itself and its principle of operation are in the public domain or in a Party's possession;

2.1.9	"Customer"	shall mean, in relation to either Party, any
		person who:
2.1.9.1		is a party to a retail contract with either
		Donty for the manifolds of ECC! from that

is a party to a retail contract with either Party for the provision of ECS' from that Party;

2.1.10 **"EC Act"** means the Electronic Communications Act 36 of 2005;

2.1.11 **"Effective Date"** means the date on which:

2.1.11.1 the Authority advises the Parties that the Agreement, as submitted to the Authority for approval, is consistent with the EC Act and the Regulations, or the Agreement is deemed to be so compliant in terms of the said Regulations, whichever is the earlier; or

in the event that an order of a court of competent jurisdiction is granted against the Agreement following its submission to the Authority for approval; the date on which the said court rules the Agreement

2.1.11.2

is effective,

Standardisation,

sector

International Telecommunications Union;

		whichever date is the later;			
2.1.12	"Electronic Communications (EC)"	shall have the meaning ascribed to it in the EC Act;			
2.1.13	"Electronic Communications Network (ECN)"	shall have the meaning ascribed to it in the EC Act;			
2.1.14	"Electronic Communications Network Service (ECNS)"	shall have the meaning ascribed to it in the EC Act;			
2.1.15	"Electronic Communications Service (ECS)"	shall have the meaning ascribed to it in the EC Act;			
2.1.16	"ETSI"	means the European Telecommunications Standards Institute or successor thereof;			
2.1.17	"GSM"	means Global System for Mobile Communications as defined in the ETSI structure of technical specifications from time to time;			
2.1.18	"Interconnection"	means the connection, by means of a POIL, of the Parties' respective ECNs for the purpose of the passing of Callabetween the two said ECNs, as provided for in this Agreement;			
2.1.19	"Interconnect Fees"	means the fees payable by the Parties to one another in terms of clause 5 of this Agreement;			
2.1.20	"ITU-T"	means the Telecommunications			

the

2.1.21	"ITU-T Recommendations"	means the official recommendations promulgated from time to time by the ITU;		
2.1.22	"Licence"	means the ECS and / or ECNS licences granted to each of the Parties in terms of the ECA;		
2.1.23	"Message"	means any voice sound, signal sent, or to be sent, for conveyance by means of an ECN;		
2.1.24	"MSC"	means a mobile switching centre within the meaning of the GSM recommendations;		
2.1.25	"Parties" or "the Parties"	means either or both of the Parties to this Agreement, as the case may be;		
2.1.26	"Point of Interconnection (POI)"	means a point at which Messages from the ECN operated by the Licensee, are handed over and carried from the Licensee ECN to the ECN of Telkom, or vice versa;		
2.1.27	"Point of Interconnect Link (POIL)"	means a physical link over which Calls shall be conveyed between the ECNs of the Parties;		
2.1.28	"RIO"	means Telkom's published reference interconnection offer, as amended by Telkom from time to time;		
2.1.29	"Senior Executive"	means, in the case of Telkom, Telkom's Chief Executive Officer, Chief Financial Officer or any senior Telkom employee nominated by either of them and, in the case of the Licensee, a senior officer employed by the Licencee (in a capacity		

		similar to that of the Telkom Chief Executive Officer or Chief Financial Officer) or any senior employee of the Licensee nominated by either of them;
2.1.30	"Telkom"	means Telkom SA Limited, a public company duly incorporated in the Republic of South Africa, with registration number 1991/05476/06 and with its registered office at Telkom Towers North, 152 Proes Street, Pretoria;
2.1.31	"Terminal Equipment"	means any terminal device which may be used by a Customer to send and/or receive Calls which are to be or have been conveyed by means of an ECN of Telkom or the Licensee;
2.1.32	"Territory"	means the Republic of South Africa;
2.1.33	"Licensee"	means the Licensee (Pty) Limited, a private company duly incorporated in the Territory with registration number YYYYYYY.

2.2 Interpretation

- 2.1 If any definition contains a substantive provision conferring rights or imposing obligations on a Party, effect shall be given to it as if it were a substantive provision in the body of this Agreement, notwithstanding that it is only in the definition clause.
- 2.2 The clause headings in this Agreement have been inserted for convenience and reference only and shall not be taken into account in its interpretation.
- 2.3 Where figures are referred to in numerals and in words, if there is any conflict between the two, the words shall prevail.

- 2.4 Words and expressions defined in any sub-clause shall, for the purposes of the clause of which that sub-clause forms part, bear the meaning assigned to such words and expressions in that sub-clause.
- 2.5 This Agreement shall be governed by and construed and interpreted in accordance with the laws of the Republic of South Africa.
- 2.6 Any reference to:
- 2.6.1 the singular shall include the plural and vice versa;
- 2.6.2 natural persons includes legal persons and vice versa;
- 2.6.3 a gender includes the other gender.
- 2.7 A reference to anybody is:
- 2.7.1 if that body is replaced by another organisation, deemed to refer to that organisation; and
- 2.7.2 if that body ceases to exist, deemed to refer to the organisation which most nearly or substantially serves the same purposes as that body.
- 2.8 The expiration or termination of this Agreement shall not affect such of the provisions of this Agreement as expressly provide that they will operate after any such expiration or termination or which of necessity must continue to have effect after such expiration or termination, notwithstanding that the clauses themselves do not expressly provide for this.
- Where any term is defined within the context of any particular clause in this Agreement, the term so defined, unless it is clear from the clause in question that the term so defined has limited application to the relevant clause, shall bear the meaning ascribed to it for all purposes in terms of this Agreement, notwithstanding that that term has not been defined in this interpretation clause.
- Where any period of days or Business Days is to be calculated from a particular day in terms of this Agreement, such period shall be calculated as excluding such particular day and commencing on and including the day or Business Day thereafter. If the aforesaid calculation pertains to days, and the last day falls on a day which is not a Business Day, the last day shall be the next succeeding Business Day.

- 2.11 Each of the provisions of this Agreement has been negotiated by the Parties and drafted for the benefit of the Parties, and accordingly the rule of construction that the contract shall be interpreted against or to the disadvantage of the Party responsible for the drafting or preparation of the Agreement (ie the *contra proferentem* rule), shall not apply.
- 2.12 This Agreement shall be binding on and enforceable by the estates, heirs, executors, administrators, trustees, permitted assigns or liquidators of the parties as fully and effectually as if they had signed the Agreement in the first instance and reference to any party shall be deemed to include such party's estate, heirs, executors, administrators, trustees, permitted assigns or liquidators, as the case may be.
- 2.13 The words "include", "including", "other", "otherwise" and "in particular" shall be construed as being by way of example or emphasis only and shall not be construed as, nor shall they take effect as, limiting the generality of any preceding word/s.
- 2.14 Except where expressly provided as being in the sole discretion of a Party, where agreement, approval, acceptance, consent, or similar action by either Party is required under this Agreement, such action will not be unreasonably delayed or withheld. An approval, acceptance, consent or similar action by a Party (including of a plan or deliverable) under this Agreement will not relieve the other Party from responsibility for complying with the requirements of this Agreement, nor will it be construed as a waiver of any rights under this Agreement, except as and to the extent otherwise expressly provided in such approval or consent. Unless otherwise specifically indicated, all consents and approvals by a Party under this Agreement must be in writing to be valid.
- 2.15 References to a statutory provision include any subordinate legislation made from time to time under that provision and include that provision as modified or re-enacted from time to time:
- 2.16 The provisions of Chapter III of the Electronic Communications and Transactions Act,
 25 of 2002, are hereby excluded in the application, construction and interpretation of this Agreement.

3. DOCUMENTATION AND ORDER OF PREFERENCE

3.1	The following documents shall form part of this Agreement:					
3.1.1	Appendix 1:	Application Form;				
3.1.2	Appendix 2:	List of available Points of Interconnection;				
3.1.3	Appendix 3:	Establishment of Points of Interconnection;				
3.1.4	Appendix 4:	Specifications, Services and Procedures for Points of Interconnection;				
3.1.5	Appendix 5:	Routing and Numbering for the Points of Interconnection;				
3.1.6	Appendix 6:	Operations and Maintenance Procedures relevant to the				
		Interface between the ECNS;				
3.1.7	Appendix 7:	Interconnection Rates;				
3.1.8	Appendix 8:	End-to-End Customer Experience Quality Specifications.				
3.2	In the event of a conflict arising between the provisions of any of the above documents, the following order of precedence shall apply:					
3.2.1	the provisions of this Agreement shall first prevail; and thereafter					
3.2.2	the provisions of Appendix 1 shall apply; and thereafter					
3.2.3	the provisions of Appendix 2 shall apply; and thereafter					
3.2.4	the provisions of Appendix 3 shall apply; and thereafter					
3.2.5	the provisions of Appendix 4 shall apply, and thereafter					
3.2.6	the provisions of Appendix 5 shall apply, and thereafter					
3.2.7	the provisions of	Appendix 6 shall apply, and thereafter				
3.2.8	the provisions of Appendix 7 shall apply, and thereafter					
3.2.9	the provisions of Appendix 8 shall apply.					

4. COMMENCEMENT AND DURATION

This Agreement shall commence on the Effective Date and shall endure until terminated by either Party in terms of clause 21 or 17.

4 NECESSARY APPROVALS AND CONSENTS

Each Party warrants to the other Party that it has the necessary rights, licences and authorities to enter into and perform its obligations in terms of this Agreement.

5. REQUEST FOR INTERCONNECTION

- Any request for interconnection or an amendment to an existing interconnection agreement by the Licensee shall be in writing and shall be made by completing an application form, in a format substantially similar to that set out in Appendix 1 hereto, and shall contain at least the following information:
- 5.1.1 the POI's at which the Licensee wishes to interconnect. A list of available POIs is set out in Appendix 2;
- 5.1.2 the number of POILS required at each POI; and
- 5.1.3 for each POI, the date on which such POIL is required.
- As soon as the Parties agree in respect of the location and number of POIs at which the Licensee wishes to interconnect, such agreed number and location of POIs shall be reduced to writing and attached as Appendix 3 to this Agreement.
- 5.3 The request contemplated in clause 5.1 shall be signed by a duly authorized signatory of the Licensee and shall reflect the date on which it is submitted to Telkom and shall either be hand delivered, telefaxed (or via any other method as may be mutually agreed by the Parties in writing) to the person nominated for this purpose by Telkom in writing from time to time.
- In the event where the Licensee accepts the terms of Telkom's published RIO unconditionally (indicate this in the space provided in the application form contemplated in clause 5.1 above), Telkom will prepare an agreement and submit same to the Licensee for signature, whereafter Telkom will sign the agreement so that interconnection may then commence in terms of and subject to such agreement; or
- In the event where the Licensee does not accept the terms of the RIO unconditionally (to be indicated by the Licensee in the space provided in the application form contemplated in clause 5.1 above), the Parties will meet to negotiate such terms as are required to be amended and attempt to conclude a mutually acceptable agreement. In the event that the Parties are able to agree on the terms of such an

agreement, same will be submitted to the Authority for approval, prior to interconnection in terms thereof commencing. Should the Parties not be able to reach agreement as aforesaid, either of the Parties may refer the matter to the Authority in terms of the EC Act and / or the Regulations.

5.6 Subject to the provisions of this Agreement, the Licensee shall abide by and adhere to Telkom's Interconnect Credit Management Policy, as amended by Telkom from time to time upon written notice to this effect. The Licensee agrees and confirms that it has read and understood the aforesaid policy and is aware that a copy of such policy shall be made available to the Licensee upon request. A copy of the aforesaid policy, as it exists at the time of conclusion of this Agreement has been made available to the Licensee.

6. INTERCONNECTION

- Telkom shall connect and may keep connected its ECN to the ECN operated by the Licensee and the Licensee shall connect and keep connected its ECN to the ECN operated by Telkom in accordance with the provisions of this Agreement, so that Calls may be conveyed to and from each such ECN.
- The Parties shall each take whatever steps as are necessary to establish, through the provision of the necessary POILs in terms of clause 6.5 below, Interconnection at the POIs identified in Appendix 2, as it exists at the Effective Date, within a period of 90 (ninety) days from the Effective Date.
- 6.3 Each Party warrants to the other that the fulfilment of such Party's obligations in terms of this clause 6 shall be in accordance with the technical standards, specifications and procedures more fully set out in Appendix 4 of this Agreement and the operation and maintenance procedures set out in Appendix 6 of this Agreement.
- Each Party shall, at no cost whatsoever to the other, make such modifications or alterations to its ECN, as may be necessary to establish the Interconnection of their ECNs in accordance with the provisions of this clause 6 within a period of 90 (ninety) days from the Effective Date.
- 6.5 Each Party shall, at its own cost and expense, provide, maintain and be responsible in all respects for all apparatus and equipment comprising its ECN and which is necessary to ensure the conveyance of Calls between their respective ECNs and the

POIs indicated in Appendix 3 of this Agreement and any future POIs established pursuant to the provisions of clause 6.9.

Each Party may, by means of its own ECN, convey Calls originating on its ECN and destined for the other Party's ECN to the POIs specified in Appendix 3 and any additional POIs established pursuant to the provisions of clause 6.9 and must, when handed to it for termination in terms of this Agreement, convey Calls originating on the other Party's ECN and destined for its own ECN from such POIs to the electronic communications apparatus by means of which such Calls are to be received or to any other electronic communications equipment or facility which provides an automatic response if connection cannot be effected to such electronic communications apparatus.

6.7 The Parties agree that either Party may send Calls destined for the ECN of the other Party to such other Party, regardless of the point of origination of such Calls, and may furthermore send any such Calls to each other either directly in terms of this Agreement or via the ECN of any third party.

Should either Party wish to change the configuration at a POI indicated in Appendix 3 or any future POIs established pursuant to clause 6.9 by changing the capacity available at such POI or terminating the use thereof, it shall give notice to the other Party in writing of such intention setting out in detail the proposals and reasons for the proposed change. Both Parties shall use their best endeavours to reach agreement in writing on the terms and conditions applicable to such change of capacity, or the augmentation of capacity at other existing POIs, if required.

Should either Party wish to procure the establishment of POIs in addition to the ones provided for in Appendix 3, such Party shall give to the other Party at least 90 (ninety) days notice in writing of its requirements in this regard, whereupon the Parties will promptly meet and use their best endeavours to reach agreement in writing on the terms and conditions upon which such additional POIs will be established; provided that where the Parties fail, for whatever reason, to reach such agreement in writing within reasonable period of time, no such additional POIs will be established; provided further that each Party will be obliged, at its own cost and expense, to make whatever modifications and adjustments to its ECN as may be necessary to procure the Interconnection of the ECNs at any such additional POIs, should they be established.

6.8

6.9

6.10 Neither Party shall make nor permit to be made, other than as contemplated in this Agreement, any alteration, adjustment or addition to:

6.10.1 the POIs specified in Appendix 3; or

any additional POIs established pursuant to clause 6.9; or

6.10.3 any element of its ECN.

6.10.2

6.12.2

in such a way as to adversely affect or impair the operation of the ECN of the other Party or so as to otherwise adversely affect or impair the conveyance of Calls pursuant to the Interconnection of their respective systems. Without in any way limiting the generality of the aforegoing provisions of this clause 6.10, each Party undertakes to take whatever steps as are reasonably necessary to minimise service failures and congestion and signalling disturbances which would affect the ability of the other Party to convey Calls across its ECN.

6.11 If the Interconnection between the Party's ECNs is interrupted for any reason whatsoever, the Party within whose ECN such interruption arose shall, at its own cost and expense, procure a restoration of the Interconnection as soon as is reasonably practicable, in accordance with the service levels specified in Appendix 4 and in accordance with the operation and maintenance procedures set out in Appendix 6.

Where a Party intends to modify its ECN or any apparatus or equipment comprising such ECN or any stored commands or protocol pertaining to such ECN then, to the extent that such modification may reasonably be expected to have the effect of requiring the other Party:

6.12.1 to modify the ECN operated by such other Party; or

to replace or cease to produce or supply any item of electronic communications equipment pertaining to Interconnection and produced or supplied by or to such other Party immediately prior to the intended modification,

the Party proposing such modification shall provide notice in writing to such other Party detailing the proposed modification. The Party proposing to modify its ECN shall, on request of the other Party, consult with such other Party and provide all reasonable co-operation and assistance to facilitate such modification.

- 6.13 Each Party shall pay, and shall be responsible for, all costs and expenses incurred by it in fulfilling its obligations in terms of this clause 6.
- 6.14 Each Party shall, throughout the term of this Agreement, and in relation to each POI established by the Parties in terms of this Agreement, adhere to the numbering allocation, route diversity and other provisions of Appendix 5 to this Agreement.
- 6.15 The Parties agree that the end to end customer experience quality specifications set out in Appendix 8 to this Agreement shall be applicable to Calls sent between the Parties in terms of this Agreement.
- In response to Customer complaints or where one of the Parties ("the requesting Party") has reason to believe the other Party ("the offending Party") does not comply with the agreed quality specifications, the requesting Party shall furnish the offending Party with a written notice, as soon as is practically possible after receipt of such Customer complaints or becoming aware of such non compliance with the agreed quality specifications, detailing the nature of the Customer complaints or the nature of the offending Party's non compliance with the agreed quality specifications. The Parties shall within 2 (two) days of receipt of the aforesaid written notice meet in an attempt to identify the remedial measures to be taken to address the issues raised in the Customer complaint or to rectify any deficiencies in respect of the offending Party's compliance with the agreed quality specifications.
- 6.17 Where the Parties are able to agree, at the meetings contemplated in clause 6.14 above, on the remedial measures required, the offending Party shall implement same within the time periods agreed to by the Parties at such meetings and shall furnish the requesting Party with satisfactory proof that such remedial measures have been duly implemented.
- Where the Parties are unable to reach agreement on whether the offending Party has contravened the provisions of clause 6.14 above, on the remedial measures to be taken by the offending Party or on the time periods for the implementation of the remedial measures, or where an offending Party has failed to satisfactorily implement such remedial measures as may have been agreed upon in terms of clause 6.14, then either Party shall be entitled to refer the matter as a dispute for resolution in terms of clause 24 of this Agreement.

7. CHARGES AND PAYMENTS

7.1 Introduction

- 7.1.1 In consideration for Interconnection in terms of this Agreement and the conveyance on their respective ECNs of Calls originating on the ECN operated by the other Party, the Parties shall pay to one another the Interconnect Fees provided for in this clause 7.
- 7.1.2 The Parties agree that:
- 7.1.2.1 in addition thereto that neither Party shall be liable to pay the other Party any fees or charges not specifically contemplated in this Agreement, the Parties specifically agree that, without limiting the generality of the statement in this clause 7.1.2.1, no charges of any nature shall be levied by either Party against the other Party in respect of:
- 7.1.2.1.1 Calls made to an invalid, defective or non-existent number; and
 7.1.2.1.2 Calls made to a called destination or device which is already engaged;
- 7.1.2.1.3 Calls which are conveyed from either Party's ECN to the other Party's ECN via a third Party's ECN.
- 7.1.2.2 the measuring of a Call's duration shall commence when
- 7.1.2.2.1 the electronic communications equipment by which such Call is to be received; or
- 7.1.2.2.2 the electronic communications equipment, or any other facility which provides an automatic response if connection cannot be effected to such electronic communications equipment,;

generates an answer signal across the relevant POI.

7.2 Interconnection Fees

7.2.1 Calls conveyed by the Licensee

In consideration for the conveyance on the ECN operated by the Licensee of any Call handed by Telkom from its ECN to the Licensee across a POI, Telkom shall pay to the Licensee, for each rate group specified in clause 1 of Appendix 7 to this agreement, an amount calculated in accordance with the following formula:

$$U = (\underline{A \times B}) + (\underline{C \times D})$$

where

- U = the amount in Rand to be paid to the Licensee by Telkom in respect of a particular Accounting Period; and
- A = the total duration in seconds of all Calls referred to in this clause 7.2.1 during peak times in respect of such Accounting Period; and
- B = the applicable per minute interconnect rate for the peak rate group as specified in item 1.1 of Appendix 7 to this Agreement.
- C = the total duration in seconds of all Calls referred to in this clause 7.2.1 during off-peak times in respect of such Accounting Period; and
- D = the applicable per minute interconnect rate for the off-peak rate group as specified in item 1.2 of Appendix 7 to this Agreement.

7.2.2 Calls conveyed by Telkom

In consideration for the conveyance on the ECN operated by Telkom of any Call handed by the Licensee from its ECN to Telkom across a POI, the Licensee

shall pay to Telkom, for each rate group specified in clause 2 of Appendix 7 to this Agreement, an amount calculated in accordance with the following formula:

$$U = (\underline{A \times B}) + (\underline{C \times D})$$

where

- U = the amount in Rand to be paid to Telkom by the Licensee in respect of a particular Accounting Period; and
- A = the total duration in seconds of all Calls referred to in this clause 7.2.2 during peak times in respect of such Accounting Period; and
- B = the applicable per minute interconnect rate for the peak rate group as specified in item 2.1 of Appendix 7 to this Agreement.
- C = the total duration in seconds of all Calls referred to in this clause 7.2.2 during off-peak times in respect of such Accounting Period; and
- D = the applicable per minute interconnect rate for the off-peak rate group as specified in item 2.2 of Appendix 7 to this Agreement.

7.3 Emergency services

Each Party shall ensure, at its own cost and expense, that its Customers are not able to access the emergency service offered by the other Party through any POI.

7.4 Provision of POIL's

Each Party shall have the right to establish and provide POILs. For each proposed POIL the Party that proposes a POIL on the most advantageous terms to both Parties (including without limitation with regard to the price, installation time and quality of

such proposed POIL) shall provide the POIL. The Parties agree that the costs for any POIL will be shared between the Parties on a 50/50 basis. Each Party shall be responsible for getting the necessary links and equipment to the POI. The Parties shall agree on the technology to be used for the POIL prior to the purchase of the POIL.

8. BILLING PROCEDURES

- 8.1 Each Party undertakes to measure and record, at its own cost and expense, the duration of Calls originating on its ECN and destined for the ECN operated by the other Party as well as the duration of Calls originating on the ECN operated by the other Party and destined for its ECN. To facilitate the reconciliation of the Parties measurements and records in both directions at the end of each Accounting Period, the Parties shall agree procedures whereby relevant information is exchanged and differences addressed at regular intervals during each Accounting Period.
- 8.2 Notwithstanding anything to the contrary contained in this Agreement Interconnect Fees shall be payable by the Parties to one another with effect from the Commercial Date.
- 8.3 Each Party shall provide to the other, on an exchange basis, an accounting summary containing the Billing Information relating to its measurements in both directions (as contemplated in clause 8.1) applicable to the immediately preceding Accounting Period no later than 10 (ten) Business Days after the expiry of each Accounting Period.

Each Party shall submit a tax invoice to the other Party in respect of the Interconnect Fees owed to it by such other Party, in respect of the immediately preceding Accounting Period, by no later than 10 (ten) Business Days after it has received the accounting summary referred to in 8.3, provided that prior to submission of such tax invoices the Parties shall use their best endeavours to resolve any discrepancies which may exist in the Billing Information contained in their respective accounting summaries as exchanged. Unless otherwise agreed by the Parties in respect of a particular Accounting Period, each Party shall base its tax invoices on its own measurements and records pertaining to the duration of Calls originating on the ECN

of the other Party and destined for its own ECN.

All charges payable by a Party under this Agreement shall be paid within 30 (thirty) days after receipt by it of a tax invoice in the relevant amount in accordance with the written payment instructions of the other Party from time to time; provided that payment shall always be effected on a Business Day or a Saturday and provided further that, should the due date fall on a Sunday or a public holiday, payment shall be effected on the preceding Business Day or Saturday.

If either Party fails to pay any amount due by it under this Agreement within the period referred to in 8.5, the other Party shall be entitled to charge and receive interest from such Party at the prime overdraft rate charged by The Standard Bank of South Africa Limited from time to time, calculated from the date payment was due until the date of actual payment in full.

If either Party disputes the amount reflected as being payable or receivable by it, such Party shall within 30 (thirty) Business Days of receipt of the tax invoice deliver a notice in writing to the other Party containing details of such dispute; and

within 5 (five) Business Days of receipt or deemed receipt of such notice, the Party receiving this notice undertakes to furnish such other Party with whatever documents and material may reasonably be required by such other Party to verify the amount reflected as being payable or receivable by it; and

the Parties will then promptly meet and consult with one another in order to try to resolve the dispute. Failing resolution of the dispute within 7 (seven) Business Days following receipt or deemed receipt of the notice referred to in this clause 8.7.1, the dispute may be referred by the Party disputing such amount for investigation and determination by a firm of auditors agreed to between the Parties or, failing agreement, by a firm of auditors nominated by

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the President, for the time being, of the South African Institute of Chartered Accountants. Such auditors will, in their determination of the dispute act as experts and not as arbitrators and their decision shall be final and binding on the Parties. The Parties shall co-operate in any such investigation and any sum found to be due or overpaid shall promptly be paid or refunded (together with any interest payable or paid as the case may be, pursuant to clause 8.6), within 30 (thirty) days of the date of such determination. The independent auditor's costs shall be paid by the Party that was found to have been incorrect in the measurement of Billing Information or accounting summaries as per clauses 8.3 and 8.4.

8.8 Notwithstanding the provisions of 8.7

8.8.2

8.9

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8.10.1

8.8.1 if an amount in dispute represents less than 5% or twenty thousand rand (R20,000), whichever is the larger of the total amount (excluding VAT) of the tax invoice in question, the invoiced amount shall nonetheless be deemed to be payable in full by the invoiced Party;

if an amount in dispute exceeds the limit defined in clause 8.8.1, all amounts not in dispute shall nonetheless be deemed payable and the disputed portion shall be deemed not to be payable pending determination by the auditors pursuant to 8.7.

Each Party shall maintain, keep and retain, in an easily accessible form, for a period of 5 years from the submission by it to the other Party of any tax invoice, accurate books of account and information contained in or on magnetic discs, tapes, documents or such other records, as may reasonably be required to enable such other Party to calculate or verify any amount payable by it in respect of such tax invoice.

Each Party shall from time to time permit the other Party during normal business hours at reasonable times, and accompanied by an authorised representative of the first mentioned Party, upon at least 30 (thirty) days written notice, to inspect the billing and accounting apparatus and equipment owned or controlled by such Party to the extent reasonably necessary to satisfy itself that such Party is not in breach of any of its obligations in terms of this clause 8; provided that

any such inspection shall be conducted in such a way as to cause a minimum of inconvenience to the activities of the Party being inspected and not to interfere with the provision of services to customers of such Party;

8.10.2 the Party whose apparatus or equipment is being inspected shall take whatever steps are reasonably necessary to facilitate the conduct by the other Party of a thorough and speedy investigation.

8.11 Notwithstanding any dispute between the Parties as to any payment, the Parties shall, throughout the term of this Agreement, remain obliged to observe and perform their respective obligations in terms of this Agreement.

8.12 It is recorded that the failure of a Party to collect any amount owing to it by its customers or any of its customers for any reason whatsoever, will in no way affect or undermine such Party's payment obligations to the other Party in terms of this Agreement.

9. GUARANTEES

9.1 Subject to clause 9.4 below, and in addition to any other rights Telkom may have in law or in terms of this Agreement, in the event that the Licensee fails to make any payment due in terms of this Agreement and fails to remedy such non-payment within 30 (thirty) days from the date on which the payment was due, Telkom shall be entitled to request the Licensee to provide Telkom, upon 21 (twenty-one) days written notice to this effect, with an unconditional bank guarantee from a recognised financial institution, registered in the Territory.

9.2 The guarantee referred to in clause 9.1 above, shall be:

9.2.1 in an amount equal to the aggregate value of the highest amounts payable by the Licensee to Telkom as reflected in tax invoices rendered in respect of the relevant Interconnect Fees for any 3 (three) months during the 12 (twelve) month period immediately preceding the request for a guarantee in terms of clause 9.1; and

9.2.2 on terms and conditions acceptable to Telkom, to guarantee the due fulfilment by the Licensee of its obligations under this Agreement.

- 9.3 Subject to clause 9.4 below, Telkom shall be entitled, at any time, to demand an increase in the amount of the bank guarantee referred to in clause 9.1 on 30 (thirty) days' written notice to this effect.
- 9.4 Telkom shall not be entitled to require a bank guarantee in terms of clause 9.1 above, or an increase in the amount of a bank guarantee in terms of clause 9.3 above, in the following circumstances:
- 9.4.1 where payment has been delayed by less than 30 (thirty) days beyond the due date reflected on the relevant invoice, and / or
- 9.4.2 where payment has been delayed as a result of late invoicing by Telkom.
- 9.5 The Parties record that this clause 9 constitutes a material term to this Agreement.

 Failure to provide Telkom with a guarantee as provided for in terms of clause 9.1 and / or to provide and increased guarantee as provided in clause 9.2 shall constitute a material breach of this Agreement.
- 9.6 The guarantee provided by the Licensee in terms of this clause 9 shall be supplementary to and not in substitution of any payment obligation of the Customer.

10. PROTECTION OF THE LICENSEE'S ECN

Telkom undertakes not to do or permit to be done or omit or permit the omission of anything in relation to its ECN which may reasonably be expected to:

- 10.1 cause any damage to the ECN operated by the Licensee; or
- 10.2 materially interfere, in any way whatsoever, with the proper and normal operation of such ECN.

11. PROTECTION OF TELKOM'S ECN

The Licensee undertakes not to do or permit to be done or omit or permit the omission of anything in relation to its ECN which may reasonably be expected to:

- 11.1 cause any damage to the ECN operated by Telkom; or
- 11.2 materially interfere, in any way whatsoever, with the proper and normal operation of such ECN.

12. SAFETY

- The Licensee and Telkom shall each, at their own cost and expense, take whatever steps are necessary to procure that the fulfilment of their respective obligations and exercise of their respective rights in terms of this Agreement will not endanger the health and safety of any Party or third party including, without limitation, one another's employees, agents, directors, sub-contractors and customers, and in this respect each Party shall be responsible for the safe operation of the equipment comprising such Party's ECN on its side of any POI.
- Either Party (the Indemnifying Party) indemnifies the other Party (the Innocent Party), all of its subsidiaries and any directors or employees of the Innocent Party or such Innocent Party's holding company against any loss or harm whatsoever caused by the Indemnifying Party, its directors, employees and/or subcontractors, to the Innocent Party, its directors, employees or agents, and any third party, pursuant to the fulfilment of the either Party's obligations to the other in terms of clause 12.1, as the case may be.

13. FAULT REPORTING AND RESOLUTION

The Licensee shall provide to Telkom and Telkom shall provide to the Licensee the operations and maintenance services set out more fully in Appendix 6 for the purpose of enabling the Licensee or Telkom, as the case may be, to report any fault in, breakdown of or problem in respect of the ECN operated by Telkom or the Licensee, as the case may be; provided that such fault, break down or problem pertains to the Interconnection, as soon as such fault, breakdown or problem occurs and the Licensee and Telkom shall, on receipt of any such report, each follow the fault report procedures set out in Appendix 6.

14. TESTING

The Parties undertake to co-operate fully with one another in the development of mutually acceptable procedures for the testing and clearance of faults occurring between their respective ECNs or otherwise affecting the Interconnection of their respective ECN, the present procedures being set out in Appendix 6.

15. INTELLECTUAL PROPERTY RIGHTS

- Nothing contained in this Agreement shall be construed to confer or be deemed to confer on either Party any rights or licences in the intellectual property of the other Party.
- For the purposes of this clause 15 "Intellectual Property" means any and all rights, title and interest in intellectual property (whether registered or not), including, past and future copyright, related rights, patents, utility models, trade marks, trade names, service marks, designs, databases, network diagrams, network architecture, semi-conductor topography, know-how, trade secrets and inventions (whether patentable or not), goodwill and all other identical or similar intellectual property as may exist anywhere in the world and any applications for registration of such intellectual property.

16. OPERATIONAL LIAISON

The Parties shall consult together regarding the operation and implementation of this Agreement and shall use their best endeavours to resolve any problems arising from such consultation or otherwise encountered in relation to this Agreement.

16.2 Without prejudice to the provisions of clause 16.1, the Parties shall each, within 30 (thirty) days of the Effective Date appoint a representative and notify the other Party in writing of the identity of such appointee. Such representative shall, together with the representative of the other Party, be responsible for overseeing the day-to-day practical implementation of this Agreement including, without limitation, the following matters:

16.2.1	numbering;
16.2.2	physical and electrical interface(s);
16.2.3	provisioning (including commissioning);
16.2.4	transmission;
16.2.5	signalling;
16.2.6	maintenance;
16.2.7	call accounting;
16.2.8	augmentation of capacity;
16.2.9	prevention of fraud;
16.2.10	malicious call tracing;
16.2.11	new or modified features and services including timescales for implementation;
	and
16.2.12	any other technical and operational matters which may arise from time to time.

- Each of the representatives contemplated in 16.2 shall liaise with the other and report to the Party appointing him, regarding any problems, which have not proved capable of being resolved. On receipt of such report, the Parties shall consult forthwith with one another with a view to achieving a mutually acceptable solution to such problem.
- Unless otherwise provided for in this Agreement, each Party shall give the other at least 7 (seven) days notice in writing of any change which it intends to make in respect of the identity of the person charged with operational liaison on its behalf.

17. FORCE MAJEURE

16.3

No Party to this Agreement shall be liable for any failure to fulfil its obligations hereunder where such failure is caused by circumstances outside the reasonable control of such Party, including, without limitation, any Act of God, insurrection or civil disorder, war or military operations, national or local emergency, acts or omissions of Government, labour disputes of any kind (whether or not involving the Party's

employees), fire, lightning, explosion or any other such cause (each an "event of force majeure").

- 17.2 The Party affected by the event of force majeure shall promptly notify the other Party in writing of the estimated extent and duration of such inability to perform its obligations.
- 17.3 Upon cessation of circumstances leading to the event of force majeure, the Party affected by such event of force majeure shall promptly notify the other of such cessation.
- 17.4 If as a result of the event of force majeure, the performance by either Party of such Party's obligations under this Agreement is only partially affected such Party shall nevertheless remain liable for the performance of those obligations not affected by the event of force majeure.
- 17.5 If the event of force majeure continues for a period of 3 (three) months or less from the date of any notification thereof in terms of 17.2, any and all obligations outstanding shall be fulfilled by the Party affected by the event of force majeure as soon as possible after cessation of the event of force majeure, save to the extent that such fulfilment is no longer practically possible or is not required by the other Party.
- If the event of force majeure continues for more than 3 (three) months from the date of any notification thereof in terms of 17.2 and notice of cessation in terms of 17.3 has not been given and such event of force majeure prevents the affected Party from performing its obligations in whole or in part during that period, the unaffected Party shall be entitled (but not obliged) to terminate this Agreement by giving not less than 30 (thirty) days written notice to the other Party after expiry of such 3 (three) month period to that effect; provided that such notice shall be deemed not to have been given if a notice of cessation given in terms of 13.3 of the event of force majeure is received or deemed to be received by the unaffected Party prior to the expiry of such 30 (thirty) days.
- 17.7 If this Agreement is not terminated in terms of the provisions of 17.6, any obligations outstanding shall be fulfilled by the Party affected by the event of force majeure as soon as reasonably practicable after the event of force majeure has ended, save to the extent that such fulfilment is no longer possible or is not required by the unaffected Party.

18. LIMITATIONS ON LIABILITY

- 18.1 Each Party ("the Indemnifying Party") indemnifies the other ("the Innocent Party") against all liability or loss arising directly from (and any reasonable cost, charge or expense incurred in connection with) -18.1.1 damage to or loss of any equipment, facility or other property of the Innocent Party caused by the intentional or negligent act or omission of the Indemnifying Party or its employees, sub-contractors, directors or agents arising out of or in connection with this Agreement; and 18.1.2 any action, claim, suit or demand by any person against the Innocent Party in respect of or arising out of any act or omission of the Indemnifying Party in the course of providing services to the Innocent Party. 18.2 If any action, claim, suit or demand ("claim") is made by any person against the Innocent Party which, if satisfied or paid by the Innocent Party, would result in any liability of the Indemnifying Party pursuant to the provisions of clause 18.1 -18.2.1 the Innocent Party shall give written notice of the claim to the Indemnifying Party as soon as practical after becoming aware thereof, and 18.2.2 within a reasonable period after receipt of that notice, but, in any event within 30 (thirty) days thereof, the Indemnifying Party shall -18.2.2.1 cause the Innocent Party to be put in sufficient funds to satisfy or pay the claim; or
- 18.2.2.2 give notice to the Innocent Party directing it to take such action (including legal proceedings) in respect of the claim, at the Indemnifying Party's own cost and expense, as the Indemnifying Party may indicate,

failing which the innocent Party shall be entitled to deal with the claim as it in its sole discretion deems fit.

18.2.3 the Indemnifying Party shall cause the Innocent Party to be put and therefore maintained, in sufficient funds and in sufficient time to pay all reasonable costs

and expenses of any action or settlement directed by the Indemnifying Party in terms of 18.2.2. and 18.2.4; and

the Innocent Party shall take such action as the Indemnifying Party reasonably directs, to avoid, dispute, defend, appeal, settle or compromise ("<u>deal with</u>") the claim and any adjudications thereof; provided that, failing such directions, the Innocent Party shall be entitled to deal with the claim as it sees fit in its sole discretion.

No Party shall be obliged to indemnify the other Party according to the provisions of this clause 18 to the extent that the loss, liability, cost, charge or expense suffered or sustained by such other Party is the direct result of any breach, act or omission by such other Party of any of its obligations in terms of this Agreement.

18.4 Notwithstanding the provisions of this clause 18, the Indemnifying Part shall not, under any circumstances, be liable for any indirect special and / or consequential damages, including but not limited to loss of profits suffered by the Innocent Party.

19. EQUALITY

- 19.1 A Call originating on the ECN operated by one Party, when passed across a POI, shall be treated by the other Party no less favourably than a similar Call originating and conveyed on the ECN operated by such other Party.
- 19.2 A Call originating on the ECN operated by one Party (the Originating Party) and destined for the ECN operated by the other Party shall be treated by the Originating Party no less favourably than a similar Call originating, terminating and conveyed on the ECN operated by such Originating Party.
- 19.3 A Call which originates on the ECN operated by one Party and which is destined for the ECN operated by the other Party and is routed via a third party's network, will be treated by such other Party no less favourably than a similar Call originating, terminating and conveyed on the ECN operated by such other Party.
- 19.4 The Parties undertake not to discriminate against one another as far as the provision of interconnection is concerned.

19.5 The Parties undertake to treat one another no less favourably as far as interconnection rates are concerned, than they treat other licensed providers of ECS or ECNS, as defined in the EC Act.

20. BREACH AND TERMINATION

20.1 If a Party to this Agreement:

- 20.1.1 fails to pay any amount due by it in terms of this Agreement by the due date, and fails to remedy such breach within 90 (ninety) days of written notice to do so; or
- 20.1.2 commits a material breach of any other provision of this Agreement and fails to remedy such breach within 90 (ninety) days of written notice to do so; or
- 20.1.3 takes steps to place itself, or is placed in liquidation, whether voluntary or compulsory, or under judicial management, in either case whether provisionally or finally; or
- 20.1.4 take steps to deregister itself or is deregistered; or
- 20.1.5 fails to satisfy a substantial judgment against that Party within 21 (twenty one) days after that Party becomes aware of the judgment, except if that Party provides evidence on an ongoing basis to the reasonable satisfaction of the other Party that steps have been initiated within the 21 (twenty one) days to appeal, review or rescind the judgment and to procure suspension of execution of that judgment and that such steps are being expeditiously pursued. The period of 21 (twenty one) days shall run from the date on which the judgment becomes final, or the date on which the attempts to procure the suspension of the execution fail,

such Party shall be in default.

- 20.2 If a Party is in default, the aggrieved Party shall be entitled, in addition to all other remedies to which it may be entitled at law, or in terms of this Agreement, to cancel this Agreement.
- 20.3 Upon the termination for any reason whatsoever of this Agreement all amounts then owing by one Party to the other Party will become immediately due and payable.

21. AMENDMENTS

- 21.1 Either Party may, at any time, and from time to time, seek to vary any of the terms of this Agreement in accordance with the provisions of 21.2.
- 21.2 The Party seeking to vary any of the terms of this Agreement shall serve a notice to the other Party, and such notice shall set out in reasonable detail the variations sought by it. Upon receipt of such notice, the Parties shall meet and negotiate, in good faith with each other with a view to agreeing on a variation of such of the terms of this Agreement as are referred to in the notice.
- 21.3 The Parties agree that, notwithstanding the provisions of this clause 21, all of the terms and conditions of this Agreement shall remain in full force and effect during any review of its terms unless and until such time as:
- 21.3.1 the Parties complete a written agreement replacing or amending the Agreement; and
- 21.3.2 the Parties have obtained whatever consents and authorities may be required by them to effect such replacement or amendment.

22. SEVERABILITY

If any term, condition, agreement, requirement or provision contained in this Agreement is held by any court of law having jurisdiction to be unenforceable, illegal, void or contrary to public policy, such term, condition, agreement, requirement or provision shall be of no effect whatsoever upon the binding force or effectiveness of any of the remainder of this Agreement, it being the intention and declaration of the Parties that had they or either of them known of such unenforceability, illegality, invalidity or that the provision was contrary to public policy, they would have entered into a contract, containing all the other terms and conditions set out in this Agreement.

23. CESSION

No Party shall cede, assign, transfer, encumber or delegate any of its rights or obligations in terms of this Agreement without the prior written consent of the other Party and such other consents as may be necessary. No consent shall be unreasonably withheld.

24. DISPUTE RESOLUTION

24.1	Should any	dispute arise	between the	Parties in	connection with -

- 24.1.1 the formation or existence of; or
- 24.1.2 the implementation of; or
- 24.1.3 the interpretation or application of the provisions of; or
- 24.1.4 the Parties' respective rights and obligations in terms of or arising out of; or
- 24.1.5 the breach or termination of; or
- 24.1.6 the validity, enforceability, rectification, termination or cancellation, whether in whole or in part of; or
- 24.1.7 any documents furnished by the Parties pursuant to the provisions of,

this Agreement, or which relate in any way to any matter affecting the interests of the Parties in terms of this Agreement, that dispute shall, unless resolved amicably between the Parties, be referred promptly for determination to the Senior Executive of each of the Parties at the instance of either of the Parties.

Should the Parties fail to resolve any dispute between themselves or should the Senior Executives of the Parties fail to reach unanimous agreement in the determination of any dispute referred to them as provided for in clause 24.1, within 14 (fourteen) days of such referral, the Parties undertake to meet promptly and consider whether or not the dispute should be referred to arbitration. If the Parties agree in writing that the dispute should be referred to arbitration, such dispute will be determined by arbitration in accordance with the remaining provisions of this clause relating to arbitration; provided that if the Parties fail to reach agreement in writing to

refer the dispute to arbitration within a period of 2 (two) days of meeting in terms of this clause 24.3, then either Party will be entitled to commence litigation proceedings against the other Party, in which event both Parties agree that the matter will be referred to the High Court, Witwatersrand Local Division (or its successor) and the Parties consent to the jurisdiction of the Witwatersrand Local Division.

24.3 Notwithstanding anything to the contrary contained in this clause 24, neither Party shall be precluded from obtaining interim relief from a court of competent Jurisdiction pending the decision of an arbitrator appointed in terms of this clause 24. In addition, neither Party shall be precluded from approaching the Authority for obtaining the relief envisaged under the EC Act and the Regulations.

24.4 The arbitration shall be held -

- 24.4.1 <u>mutatis mutandis</u> in accordance with the provisions of the High Court Act 59 of 1959, the rules made in terms of that Act and the practice of the division of the High Court referred to in clause 24.10;
- 24.4.2 in Johannesburg;
- 24.4.3 with only the legal and other professional representatives of the Parties present;
- 24.4.4 in terms of the Arbitration Act, No. 42 of 1965,

it being the intention of the Parties that the arbitration shall be held and completed as soon as possible.

- 24.5 The arbitrator shall be,
- 24.5.1 a practising senior advocate or attorney of Johannesburg of at least 15 years standing;
- 24.5.2 agreed between the parties, and assisted by an independent person who is an expert in the field in which the dispute has arisen (appointed by the parties by agreement) provided that the arbitrator shall not be bound by experts opinion.
- 24.6 Should the Parties fail to agree on an arbitrator within 7 (seven) days after the matter was referred in terms of clause 24.2 to arbitration, the arbitrator shall be

appointed at the request of either Party to the dispute by the Chairperson for the time being of the Bar Council of Johannesburg (or any successor body) according to the provisions of clause 24.5.

- 24.7 The decision of the arbitrator shall be final and binding on the Parties and may be made an order of the court referred to in clause 24.8 at the instance of either of the Parties.
- 24.8 The Parties hereby consent to the jurisdiction of the High Court of South Africa (Witwatersrand Local Division) (or its successor) in respect of the proceedings referred to in clause 24.4.
- 24.9 The Parties agree to keep the arbitration including the subject matter of the arbitration and the evidence heard during the arbitration confidential and not to disclose it to anyone except for the purposes of an order to be made in terms of clause 24.8.
- 24.10 The provisions of this clause -
- 24.10.1 constitute an irrevocable consent by the Parties to any proceedings in terms of this clause 24 and neither Party shall be entitled to withdraw there from or claim at any such proceedings that it is not bound by such provisions;
- 24.10.2 are severable from the rest of this Agreement and shall remain in effect despite the termination of or invalidity for any reason of this Agreement, or any part of this Agreement.

25. CONFIDENTIALITY

Subject to the provisions of clause 25.2, the Parties undertake to each other that they will use all reasonable endeavours to keep and procure that their directors, employees, professional advisors, agents and sub-contractors shall keep secret all Confidential Information and will not disclose such Confidential Information to any third party.

- 25.2 The provisions of clause 25.1 shall not apply to information which:
- 25.2.1 is in or comes into the public domain other than by default of one of the Parties; or
- 25.2.2 is or has already been independently generated by the Party disclosing such information; or
- 25.2.3 is disclosed to satisfy a legal demand by a competent court of law or government body or is disclosed to the Authority pursuant to section 39 of the EC Act provided that the Agreement does not refer to or disclose Confidential Information of a Party; or
- 25.2.4 is in the possession of or is known by the receiving Party prior to its receipt from the disclosing Party; or
- 25.2.5 is authorised to be disclosed by the disclosing Party in writing but then only to the extent of the authority given; or
- 25.2.6 is properly disclosed pursuant to and in accordance with the Licence or any licence granted to Telkom or the Licensee, or in accordance with any relevant statutory obligation or (with the prior written consent of the other Party), in order for either Party to comply with the requirements of any recognised Stock Exchange.
- 25.3 Confidential Information which is the subject of the provisions of clause 25.1 shall be used only for the purpose for which it was disclosed and/or for the purposes of performing the obligations of the Parties in terms of this Agreement.
- Confidential Information which is the subject of the provisions of clause 25.1 may be disclosed to sub-contractors of the Parties; provided that all such sub-contractors shall, prior to receiving any such information, enter into a confidentiality undertaking to the satisfaction of the disclosing party, to give effect to the intention of this clause with the disclosing Party.
- 25.5 The provisions of this clause will apply with effect from the Effective Date until 60 months after the date of termination or expiry of this Agreement.

NOTICES AND DOMICILIA 26.

26.1 The Parties choose as their domicilia citandi et executandi their respective addresses set out in this clause for all purposes arising out of or in connection with this Agreement, at which addresses all processes and notices arising out of or in connection with this Agreement, its breach or termination may validly be served upon or delivered to either of the Parties.

For the purposes of this Agreement the Parties' respective addresses shall be-

26.2.1 as regards the Licensee YYYYYYYYY

YYYYYYYY YYYYYY

(For the attention of YYYYYY)

(011) YYYYYY

26.2.2 Xxxxxx as regards Telkom

XXXXXX

Facsimile number : XXXXXX

or at such other address, not being a post office box or poste restante, of which the Party concerned may notify the other Party in writing.

- 26.3 Any notice given or other document sent in terms of this Agreement shall be in writing and shall -
- if delivered by hand be deemed to have been duly received by the addressee 26.3.1 on the date of delivery;

- 26.3.2 if posted by prepaid registered post be deemed to have been received by the addressee on the 7th (seventh) day following the date of such posting;
- 26.3.3 if transmitted by facsimile be deemed to have been received by the addressee the day after dispatch;
- 26.3.4 if transmitted by e-mail be deemed to have been received by the addressee when such addressee has sent an acknowledgement of receipt to the sender, and the sender has provided confirmation of the acknowledgement of receipt;
- 26.3.4 in the case of all documents, excluding notices, if posted by ordinary prepaid post be deemed to have been received by the addressee on the 10th (tenth) day following the date of such posting.
- Notwithstanding anything to the contrary contained in this Agreement, a written notice or communication actually received by one of the Parties from another including by way of facsimile transmission shall be adequate written notice or communication to such Party.

27. WHOLE AGREEMENT

This Agreement constitutes the whole Agreement between the Parties as to the subject matter of this Agreement and no agreements representations or warranties between the Parties other than those set out herein will be binding on the Parties.

28. VARIATION

No addition to or variation, consensual cancellation or novation of this Agreement and no waiver of any right arising from this Agreement or its breach or termination shall be of any force or effect unless reduced to writing and signed by both the Parties or their duly authorised representatives. In addition, any alterations and/or amendments to the Agreement shall only be effective and binding upon the Parties where such alterations and/or amendments are lodged with the Authority.

29. RELAXATION

No latitude, extension of time or other indulgence which may be given or allowed by either Party to the other in respect of the performance of any obligation hereunder or the enforcement of any right arising from this Agreement and no single or partial exercise of any right by either Party shall under any circumstances be construed to be an implied consent by such Party or operate as a waiver or a novation of, or otherwise affect any of that Party's rights in terms of or arising from this Agreement or estop such Party from enforcing, at any time and without notice, strict and punctual compliance with each and every provision or term of this Agreement.

30. SUBMISSION TO THE AUTHORITY

Immediately after the signature date of this Agreement, the Parties shall lodge this Agreement with the Authority in terms of the EC Act to enable the Authority to follow the process laid down in section 39 of the EC Act.

Signed at	On	20	11		
As witnesses:					
1)		••••			
		Fo	r the	Licensee	duly
2)		au	thorised		

On	2011
	For Telkom duly authorised
	(First signatory)
On	2011
	For Telkom duly authorised
	(Second signatory)



INTERCONNECTION APPLICATION FORM

1. Interconnection	and Co	mpany De	tails:					
Complete name of leg		ment of the a	account	in terms	of this A	greeme	ent)	
Company or CC regis	stration n	umber						
VAT registration num		4						
Registered address	of your	company (d	omiciliu	um addr	ess):			
Building/Room no.								
Street & no.								
Suburb								
City/Town							Postcode:	
Postal Address: Suburb City/Town							Postcode:	
Oity/ FOWIT							1 Ostobue.	
Full name of contact	t person	for the agre	ement:					
Name	•							
Position He/She ho	lds in the	company						
Tel No.								
Fax No.								
Cell No.								
E-mail								

Full name of designated signated	ory:							
Name								
Position held in the company								
Tel No.								
Fax No.								
Cell No.								
E-mail								
Banking Details:								
Banking details to be on an offici	al							
company letterhead								
Authority Documentation:								
Type of licence		ECS:		ECN	NS:		Both	ո:
(Please attach copy of licence/s)								
ECS/ECNS Licence number/s								
Type of allocated number ranges		None:	Applied:	G	Seo:	Non Ge	0:	Univ Serv:
(Please attach copy of numbers)								
Signalling Point Code		None:	Applied:	S	PC Nu	mber:		
The Licensee Termination Rate								
Rate Group	Appli	icable Ho	urs	l	Rate P	er Minute	e (Ex	cluding VAT)
Peak								
Off-Peak								

2. Technical Information:

The Licensee Point of Interconnection:

The	Telkom	Number of	Signalling	Trunk	Contracted	RFS Date
Licensee	DPSU	POILs	System	group	Service	
Switch	exchange			direction	Level For	
				(IC to The	POILs	
				Licensee,		
				IC to		
				Telkom,		
				BW)		

Traffic Projections:

Please provide us with your traffic projections for six (6) months in writing within fourteen (14) days from date of signature of this application form.

Telkom RIO for Fixed Interconnection

who warrants that he is duly authorised hereto.

3. Technical Information Per POIL Required:

REQUEST FOR ORDER NEW TRANSMISSION LINK (SS7 SIGNALLING)

TO:						
FROM:						
DATE SUBMITTED:						
THE LICENSEE REFERENCE	E NUMB	ER: (three dig	it Alp	ha cod	le to be ob	etained from Telkom)
Service Details						
Service Number						
Link Type		Megaline				
Link Capacity		2 Mbit/s				
Contract Period						
Service Level Required						
Scheduled RFO date						
Required Date of Service						
Transmission Engineer					Tel No	
Head Office Contact					Tel No	
Remarks				l		
Source Site Details (The Lic	ensee)					
Site Name						
Site ID						
Site Address						
Site Plan	Р	lease attach t	he sit	e Plan	to the app	olication form
Site Contact					Tel No	
Site Owner					Tel No	
Latitude				Longi	tude	

Destination Site details (Telkom)

Site Name*	
Site ID	
Site Address	

Signed for the Licensee

- a) (JDF i.e. New Doornfontein + JGM i.e. Germiston) and
- b) (JNL i.e. Newlands + JRB i.e. Rosebank)

Due to limited tie-line capacity between the two "mated pairs" as well as ensuring redundant routing, Licensees are strongly advised to split their POIL applications between different mated pairs to avoid possible degradation of quality.

^{*} Please note that Telkom has two sets of "mated pair" exchanges in Johannesburg. These are:

POINTS OF INTERCONNECTION AND CAPACITY

1. GENERAL

This Appendix sets out a schedule of POIs offered by Telkom and may be augmented by Telkom from time to time.

2. TELKOM POINTS OF INTERCONNECTION AVAILABLE

Alpha	DPSU	Intercon-	Longitude	Latitude	Physical Address
code	Exchange	nection	(deg:min:s	(deg:min:sec)	
	Name	Туре	ec)		
BCS	Bloemfontein	TDM	26:13:15	29:06:57	Telkom Building,
	- Charles				57 Charles Street,
	Street				Bloemfontein
BCY	Bloemfontein	TDM	26:13:15	29:06:57	Telkom Building,
	-				57 Charles Street,
	City				Bloemfontein
CBS	Cape Town -	TDM	18:25:23	33:55:40	Telkom Building,
	Barrack				59 Commercial
	Street				Street,
					Cape Town
СТВ	Cape Town -	TDM	18:37:47	33:53:51	Telkom Building,
	Tygerberg				27 Teddington Street,
					Belville
DNG	Durban - New	TDM	30:52:27	29:47:59	Telkom Building,
	Germany				3 Regal Crescent
					New Germany
DTM	Durban - Taj	TDM	31:01:15	29:51:27	Centrex Building,
	Mahal				296 Pine Street,
					Durban
JDF	Johannesburg	TDM	28:03:25	26:11:48	Telkom Building,
	– New				80 Siemmert Road,
	Doornfontein				New Doornfontein
JGM	Johannesburg	TDM	28:09:39	26:12:43	Telkom Building,
	Germiston				1 Clark Street,
					Germiston

- Newlands - Newlands JRB Johannesburg TDM 28:02:40 26:08:48 Telkom Building, 167 Oxford Road, Rosebank PDO Port Elizabeth - Donkin PLZ Port Elizabeth - Linton Grange Cnr Main and Shortmarket Streets, Newlands Telkom Building, 167 Oxford Road, Rosebank Tom 25:35:29 High Tech Building, 1A Neil Street, Sidwell Tom 25:30:45 33:56:40 Telkom Building, 508 Cape Road, Linton
JRB Johannesburg TDM 28:02:40 26:08:48 Telkom Building, 167 Oxford Road, Rosebank PDO Port Elizabeth TDM 25:35:29 33:55:29 High Tech Building, 1A Neil Street, Sidwell PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
JRBJohannesburg - RosebankTDM28:02:4026:08:48Telkom Building, 167 Oxford Road, RosebankPDOPort Elizabeth - DonkinTDM25:35:2933:55:29High Tech Building, 1A Neil Street, SidwellPLZPort Elizabeth - LintonTDM25:30:4533:56:40Telkom Building, 508 Cape Road,
- Rosebank PDO Port Elizabeth TDM 25:35:29 33:55:29 High Tech Building, 1A Neil Street, Sidwell PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
PDO Port Elizabeth TDM 25:35:29 33:55:29 High Tech Building, - Donkin 1A Neil Street, Sidwell PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, - Linton 508 Cape Road,
PDO Port Elizabeth TDM 25:35:29 33:55:29 High Tech Building, 1A Neil Street, Sidwell PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
- Donkin - Donkin 1A Neil Street, Sidwell PLZ Port Elizabeth - Linton 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
PLZ Port Elizabeth TDM 25:30:45 33:56:40 Telkom Building, 508 Cape Road,
– Linton 508 Cape Road,
Grange Linton
PBN Pretoria - TDM 28:12:44 25:45:13 Telkom Building,
Bronberg Cnr Plein and Spuy
Streets, Sunnyside
PPR Pretoria – TDM 28:11:17 25:44:37 PPR Building,
Proes Street 179 Proes Street,
Pretoria
VVE Vereeniging TDM 27:55:49 26:40:20 Telkom Building,
Cnr Merriman and
Lesly Streets,
Vereeniging
VME Meyerton TDM 28:01:01 26:40:20 Telkom Building,
Cnr Kruger and
Eeufees Streets,
Meyerton

ESTABLISHMENT OF POIS

1. POIS TO BE ESTABLISHED BY EFFECTIVE DATE

The table below details the route, capacity in terms of 2 Mbit/s systems, signalling type, trunk group direction and ready for service (RFS) date of the POIs to be established between the Parties by the Effective Date. Trunk Group Direction is assumed to be bi-directional in all scenarios.

Site name	Telkom Site	Traffic	E1s	the Licensee Site

2. ADDITIONAL POIS ESTABLISHED

The table below provides for the routes, capacity in terms of 2 Mbit/s systems, signalling types, trunk group directions and ready for service (RFS) dates of POIs established or to be established between the Parties following the Effective Date. Trunk Group Direction is assumed to be bi-directional in all scenarios.

Site name	Telkom Site	Traffic	E1s	the Licensee Site

SPECIFICATIONS, SERVICES AND PROCEDURES FOR POIS

1. TECHNICAL SPECIFICATIONS

1.1 General

1.1.1 The ITU-T Recommendations for Interfacing between Equipment Types and for Common Channel Signalling System Number 7 (CCS 7) provide the framework for adherence to the standards contained herein. The Parties are committed to conform wherever practicable with the ITU-T as amended from time to time. The form of reference will be the ITU-T Recommendations as published in the ITU-T White Book, as amended from time to time, the details of which shall be agreed between the Parties.

1.1.2 Notwithstanding the above ITU-T Recommendations, for Calls that are originated in one ECN and terminated on another, the originating ECN will be entitled to block backward signals that modify the originating tariff structure. Such backward signals will be discarded and the Call will be force released.

1.1.3 In order to protect personnel and equipment on both sides of the interface it is necessary to provide protection against the transmission of dangerous voltages across the interface. Thus, for equipment that uses or generates excessive voltages, a barrier shall be provided to protect the interface from those voltages.

1.2 Physical Interface

The physical interface between the ECNs shall be 120 Ohm balanced termination provided by means of a twisted pair terminated on 10 pair Kröne insulation displacement terminating blocks. A loss of 6 dB is supported for both termination types.

1.3 Electrical Interface

1.3.1 Input and Output

The electrical interface shall conform to ITU-T Recommendation G.703 for twisted pairs at 2048 Kbit/s. An input impedance of 120 Ohm balanced is required. The output impedance is approximately 120 Ohms as specified in G.703. This is necessary to meet the required pulse shape masks.

1.3.2 Attenuation

The attenuation of the interconnecting cable (including any digital distribution frame or interconnecting equipment) shall not exceed 6 dB at 1024 KHz.

1.3.3 Interference

Both input ports shall tolerate, without error, interference from a non-synchronous standard test signal (ITU-T Recommendation 0.151) at a level 18 dB lower than the wanted signal.

1.3.4 Multiplex Characteristics

The multiplex structure shall be in accordance with ITU-T Recommendation G.704, G.705, G.732, Q.500 and Q.511.

1.4 Signalling

1.4.1 Chapter 5 of ITU-T Recommendation G.732 shall apply.

1.4.2 Signalling Protocol

The signalling protocol between the ECNs will initially be based on CCS 7 as defined in the ITU-T White Book Recommendations modified with country specific options, including but not limited to ISUP and MAP signalling.

1.4.3 General CCS 7 Principles

 a) The principle of minimum visibility in respect of the Destination Point Codes (DPCs) shall apply between the Parties.

- b) The CCS 7 network shall be implemented as agreed between the Parties, including the use of STPs.
- c) CRC4 will only be used end-to-end over links following agreement between the Parties.

1.4.4 Wander and Jitter

- (a) Maximum jitter at output ports immediately preceding digital switching as per ITU-T Recommendation G.823 (1984) paragraph 2 shall apply.
- (b) Jitter and wander tolerance at input ports will be as per ITU-T Recommendation G.823 (1984) for 2 Mbit/s links on the Primary Digital Hierarchy (PDH) network and for links provided on copper cables with regenerators. It should be noted that the ports should be able to tolerate a frequency offset greater than 50 ppm.

1.4.5 Time Slot Zero

The provisions of Chapter 2 of ITU-T Recommendation G.704 shall apply.

1.4.6 Fault Conditions and Consequent Actions

The provisions of ITU-T Recommendations G.732, Q.500 and Q.511 shall be implemented by the Parties.

1.4.7 Channel Time Slot Encoding

(a) Channel time slots

The 64 Kbit/s channel slots comprising the 2048 Kbit/s stream shall carry "A" law encoded information as defined in ITU-T Recommendation G.711.

(b) Idle channel bit pattern

The idle channel bit pattern in both directions shall be 01010100 (MSB at left hand end) in accordance with paragraph 2.4.6 of ITU-T Recommendation Q.503 when the interface is between digital exchanges.

1.5 Synchronisation

The synchronisation of the MSCs will be achieved by having a connection to two Digital Primary Switching Units (DPSUs) or, as an alternative if two direct links are not available, to one DPSU and any other MSC. In the event of both bit streams failing, an internal source meeting ITU-T Recommendation G.811 shall become the worker. Digital Secondary Switching Units (DSSUs) synchronisation options may be discussed at non-DPSU sites.

1.6 CCS 7 Signalling Links

1.6.1 Signalling link pairs in a combined link set will be operated in a load share mode, with no single signalling link operated at greater than 30% of its theoretical message capacity under normal conditions and 60% under overload conditions.

1.6.2 A 64 Kbit/s signalling link will be engineered to offer, in each direction, a normal traffic load of up to 96 ISUP messages per second for trunk signalling and an overload traffic load of up to 192 ISUP messages assuming an average message length of 25 octets shall apply.

1.6.3 It will be up to the discretion of either Party to decide as to whether en block or overlap signalling is to be used for calls originating on its ECN.

2. PROVISIONING PROCEDURE

2.1 Forecast

- 2.1.1 The forecast for additional point of interconnect links (POILs) will be carried out either at the Operation and Maintenance meetings, as provided for in Appendix 4, or by written request.
- 2.1.2 To ensure that one Party is not benefited to the expense of the other, increases in capacity on an existing POI as well as the provisioning of capacity for a new POI shall, unless otherwise agreed, be made in multiples of two.

2.2 Commissioning of POILs

All POILs shall prior to commissioning be tested in accordance with the appropriate test specification for the signalling system employed.

2.3 Signalling Point Code Allocations

The Parties shall liaise with each other regarding the allocation of Signalling Point Codes (SPCs) necessary for the interconnection of the ECNs.

3. GRADE AND QUALITY OF SERVICE

- 3.1 In order to ensure system performance compatibility, the grade of service of both of the ECNs as seen from the interface between the two, shall be planned so as to give an average (calculated over a period of a week) probability that not more than 3% of Call attempts encounter congestion.
- 3.2 Routes carrying traffic between the ECNs in either or both directions shall be designed to operate at a busy hour grade of service of 0.008 subject to the route dimension giving a grade of service of 0.02 at 10% traffic overload and a grade of service of 0.05 at 20% overload. Only under extreme failure conditions should the ECNs not process all of the Calls offered. Sequential circuit selection mechanism will be employed on bothway routes. The direction of the selection process at either end of the link will be determined by agreement.

3.3 The parameters in the table below are intended to be the objectives for circumstances where all circuits forming a traffic route between the two ECNs are available to carry traffic.

Performance parameter	Direction	Originating Network (info only)	Interconnect Route (agreed objective)	Terminating Network (info only)
Mean busy hour blocking	the Licensee	0.03	0.008	0.03
probability	to Telkom	0.03	0.008	0.03
Probability of call failure due to network equipment malfunction (excluding	the Licensee to Telkom	0.002		0.002
premature release)	Telkom to			
	the Licensee	0.002		0.002
Probability of call failure due to premature release caused by network	the Licensee to Telkom	0.02		0.02
equipment malfunction	Telkom to the Licensee	0.02		0.02

ROUTING AND NUMBERING

1. ROUTING PRINCIPLES

1.1 Normal Conditions

Under normal conditions the Parties shall route all Calls across the POI nearest to where such calls originated.

1.2 Abnormal Conditions

The re-routing of traffic under abnormal conditions will be according to the alternate routing indicated in the routing tables supplied by the Parties. The Parties shall inform each other of such re-routing undertaken in the event of severance of routes. When only a portion of a route has failed, traffic should continue to be offered to the remaining portion of that route before overflowing to latter choice routes. In the event of the available capacity on the designated alternative routes being insufficient to handle all the overflow traffic, the Parties shall contact one another to seek agreement to route the remainder of the traffic through its own ECN to an alternative POI. The predefined prescribed arrangements and details of the information to be handed over in such an event, will be encompassed in a document to be drawn up at the Operation and Maintenance meetings provided for in Appendix 6. In the event that the predefined routing arrangements for abnormal conditions cannot be implemented, due to exceptional circumstances, details of the alternative arrangements that are to be implemented must be supplied.

1.3 Route Diversity and Security Arrangements

- 1.3.1 For reliability, signalling links shall be provisioned over physically diverse transmission paths where such diversity exists. Any deviation from this rule shall be negotiated between the Parties.
- 1.3.2 The minimum number of links per link set shall be two. Any number of links per link set, however, exceeding two shall be negotiated between the Parties. All circuit conditioning equipment such as PADS, voice compression equipment and echo cancellers must be removed from the signalling links.

2. NUMBERING

2.1 Calls Originating on One ECN and Terminating on the Other

- 2.1.1 The POIs will be configured to forward pass numbers in the format AB X, where
 - "AB" is the national destination code allocated to and utilised by either Party; and
 - "X" can be any digit, i.e. any numeral from 0 to 9, and any number of digits.
- 2.1.2 All dialled digits will be passed across the interface between the ECNs.

2.2 Other Calls

Should the need arise for Calls other than those provided for in paragraph 2.1 to be passed across a POI, e.g. as might occur when traffic merely transits one or both of the ECNs, the Parties shall consult with each other and agree on the format of the numbers to be forward passed.

2.3 Calling Line Identification

- 2.3.1 The Parties shall forward to each other across the POIs the individual subscriber numbers of their Customers, irrespective of whether their Customers have restricted the forwarding thereof.
- 2.3.2 A number of a Customer who has restricted the forwarding thereof shall be forwarded in a restricted mode and utilised by the Party receiving it for internal technical purposes only. Where such a restriction has been correctly communicated to the other Party, the Party receiving such number shall under no circumstances permit or enable in any way such number to be forwarded and/or presented on any Terminal Equipment within its ECN and shall, in addition, not make available such number to any third party; unless authorised thereto in writing by the other Party.

OPERATION AND MAINTENANCE PROCEDURES RELEVANT TO THE INTERFACE BETWEEN THE PARTIES' ECNS

1. INTERCONNECTION SERVICE DESK (ISD)

It being essential that any malfunctioning of the Interconnection be rectified promptly and efficiently, each Party shall establish an ISD to which all matters relevant to the proper functioning of the Interconnection (generally of a technical nature) are to be reported. Each ISD shall:

- 1.1 be staffed on a 24-hour basis and equipped with the necessary infrastructure to facilitate efficient communication (contact details are to be updated by the Parties as and when changes occur);
- 1.2 offer its full assistance to the other for the rectification of Interconnection Outages and other faults;
- 1.3 be responsible for processing reported Interconnection Outages and other faults using its own procedures;
- 1.4 function as the traffic controlling party for the circuit on which it loads outgoing traffic; and
- 1.5 be used as the contact point for any inter-service assistance required.

2 FAULT HANDLING AND RECTIFICATION PROCEDURES

2.1 Unplanned Interconnection Outages

Upon detection of an unplanned Interconnection Outage, the Parties shall immediately notify each other. At the time of notification the Outage could have ceased to exist or could still be persisting. In cases where the Outage has ceased to exist, the Parties will note the occurrence, duration and details of the failure. In cases where the Outage is persisting, immediate action shall be taken to localise the fault causing the failure and to identify the Party responsible for clearing the fault (should this have been unclear at first). The Parties shall thereafter and until full restoration of service informs each other at mutually agreed upon intervals, of the progress of the repair.

Once full service has been restored the Parties will note the Outage duration and details of the failure.

2.2 Planned Interconnection Outages

Planned Interconnection Outages shall be kept to an absolute minimum and shall not be carried out during busy traffic times. The Party planning such an Outage shall inform the other Party 7 (seven) days in advance (by mutual agreement this time scale may be reduced) and agree upon a suitable time and expected duration for such an Outage. If the planned Outage does not directly affect the other Party, such other Party shall nevertheless be informed of the planned time and duration of the Outage. During a planned Outage the responsible Party shall, at regular intervals and until full restoration of service, inform the other Party of the progress. Once full service has been restored the Parties will note the Outage duration. If full service is not restored within the expected duration, the Outage will be regarded as an unplanned Outage (occasioned by a planned Outage) and the procedure above for dealing with unplanned Outages will be followed.

2.3 Outage and Fault History

Each Party shall maintain records, preferably in electronic format, containing details of all Interconnection Outages and other faults and the corresponding restoration times which were handled between it and the other Party for a running twelve month period. These records should be used to assess the fault performance of the Interconnection.

3. MAINTENANCE PROCEDURES

3.1 Maintenance Methodology

It is accepted that certain scheduled and unscheduled maintenance actions will be carried out by the Parties on the items comprising the Interconnection. Where such actions could affect the proper functioning of the Interconnection, e.g. when work is to be performed on critical centralised equipment, the other Party shall be informed accordingly. In the case of scheduled maintenance, the schedule of critical activities shall be made available to the other Party in advance; it will, however, not be necessary to inform such Party of the completion of such activities. If the maintenance action results in an Interconnect Outage, the procedure provided for in paragraph 2 shall be followed.

3.2 Routine Testing

The Parties shall supply each other with test numbers to be used for test calls in order to do routine testing of the Interconnection circuits. Artificial traffic generators shall be used in such a way so as not to unduly load the POIs.

3.3 System and Circuit Identification

Each Party shall communicate to the other generic system and circuit identification for mapping to its own generic system and circuit identification scheme.

3.4 Interconnection Circuit Utilisation Details

The Parties may, where required, exchange records of utilisation and Call connection performance over the interface to ensure that the service over the interface is maintained at satisfactory levels. Information regarding planned dates for route augmentation shall also be exchanged between the Parties whenever necessary.

3.5 Malicious Call Tracing

Authorised malicious call tracing may be requested by either of the Parties and the other Party shall give priority to such a request.

4 OTHER ISSUES

4.1 Escalation Procedure for Operational Matters

In all cases of Interconnection Outages or interaction between the Parties concerning operation and maintenance activities, the following agreed escalation procedure shall apply.

4.2 FAULT CATEGORY DEFINITIONS

Definition of a Service Affecting Fault:

A "service affecting" fault is one that directly or indirectly affects traffic flow or reduces the level of service provided to Telkom or the Licensee or their Customers.

Fault Categories:

Fault	Fault Description:
Category:	,
1	Critical
·	Requires immediate attention.
	Any unplanned failure, persisting for longer than 10 seconds, which is
	characterized by complete inability to perform all required functions of any
	item in the interconnection. As a result, Telkom and/or the Licensee's
	customers cannot make calls, complete or receive calls, one-way speech or
	no speech conditions are being experienced.
	Any failure that affects more than 15% of the total number of ports.
	Failures that reduce the ingress or egress GOS by more than 50%.
	Severely degraded speech quality.
	For calls to remain at Category 1, Telkom and the Licensee Level 2 support
	staff with the necessary knowledge and experience to solve system faults
	must continuously and actively pursue service restoration activities until
	restoration is achieved.
	SME's need to be available on-line and on-demand, continuously until the
	fault is restored should their participation and cooperation be required to
	troubleshoot, locate and correct faults.
2	Major
	Attention required as soon as possible.
	Any faults that impact the service to customers in a significant way.
	Difficulties encountered in reaching specific destination(s), where there has
	been a reduction in the GOS by more than 15%.
	Degraded speech quality.
	For calls to remain at Category 2, Telkom and the Licensee Level 2 support
	staff with the necessary knowledge and experience to solve system faults
	must continuously and actively pursue service restoration activities during
	normal business hours until restoration is achieved.

Fault	Fault Description:
Category:	
3	Minor
	Attention required within 48 business hours.
	Any fault that is not service or revenue affecting.
	System functionality is impaired, but the conveyance of calls can continue with little or no inconvenience to customers.

4.3 FAULT RESOLUTION TIMES

For the transport of Carrier of Carrier service, the Licensee and Telkom make use of their own infrastructure and that of third parties. Therefore, fault resolution time is also dependent on the times delivered by third parties.

	Telkom	the Licensee
Fault	Target Fault Resolution Time:	Target Fault Resolution Time:
Category:	(Fault in Telkom Network)	(Fault in the Licensee Network)
1	Four hours	Four hours
2	Eight hours	Eight hours
3	Forty eight hours	Forty eight hours

Note:

Both parties will use reasonable endeavours to meet the above restoration times. However, there may be occasions when these times cannot be met, e.g. transmission cable failure, major network fault in either operator's network or in that of third parties. Instances where the above times have not been met are to be closely monitored and statistics maintained.

4.4 FAULT REPORTING HIERARCHY

	Telkom	the Licensee
FAULT REPORTING	Telkom ISD	
	Uniweb or 0800112287	
FIRST LEVEL	Specialist on duty: Telkom ISD	
ESCALATION	0800112287	
SECOND LEVEL	Manager: Telkom ISD	
ESCALATION	Luis de Nobrega: 012 680 6451	

THIRD LEVEL	Senior manager: ISD	
ESCALATION	Franco Ragghianti: 012 680 6455	
FOURTH LEVEL	Executive: Wholesale Service	
ESCALATION	Operations	
	Marna Wilden: 012 680 8155	

4.5 FAULT ESCALATION

The intention of fault escalation is to raise awareness of faults within Telkom and the Licensee management on a peer-to-peer hierarchical basis to ensure that the appropriate levels of resources are directed towards fault resolution.

4.6 FAULT ESCALATION CRITERIA

Fault Escalation Criteria:

Fault is not repaired within the agreed time frame.

The agreed time frame is mentioned in "Fault escalation Matrix".

All escalations between parties are to be made by the appropriate representative of the party escalating; e.g. if the reporting party requires a level 3 escalation it is expected that the reporting party's level 3 representative will contact the other parties.

4.7 TELKOM FAULT ESCALATION MATRIX

Escalation	Telkom Management	Fault Category Escalation Matrix		on Matrix
Level				
		Category	Category	Category
		1	2	3
1	Specialist on Duty: ISD	30 Min	2 Hours	Once a day
2	Manager: ISD	2 Hours	6 hours	After 3 days every day

3	Senior Manager: ISD	3 hours	8 hours	After 4 days
4	Executive: Wholesale	4 hours	1 day	After 5 days
	Service Operations			

4.8 FAULT ESCALATION MATRIX

Escalation Level	the Licensee Management	Fault Category Escalation Matrix		
		Category	Category	Category
		1	2	3
1	ISD Co-ordinator	30 Min	2 Hours	Once a day
2	Network Operations Centre (NOC) Supervisor	2 Hours	6 hours	After 3 days every day
3	NOC Manager	3 hours	8 hours	After 4 days
4	General Manager: Network Operations	4 hours	1 day	After 5 days

Office hours are from 7:30 -17:00 hours on a working day, Monday to Thursday and 7:30 to 16:30 on Fridays, except on public holidays.

4.9 Software Upgrades/Modifications

4.9.1 To ensure that there are no interworking problems, software enhancements shall, prior to the introduction thereof into an active exchange, be introduced and tested between the Parties at a test exchange. A minimum of two weeks written notice shall be given before testing can commence.

4.9.2 Unless otherwise agreed in writing between the Parties, a 30 (thirty) day lapse is required between a software upgrade in any MSC or switching unit and the general release into the rest of the ECN.

4.9.3 A controllable number of software patches should be activated in any 24-hour period on the same switching unit. The testing of such patches will be by agreement in writing. All applications and tests shall be done between 22h00 and 05h00 or during such other low traffic periods as may be agreed.

4.10 Operation and Maintenance meetings

Whenever required, but not less frequently than every six months, meetings are to be held between the ISDs in order to review the general performance of the Interconnection, information exchanges, the procedures provided for herein and/or any other relevant matters.

INTERCONNECTION FEES

1. Interconnection Fees payable to the Licensee

	Rate group	Applicable hours	Rate per minute
1.1	Peak	Mondays to Fridays 07:00 to 20:00	R [as prescribed by the Authority (and accepted by Telkom) from time to time]
1.2	Off-peak	All hours other than peak rate group hours	R [as prescribed by the Authority (and accepted by Telkom) from time to time]

2. Interconnection Fees payable to Telkom

	Rate group	Applicable hours	Rate per minute
1.1	Peak	Mondays to Fridays 07:00 to 20:00	R [as prescribed by the Authority (and accepted by Telkom) from time to time]
1.2	Off-peak	All hours other than peak rate group hours	R [as prescribed by the Authority (and accepted by Telkom) from time to time]

END TO END CUSTOMER EXPERIENCE QUALITY SPECIFICATIONS

1. **DEFINITIONS**

- **ASR** = (Answer Seizure Ratio) ITU E.425 ASR represents the relationship between the number of seizures that result in an answer signal and the total number of seizures. ASR is measured by the operator on outgoing traffic on their gateway switch. By definition, this ASR cannot be measured by the carrier.
- **ABR** = (Answer BID Ratio) ITU E.425 ABR represents the relationship between the number of bids that result in an answer signal and the total number of bids. ASR is to be measured by the carrier on incoming traffic on their gateway switch. By definition, this ABR cannot be measured by the operator. ASR and ABR as described above may be comparable, since they are based on the same triggers on the interconnect, but just measured from a different side.
- 1.3 CLI = (Calling Line Identification) Calling Line Identification. Also known as "A number" is basic information contained in the signalling system that identifies the calling party.
 CLIP CLI Presentation provides for the calling user number to be displayed to the called user. CLIR CLI Restriction provides a means for the calling user to restrict presentation of its MSISDN to the called user.
- Quality Specifications are the minimum technical specifications agreed to by the Licensee and Telkom and required to support the desired customer experience for any Calls delivered to the Parties respective ECN's for transit or termination as defined in this Appendix.
- **PDD** = (Post Dial Delay) ITU E.431 PDD is the time interval between dialling completion and the call connection (ringing tone).
- **Transmission Delay** is the time interval for a signal to travel across the Originating ECN.

2. APPLICATION

Calls must comply with Quality Specifications over the end to end Originating ECN.

3. QUALITY SPECIFICATIONS

- 3.1 PDD
- 3.1.1 The PDD must meet the performance requirements in the following table.

Connection Service Type	Mean Value (Seconds)	95 th Percentile
the Licensee to Telkom	≤ 12	≤ 15
Telkom to the Licensee	≤ 9	≤ 12

- 3.2 Transmission Delay (Latency)
- 3.2.1 Subject to Clause 3.2.2, the one-way Transmission Delays must meet the requirements in the following table:

Network Portion	Latency (non-satellite connections)
Telkom to the Licensee	≤150ms
the Licensee to Telkom	≤150ms

- 3.3 Echo Control
- 3.3.1 Echo cancellers must be employed when the round trip delay exceeds 34 ms.
- 3.3.2 Partners who operate an ECN must provide echo cancellers within their networks for both call directions.
- 3.4 Synchronisation and Slip
- 3.4.1 The Slip performance of a 64 kbit/s connection must meet the requirements specified in the following table.

Performance	Mean Slip Rate	Proportion of Time (Total	
Category		time ≥1 year)	

А	≤ 5 slips in 24 hours	≥ 98.9%	
В	≥ 5 slips in 24 hours <1%		
	≤ 30 slips in 1 hour		
С	> 30 slips in an hour	in an hour <0.1%	

3.5 CLI

3.5.1 Subject to clause 2.6.2, all Calls must include the CLI of the Calling Party in accordance with the following table.

Message Origination	Average Messages with Calling Party CLI	95 th Percentile
the Licensee	99.8%	99.9%
Telkom	99.8%	99.9%

3.6 ASR and ABR

Monthly average ASR %	Weekly average ASR %	Monthly average ABR %	Weekly average ABR %
90	90	90	90