

REFERENCE INTERCONNECT OFFER

GTT Legal Framework 3.0

February 24, 2023

TABLE OF CONTENTS

	Page
1. Interpretation and Construction	2
2. Duration	3
3. Interconnection	3
4. Limitations on Services.....	6
5. Forecasting, Ordering and Provisioning of Interconnect Capacity.....	8
6. Testing.....	8
7. Operation and Maintenance	8
8. System Changes	9
9. Telecommunication Services	9
10. Charges and Payment.....	10
11. Taxes	12
12. Variation of Charges	13
13. Security Deposit.....	14
14. Numbering	15
15. CLI	16
16. Performance Measures and Standards	16
17. Safety and System Protection	17
18. Prevention of Fraud.....	18
19. Bypass Operations	18
20. Unagreed Traffic.....	19
21. Confidentiality	20
22. Use of Customers' Information	22
23. Intellectual Property Rights; Licences	22
24. Publicity; Trade and Service Marks.....	23
25. Authorised Representatives	24
26. Review and Amendment.....	24
27. Suspension and Termination.....	25
28. Effects of Termination	27
29. Force Majeure	27

**REFERENCE INTERCONNECT OFFER
GTT LEGAL FRAMEWORK 3.0**

30.	Limitation of Liability.....	29
31.	Disclaimer of Representations and Warranties.....	32
32.	Indemnity	33
33.	Relationship of the Parties	35
34.	Representations of the Parties.....	36
35.	Severability	37
36.	No Waiver.....	37
37.	Entire Agreement	38
38.	Assignment	38
39.	Subcontracting	39
40.	Notices	39
41.	Dispute Resolution.....	40
42.	[Section Intentionally Omitted]	43
43.	Insurance	43
44.	Regulatory Approval.....	44
45.	Governing Law and Venue	44
46.	Compliance	44
47.	Law Enforcement.....	45
48.	Cooperation.....	45
49.	Conflict of Interest	45
50.	Counterparts.....	46

THIS LEGAL FRAMEWORK AGREEMENT

is made this ____ day of _____, ____

BY AND BETWEEN

[LEGAL NAME] (“Telco”),

a company organized and existing under the laws of Guyana,
having its registered office at [Legal Address];

and

**GTT Inc., formerly known as Guyana Telephone & Telegraph
Company Limited (“GTT”),**

an entity duly incorporated and existing under the laws of Guyana,
having its registered office at 79 Brickdam, Stabroek, Georgetown,
Guyana.

RECITALS

A. WHEREAS, pursuant to sections 23 and 93(4)(b) of the Telecommunications Act of 2016 (Act No. 18 of 2016 (the “Telecommunications Act”)), the Minister has granted Telco licences to own and operate certain facilities in Guyana and to provide certain domestic telecommunications services and facilities to the public;

B. WHEREAS, pursuant to sections 23 and 93(4)(b) of the Telecommunications Act, the Minister has granted GTT licences to own and operate certain facilities in Guyana and to provide certain domestic telecommunications services and facilities to the public;

C. WHEREAS, pursuant to such licences and to the provisions of the Telecommunications Act, Telco is entitled to connect its public network to and with GTT and GTT is entitled to connect its public network to and with Telco, in accordance with the Telecommunications Act; and

D. WHEREAS, Telco and GTT have requested to directly interconnect to and with the facilities and to and with the network of the other Party for the exchange of Domestic Traffic and Domestic Roaming Traffic upon the terms and conditions contained in this Agreement;

E. WHEREAS, pursuant to section 41(a) of the Telecommunications Act, Telco and GTT agree to allow the other Party to directly interconnect to and with its facilities and to and with its network for the exchange of Domestic Traffic and Domestic Roaming Traffic upon the terms and conditions contained in this Agreement.

E. NOW, THEREFORE, in consideration of the covenants and the consideration contained herein, which consideration is expressly agreed to by the Parties to be legally sufficient, the Parties hereby agree as follows:

1. Interpretation and Construction

1.1 The Parties agree that the foregoing recitals are an integral part of this Agreement and are incorporated herein by this reference.

1.2 In this Agreement, unless the context otherwise requires or explicitly states otherwise, the terms used shall have the meanings assigned to them in Annex A (Definitions) and in Annex D (Joint Working Manual) of this Agreement.

1.3 For purposes of this Agreement, certain terms have been defined in this Agreement to encompass meanings that may differ from, or be in addition to, the normal or ordinary connotation of the defined word. A defined word intended to convey its special meaning is capitalized when used. Other terms that are capitalized and not defined in this Agreement will have the meaning in the Telecommunications Act, or in the absence of their inclusion in the Telecommunications Act, their customary usage in the telecommunications industry as of the Effective Date.

1.4 In this Agreement, unless the context otherwise requires or explicitly states otherwise:

1.4.1 The singular includes the plural and vice versa;

1.4.2 The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation” and/or “but not limited to”;

1.4.3 The words “will” and “shall” are used interchangeably throughout this Agreement and the use of either connotes a mandatory requirement;

1.4.4 Reference to an agreement or other instrument, inclusive of this Agreement, includes any variation or replacement;

1.4.5 References in this Agreement to either Party shall include any legitimate successors or assigns of that Party pursuant to Section 38 (Assignment).

1.4.6 All references to GYD or GY\$ or other payable amounts refer to the Guyanese Dollar unless otherwise stated, and all references to USD or US\$ refer to the United States Dollar;

1.4.7 If a day on which payment of money falls due is not a Business Day, the Bill Due Date for such payment shall be deemed to be the next following Business Day;

1.4.8 Reference to any statute, ordinance, code or other Law includes regulations and other instruments under it and any consolidations, amendments, re-enactments or replacements thereof at any time.

1.5 The headings and numbering of any sections or annexes to this Agreement are for convenience only and shall not be construed to define or limit any of the terms herein or affect the meaning or interpretation of this Agreement.

1.6 In the event of any inconsistency between this Legal Framework, Annexes, and any other attachments, this Legal Framework shall prevail first, then the Annexes shall prevail. In any other event of an inconsistency between or among the Annexes and any other attachments, the following priority shall apply in order of priority:

- 1.6.1 Annex A (Definitions);
- 1.6.2 Annex B (Services);
- 1.6.3 Annex C (Rate Schedule);
- 1.6.4 Annex D (Joint Working Manual); and
- 1.6.5 Any other attachment.

2. Duration

2.1 This Agreement takes effect on the Effective Date and, subject to Section 27 (Suspension and Termination), continues in full force and effect for an initial period of three (3) years (the “Initial Period”), and after expiration of the Initial Period, the Agreement shall, subject to Section 2.2, automatically renew for successive one (1) year periods (each a “Successive Period”) until Terminated. During the Initial Period and any Successive Periods, the Agreement may be Terminated in accordance with Section 27 (Suspension and Termination), or otherwise varied in accordance with Section 26 (Review and Amendment), or replaced by a new, fully-executed agreement which specifically recites that it replaces this Agreement. In the event of any variation by agreement of the Parties pursuant to Section 26 (Review and Amendment), the Agreement as amended shall continue in full force and effect until Termination.

2.2 Either Party may provide written Notice to the other Party no later than one hundred (100) calendar days prior the end of the Initial Period or the end of any Successive Period that the Party does not desire to continue the Agreement for a Successive Period. In the event that a Notice is provided pursuant to this Section 2.2 then, subject to Section 2.3, the Agreement shall Terminate at the end of the then-current Initial Period or Successive Period.

2.3 Following any Notice provided by either Party pursuant to Section 2.2, the Parties shall engage in good faith negotiations to replace this Agreement with a new, fully-executed agreement. In the event that no new agreement is reached prior to the end of the then-current Initial Period or Successive Period, this Agreement shall Terminate. Following Termination, neither Party shall be obliged to continue to provide Services, unless specifically required by applicable Law, and neither Party shall be obligated to provide Services at the Charges described in this Agreement. For the avoidance of doubt, Termination under this Section of the Agreement shall be without prejudice to any rights accrued prior to Termination and any provision, which is expressly stated not to be affected by, or to continue after, such Termination.

3. Interconnection

3.1 Subject to the provisions of this Agreement, the Parties shall connect to and keep connected to the other Party’s System in the manner described in this Agreement in order to

convey the Traffic described in Annex B (Services) through an Interconnection Link; *provided that* each Party's System and the Interconnection Links are suitable for the conveyance of the Services described in Annex B (Services), and that each Party ensures that all necessary Equipment and Facilities for the Interconnect conforms to the technical requirements in Annex D (Joint Working Manual). For clarity, Services under this Agreement shall solely be provided on Interconnection Links provided by either Party in accordance with this Legal Framework, Annex B (Services), and Annex D (Joint Working Manual), and shall be subject to the Charges set forth herein and in the Annex C (Rate Schedule).

3.2 Each Party agrees to segregate Traffic through separate Interconnects between the Parties by: (i) Service in Annex B (Services), unless the Traffic is Domestic Traffic originated by a Mobile end user in Guyana using the other Party's international roaming services on the Party's PLMN in Guyana ("Roaming Traffic"), then the Parties shall segregate the exchange of Domestic Roaming Traffic on separate Interconnects; and (ii) the direction of Traffic (*i.e.* in-bound or out-bound); *provided that*, until six (6) months following the Effective Date, each Party may maintain unsegregated Traffic through all Interconnects between the Parties during a transition period (the "Segregation Transition Period"). The Parties agree to work cooperatively during the Segregation Transition Period to effectuate the segregation requirements of this Section 3.2 and agree that, upon written Notice, either Party may extend the Segregation Transition Period for a timeframe of three (3) months. Following the Segregation Transition Period, in the event that a Party conveys to the other Party any Traffic of a type which is not segregated for that Traffic type or which is not segregated for that direction of Traffic ("Misrouted Traffic"), and the other Party receives any Misrouted Traffic which results in a successful delivery, then the Parties agree that the rate for such Misrouted Traffic shall be equal to the rate identified in Annex C (Rate Schedule) plus US\$0.07 for administrative fees for each 60 seconds of a Call, and be equal to Annex C (Rate Schedule) plus US\$0.07 for administrative fees for each SMS. The Parties agree that this rate reflects the additional operational activity associated with receiving the Misrouted Traffic. As soon as practical following discovery of the Misrouted Traffic, the Party receiving the Misrouted Traffic will notify the other Party about the nature of the Misrouted Traffic.

3.3 For an Interconnect that convey Traffic associated with a Service provided by Telco to GTT or that conveys Traffic from GTT's System to Telco's System (regardless of the Traffic's origination or termination), GTT shall provide the Interconnection Links to Telco.

3.4 For an Interconnect that conveys Traffic associated with a Service provided by GTT to Telco or that conveys Traffic from Telco's System to GTT's System (regardless of the Traffic's origination or termination), Telco may elect either (i) to provide the Interconnection Link through its own Facilities and Equipment or through the Facilities and Equipment of a Third Party preapproved by GTT, or (ii) for GTT to provide the Interconnection Link through its Interconnection Link Service. To the extent that Telco elects to provide an Interconnection Link using its own Facilities and Equipment or through the Facilities and Equipment of a Third Party preapproved by GTT, Telco shall ensure that all necessary Equipment and Facilities for the Interconnect conforms to the technical requirements in Annex D (Joint Working Manual). For the avoidance of doubt, and without in any way restricting any other breaches of this Agreement being deemed to be material breaches, any failure by a Third Party to provision the Interconnect

Link Service in accordance with the requirements set out in this Section 3 and in Annex D (Joint Working Manual) (other than as a result of an act or omission of GTT) shall constitute a material breach by Telco of its obligations under this Section 3.4.

3.5 Upon execution of the Agreement, by written Notice and, thereafter upon reasonable prior written Notice of a changed election (with such Notice received at least ninety calendar days prior to the change), Telco shall inform GTT of its election pursuant to Section 3.4 as to each Interconnection Link by Service.

3.6 All Interconnection Links shall be established between the Parties at an existing Interconnect Location, the specific location of which is set forth in Annex D (Joint Working Manual). Interconnects shall be used solely for Services, a list of which is set forth in Annex B (Services).

3.7 For Interconnection Links provided by GTT, the Point of Connection between GTT's System and Telco's System will be at a fibre panel located at the Interconnection Location described in Section 3.6. For Interconnection Links provided by Telco, the Point of Connection between GTT's System and Telco's System will be a fibre panel located at the Interconnection Location described in Section 3.6.

3.8 For Interconnection Links provided by GTT, GTT shall be responsible for the installation, provision, maintenance, cost, and decommission (if decommission is applicable) of Interconnection Links up to but excluding the Joining Box, and the fibre panel therein, at Telco's end of the Interconnection Link; the Joining Box, and the fibre panel therein, for GTT-provided Interconnection Links will be installed, provisioned, maintained, paid for, and decommissioned (if decommission is applicable) by Telco. For Interconnection Links provided by Telco, Telco shall be responsible for the installation, provision, maintenance, cost, and decommission (if decommission is applicable) of Interconnection Links up to but excluding the Joining Box, and the fibre panel therein, at GTT's end of the Interconnection Link; the Joining Box, and the fibre panel therein, for Telco-provided Interconnection Links will be installed, provisioned, maintained, paid for, and decommissioned (if decommission is applicable) by GTT. All Joining Boxes shall be for the exclusive use of the Parties' Interconnection Links established by any agreement between the Parties. Except for permitted subcontractors and agents, both Party shall limit access to the Joining Boxes provided for Interconnection Links.

3.9 To extent reasonably necessary for the Interconnection Links, Telco shall permit, and hereby consents to, GTT's access to the Telco-provided Joining Box, but solely as is necessary to install, provision, maintain, or decommission (if decommission is applicable) any of GTT's Equipment, Facilities, and optical fibre for the Interconnection Links to the Telco-provided Joining Box, upon reasonable prior Notice. To extent reasonably necessary for the Interconnection Links, Telco shall permit, and hereby consents to, Telco's access to the GTT-provided Joining Box, but solely as is necessary to install, provision, maintain, or decommission (if decommission is applicable) any of GTT's Equipment, Facilities, and optical fibre for the Interconnection Links, upon reasonable prior Notice.

3.10 If a Party is required to provide a Joining Box and fibre panel in Section 3.8 for the other Party's Interconnect Link (in this clause, the "Providing Party"), the Providing Party

may choose, in its sole discretion, to provide the fibre panel within the building located at the address of the Interconnection Location in lieu of providing the fibre panel in a Joining Box. If the Providing Party elects to provide the fibre panel within the building located at the address of the Interconnection Location, the Providing Party shall permit, and hereby consents to, the other Party's access to the Providing Party's premises, but solely as is necessary to install, provision, maintain, or decommission (if decommission is applicable) any of the its Equipment, Facilities, and optical fibre for the Interconnection Links, upon reasonable prior Notice. Where a Party's Equipment or Facilities are located on the premises of the other Party, the Party (on whose premises the Equipment or Facilities are located) will provide a secure and suitable environment for the Equipment or Facilities and shall not in any way adjust, alter, modify or tamper with the same without the consent of the other Party.

3.11 To the extent either Party desires access on the premises of the other Party's Interconnect Location beyond the scope permitted by this Section 3, the Party requesting access must adhere to the requirements of Section 17.2.

3.12 Nothing in this Agreement shall be taken as requiring a Party to share Facilities or to provide co-location space or Equipment.

3.13 The Parties agree that the Services in this Agreement shall not be provisioned over Session Initiation Protocol ("SIP") connections through the Interconnects subject to this Agreement.

3.14 Each Party is individually responsible for the cost to provide any and all Facilities and Equipment within its System, including as to Interconnection Links it provides up to the other Party's Joining Box, that are necessary for routing, transporting, measuring, and billing of Services to and from that Party's System to and from the other Party's System.

3.15 Each Party shall ensure that it routes, transports, measures, and bills Services in the standard format compatible with Annex D (Joint Working Manual), and shall ensure that it terminates the Traffic it receives in that standard format to the proper address on its System.

3.16 In the event an Interconnection Link has excess capacity, either Party may terminate capacity within an Interconnection Link following reasonable prior written Notice; however, there shall always be at least one E1 Interconnection Link set between the Parties for each Service, for each particular direction of Traffic, and for Roaming Traffic.

3.17 The Parties agree it will not use or deploy in the Interconnection Link between the Parties any services or Equipment, manufactured or provided, by Huawei Technologies Company (Huawei), ZTE Corporation (ZTE), PacNet/ComNet, China Unicom, or any other entities identified as a covered entity pursuant to the U.S. Secure and Trusted Communications Networks Act of 2019.

4. Limitations on Services

4.1 A Party (in this clause, the "First Party") may refuse to provide or continue to provide Services to the other Party if:

4.1.1 The First Party has not received evidence reasonably satisfactory to the First Party that the other Party has a valid telecommunications licence that permits it to provide telecommunications services in Guyana, to operate a telecommunications network in Guyana, and to interconnect with the First Party and to provide a specific Service described in Annex A (Services);

4.1.2 The First Party has not received evidence reasonably satisfactory to the First Party that the other Party has made its System operational and performed its obligations under any testing procedure relating to any specific Services;

4.1.3 The First Party has not received evidence reasonably satisfactory to the First Party that the other Party operates a telecommunications network that provides telecommunications services to the public in Guyana; or

4.1.4 The other Party has not delivered a security deposit or bank guarantee, if required, in accordance with the requirements set out in the Section 13 of this Agreement, if demanded by the First Party.

4.2 For the avoidance of doubt, and notwithstanding the Interconnect of the Parties' Systems, the Parties shall not convey to the other Party's System, and shall not have an obligation to convey any Traffic, or continue to convey Traffic, of any category, unless there is an express provision to convey that category of Domestic Traffic as a Service in Annex B (Services) and in Annex C (Rate Schedule).

4.3 To the extent that the Parties desire to interconnect for services excluded from this Agreement, including for Traffic originating or terminating internationally, either Party shall request such services through separate agreements or through separate legal frameworks which incorporate service descriptions that are not incorporated into this Agreement. For clarity, the Services provided in this Agreement are limited solely to the Services, and do not include Traffic originating or terminating internationally. Neither Party shall be obligated to provide a service that is not recited in Annex B (Services).

4.4 Each Party shall be solely responsible for the switching and routing of all Services on its System and shall not be liable for telecommunications services, products, or services that are outside all categories described in Annex B (Services).

4.5 Each Party is solely responsible for all products and services it provides to its Customers and to Third-Party Telecommunications Providers.

4.6 Unless otherwise expressly agreed in the writing by the Parties, the Charges payable by one Party (in this clause, the "First Party") to the other Party (in this clause, the "Second Party") for a Service shall be the same as the Charges payable by the Second Party to the First Party for the same Service ("Principle of Charge Reciprocity"). In the event that a Party's Charges for a Service are varied pursuant to Section 12, following written Notice, the other Party may vary its Charges by the same amount for the same Service to reflect the Principle of Charge Reciprocity pursuant to Section 12.4.

5. Forecasting, Ordering and Provisioning of Interconnect Capacity

5.1 The Parties will exchange technical descriptions and Forecasts for each Service recited in Annex B (Services) in accordance with the procedures set out in Annex D (Joint Working Manual), and will comply with all the applicable provisions in Annex D (Joint Working Manual) relating to Forecasts.

5.2 The Parties will order and provision capacity in accordance with the procedures set out in Annex D (Joint Working Manual) and will comply with all applicable provisions in Annex D (Joint Working Manual) relating to ordering and provisioning.

5.3 In accordance with Annex D (Joint Working Manual), the Parties agree that the technical descriptions and Forecasts for each Service will be provided in sufficient detail necessary to establish the Interconnects required to assure Traffic completion in their respective designated service areas.

6. Testing

6.1 The Parties will carry out the testing procedures contained in Annex D (Joint Working Manual), or as agreed by both Parties in writing, including but not limited to Acceptance Testing, commissioning procedures, and testing specification plans.

7. Operation and Maintenance

7.1 Subject to Section 5 (Forecasting, Ordering and Provisioning of Interconnect Capacity), each Party shall be responsible for planning, providing, operating, paying for, and maintaining all Equipment and Facilities located on its side of the Interconnection Links.

7.2 Each Party shall manage Traffic on its System so as to avoid disruption to the other Party's System to the maximum extent reasonably practicable and each Party shall take all necessary steps as are reasonably practicable to minimise service failures and congestion and signaling system disturbances within its own System which would affect the ability of the other Party to carry Services across such other Party's System in accordance with the routing principles set out in the Joint Working Manual in Annex D (Joint Working Manual).

7.3 Each Party shall advise the other Party of any Faults or planned maintenance which may impact the Services in accordance with the procedures set out in Annex D (Joint Working Manual) and shall resolve the Faults or conduct the maintenance in accordance with the Annex D (Joint Working Manual).

7.4 Each Party may make reasonable tests and inspections of any Facilities and Equipment it provides to the other Party, if any, and may upon reasonable advance written Notice temporarily interrupt Services being tested or inspected in accordance with the provisions of Annex D (Joint Working Manual) relating to planned maintenance. Where a test or inspection will affect Traffic on the other Party's System, the testing or inspection shall be carried out in such a way as to minimise disruption to each Party's System.

8. System Changes

8.1 Either Party shall notify the other Party of developments within its System that may impact on the provision of Services to the other Party upon finalization of a decision to make such a change. Such Notice shall be in advance, in writing, and shall be reasonable given the nature of the proposed development and potential impact on the provision of the Services.

8.2 Neither Party shall make or permit to be made any alteration, adjustment or addition to its System in such a way as to materially impair the operation of the other Party's System or otherwise to materially affect the conveyance of Services over an Interconnect unless the Party provides reasonable prior written Notice to enable the other Party to make modifications or upgrades to its own System which are necessary to maintain the Interconnect at the agreed standards. Each Party shall take appropriate and reasonable steps to minimize the impact on the other Party of such alteration, adjustment or addition (including but not limited to costs).

8.3 In the event that, at any time, either Party proposes to change any standards or implement additional standards or standards with different features which may materially affect the operation of the other Party's System, the Party shall so notify the other Party as soon as practicable and in any event at least six (6) months in advance, so that the other Party has a reasonable opportunity to attempt to meet such standards or adjust its System accordingly. Each Party shall take appropriate and reasonable steps to minimise the impact on the other Party's Systems of such alteration, adjustment or addition (including but not limited to cost).

8.4 Subject to Section 8.2 and Section 8.3, nothing in this Agreement shall limit either Party's ability to upgrade its System through the incorporation of new Equipment, new Facilities, new software, or otherwise, or to change, in part or in whole, the design, function, operation or layout of its System.

8.5 The applicable standards of operation of each Party's System for the purpose of the Services will be those specified in Annex D (Joint Working Manual) and, in the absence of any specified standards, will be such applicable international standards as the Parties may agree.

8.6 The Parties agree that this Section 8 may not be used to modify the Interconnects to permit SIP connections between the Parties.

9. Telecommunication Services

9.1 Interconnects under this Agreement shall be provided solely for the conveyance of Services as described in Annex B (Services). Traffic subject to the Services must be originated either as Roaming Traffic or from a valid Guyanese telephone number issued for a Legitimate Use. For the avoidance of doubt, the provisions of Section 14 (Numbering) and Section 15 (CLI) apply to any such assigned number. For the purposes of this Section, a valid Guyanese telephone number is one which has been allocated by the Regulator for the purposes of assignment in Guyana under the Guyanese National Numbering Plan to a Person in Guyana.

9.2 Subject to the terms of this Agreement, each Party shall provide the other Party with the Services described in Annex A (Services), provided that each Party's System and the Interconnects are suitable for the conveyance of Services pursuant to the relevant Service descriptions. Subject to Section 16 (Performance Measures and Standards), the Services shall be provided in accordance with the Service descriptions in Annex B (Services) and with Annex D (Joint Working Manual).

9.3 For the avoidance of doubt, and notwithstanding the Interconnect between the Parties' Systems, neither Party shall convey to the other Party, nor have an obligation to convey Services of any category, unless the Parties have agreed to convey Services of that category pursuant to Annex B (Services).

9.4 Each Party shall be solely responsible for the switching and routing of all telecommunication services on its System and, subject to Section 18 (Prevention of Fraud) and Section 32 (Indemnity), neither Party shall be liable to the other Party for telecommunications services provided by a Third Party Telecommunications Provider. All Service switching and routing shall be consistent with the Service descriptions in Annex B (Services) and with Annex D (Joint Working Manual).

10. Charges and Payment

10.1 Each Party shall pay to the other Party the relevant Charges applicable to each Service, as described herein and in Annex B (Services), with the corresponding rate as more particularly described in Annex C (Rate Schedule). Each Party shall solely pay to the other Party only the relevant Charges for Services described in the Agreement.

10.2 Each Party shall render invoice(s) on a monthly basis to the other Party for the relevant Charges applicable to each Service, or for any other amounts expressed as being payable in accordance with the specific provisions of this Agreement, with sufficient detail to identify the nature of the Charges and the date the Charges accrued, with remittance by the Bill Due Date (which shall be determined according to this Agreement and printed on the invoice), at the applicable rates set forth in Annex C (Rate Schedule). All invoices shall be delivered via electronic mail to the email address indicated in Section 40 (Notices) with confirmation of received-receipt notification for use to establish the Deemed Receipt Date. Invoicing for a Joint Service, if any, shall be carried out in accordance with the relevant Service description in Annex B (Services) and all reasonable endeavours shall be used to ensure that all information necessary to produce a complete invoice for such Joint Services is obtained in a timely manner.

10.3 Each Party will use its reasonable best efforts to promptly render invoice(s) for current Charges outstanding for the prior month. However, any failure to deliver invoices in accordance with this Section 10, subject to Section 41 (Dispute Resolution), shall not be deemed to be a waiver of the invoicing Party's rights in respect of payment and shall not be deemed to be a breach of a material obligation; *provided however*, that a Party may not recover Charges from the purchasing Party if such Charges were not previously indicated on an invoice remitted to the purchasing Party and more than thirty-six (36) months have expired since the month in which the Charges accrued or in the last month in which the Charges accrued where assessed over a timeframe greater than the timeframe associated with an invoice.

10.4 Where appropriate, consistent with Section 11 (Taxes), any value added or other applicable Tax shall be detailed on the invoice associated the Services giving rise to the value added or other applicable Tax, and shall be denoted as a separate line item with sufficient detail for the Party receiving the invoice to ascertain the reason for the value added or other applicable Tax. Where a value added or other applicable Tax is assessed over a timeframe greater than the timeframe associated with an invoice, the value added or other applicable Tax shall appear on the last invoice associated with the Services associated with the value added or other applicable Tax.

10.5 Subject to Section 10.8 and Section 41 (Dispute Resolution), all Charges payable under this Agreement shall be payable no later than thirty (30) calendar days from the Deemed Receipt Date of an invoice (the “Bill Due Date”). “Deemed Receipt Date” shall mean the Business Day on which the invoicing Party receives a confirmation of the received-receipt of the emailed invoice or, if the invoicing Party receives a confirmation of the received-receipt of the emailed invoice on a non-Business Day, the first Business Day following receipt of the received-receipt of the emailed invoices. For clarity, the Business Day on which the invoicing Party receives a confirmation of the received-receipt of the emailed invoice is not counted for purposes of calculating the Bill Due Date.

10.6 Subject to Section 10.8 and Section 41 (Dispute Resolution), in the event that a Party fails to pay any amount due hereunder on or before the Bill Due Date, the invoicing Party, at its sole option: (i) may charge and receive annual interest at the base lending rate of the Republic Bank of Guyana from time to time in force plus two percent (2%), on the unpaid Undisputed Charges, from and including the day following the Bill Due Date until the date of payment in full (an “Interest Charge”); (ii) may assess a monthly late fee of one percent (1%) of the unpaid Undisputed Charges, from and including the day following the Bill Due Date until the date of payment in full (a “Late Payment Charge”); or (iii) may deduct any Undisputed Charges it is owed from any amount it owes to the other Party under any agreement or arrangement governing services performed in Guyana, upon at least seven (7) Business Days’ written Notice. For clarity, the Late Payment Charge and/or Interest Charge, with the exception of Section 13.2, shall only apply to the portion of the payment that is not received by the invoicing Party on or before the Bill Due Date and which has not been properly Disputed pursuant to Section 10.7 and Section 41 (Dispute Resolution). The assessment of the Late Payment Charge and/or Interest Charge shall appear on an invoice to the other Party in an amount solely determined by the invoicing Party.

10.7 Subject to Section 10.8 and Section 41 (Dispute Resolution), the Parties may pay invoices “Net” of the other Party’s invoice. For clarity, payment of “Net” invoiced amounts means that, if one Party is owed an amount to the other Party under this Agreement in the same monthly invoice timeframe, that Party may deduct the amount it is owed from its invoice under this Agreement to the other Party and pay only the “Net” amount. The requirement to issue a detailed invoice of Charges indicated in this Section 10 is not modified by this provision. Further, nothing in this Section 10.7 shall preclude either Party, upon at least thirty (30) days written Notice, from requiring that payments no longer be accepted on a “Net” basis.

10.8 In the event that either Party Disputes, in good faith, a specific amount of any invoice delivered by an invoicing Party under this Agreement, the Parties shall resolve the Dispute in accordance with the investigation and determination procedures set out in Section 41

(Dispute Resolution). Notwithstanding any Dispute as to any specific Charge, the Parties shall remain obliged to continue to observe and perform the provisions of this Agreement, including but not limited to the payment of all Undisputed Charges pursuant to Section 10.5 and the provision of Services. Any amount in Dispute shall, for the purposes of this Section, be deemed not payable pending resolution of the Dispute set out in Section 41 (Dispute Resolution); *provided however*, that nothing in this Section shall be taken as permitting a Party to withhold payment of an amount that is an Undisputed Charge, and that is not Disputed in good faith. A contention that the Party receiving the invoice no longer agrees with the Charges contained in this Agreement is not a good-faith Dispute unless supported by a written description of a Material Change in Law as part of the information required in Section 41 (Dispute Resolution). For the avoidance of doubt, where an invoice results in a payment that is partly in Dispute, the Undisputed Charge amount shall be paid on or before the Bill Due Date. Further, notwithstanding the reference of any Dispute investigation, if the amount in Dispute represents less than two percent (2%) of the cumulative total amount of all invoices between the Parties (excluding any value added or other applicable Tax) in a particular month, the invoiced amount shall be deemed due and payable in full on or before the Bill Due Date, but subject to a future invoice credit in accordance with Section 41.12, depending upon the result of the Dispute resolution procedures specified in Section 41 (Dispute Resolution). If the amount in Dispute represents two percent (2%) or more of the cumulative total amount of all invoices between the Parties (excluding any value added or other applicable Tax) in a particular month and the amount is not an Undisputed Charge, the amount in Dispute shall not be deemed due and payable pending resolution of the Dispute under Section 41 (Dispute Resolution). Nothing in this Section shall be taken as permitting a Party to withhold payment of Charges that do not satisfy the Dispute criteria of Section 41 (Dispute Resolution). Without in any way restricting any other breaches of this Agreement being deemed to be material breaches, failure to remit payment on or before the Bill Due Date shall be deemed to be a material breach of the Party's obligation under this Agreement.

10.9 Each Party shall be responsible for invoicing its own Customers.

10.10 All payments under this Agreement shall be paid by either: (i) electronic funds transfer (“EFT”) to the invoicing Party to which the payment is due, and such payment will be deemed made on the date of receipt of such funds by the invoicing Party; or (ii) by cheque to the invoicing Party to which the payment is due, and such payment will be deemed made on the date of receipt of cleared funds by the invoicing Party.

11. Taxes

11.1 Except as otherwise provided in this Section 11, with respect to any purchase of Services under this Agreement, if any Tax is required or permitted by Law to be billed to and/or collected from the purchasing Party by the providing Party, then: (i) the providing Party shall have the right to bill the purchasing Party for such Tax; (ii) the purchasing Party shall pay such Tax to the providing Party; and (iii) the providing Party shall pay or remit such Tax to the respective Governmental Authority. Whenever possible, Taxes shall be billed as a separate item on the invoice; *provided however*, that failure to include Taxes on an invoice or to state a Tax separately shall not impair the obligation of the purchasing Party to pay any Tax. Nothing shall prevent the providing Party from paying any Tax to the appropriate Governmental Authority

prior to the time: (i) it bills the purchasing Party for such Tax, or (ii) it collects the Tax from the purchasing Party. If the purchasing Party fails to pay any Tax properly billed by the providing Party, then, as between the providing Party and the purchasing Party, the purchasing Party shall be solely responsible for payment of the Tax and any penalties or interest thereon. Subject to the provisions of Section 41 (Dispute Resolution) and this Section 11 governing contests of Disputed Taxes, the purchasing Party shall be liable for and the providing Party may collect from the purchasing Party any Tax, including any interest or penalties for which the purchasing Party would be liable under this Section 11.1, which is paid by the providing Party to the respective Governmental Authority within the applicable statute of limitations periods for assessment or collection of such Tax, including extensions; *provided however*, that the providing Party notifies the purchasing Party within the earlier of: (i) sixty (60) days following the running of such limitations period for, including extensions, or (ii) three (3) years following the purchasing Party's payment for the Services to which such Tax relates.

11.2 With respect to any purchase under this Agreement of Services that are resold by the purchasing Party to a Third Party Telecommunications Provider or used as a component part of or integrated into a Service sold to a Third Party Telecommunications Provider, if any Tax is imposed on or with respect to such sale by the purchasing Party, the purchasing Party shall pay or remit such Tax to the respective Governmental Authority. If the purchasing Party fails to pay or remit any Tax as required by applicable Law, then, as between the providing Party and the purchasing Party, the purchasing Party shall remain liable for such Tax and any interest and penalties thereon. Notwithstanding any other provision of this Agreement, the purchasing Party agrees to protect, indemnify and hold harmless (and defend at the purchasing Party's expense) the providing Party from and against any Tax, any interest or penalties thereon, and any costs or expenses (including attorneys' fees) incurred by the providing Party as a result of any claim asserted or actions taken by the respective Governmental Authority to assess against or collect from the providing Party any Tax related to any sale by the purchasing Party to a Third Party Telecommunications Provider.

11.3 If either Party is audited by or on behalf of a Governmental Authority with respect to a Tax, and in any contest of a Tax by either Party, for Services subject to this Agreement, the other Party shall timely cooperate by providing records, testimony and such additional information or assistance as may reasonably be necessary to expeditiously resolve the audit or pursue the contest.

12. Variation of Charges

12.1 Subject to Section 41 (Dispute Resolution), either Party may from time to time provide written prior Notice of changes to Charges where the change is:

12.1.1 Charges approved by the Regulator; or

12.1.2 Charges determined by a decision of the court or by arbitrators appointed subject to Section 41 (Dispute Resolution).

Such Notice shall specify the date on which the variation is to become effective. In the case of changes falling within (Section 12.1.1) and (Section 12.1.2) above, the changes will take effect

from the effective date approved by the Regulator or from the date of the issuance of an order or the effective date as determined by a court of competent jurisdiction or arbitrators appointed, with such date stated in the Notice.

12.2 The provisions of Section 41 (Dispute Resolution) apply to changes to Charges as a result of this Section 12.

12.3 Without limiting the provisions of Section 41 (Dispute Resolution), in the event that a Party Disputes a Charge as an undercharge or overcharge caused by a Notice issued pursuant to this Section 12, the provisions of Section 41.12 requiring a refund, compensation, and interest on the Disputed Charge shall apply if the Dispute is resolved in the Disputing Party's favor.

12.4 Subject to Section 4.6, if a Party (in this clause, the "First Party") changes its Charges in accordance with this Section 12, the other Party (in this clause, the "Second Party") may, by written prior Notice to the First Party, also change its Charges by the same amount for the same Service or Services in accordance with the Principle of Charge Reciprocity specified in Section 4.6. Such Notice shall specify the date on which the variation is to become effective which shall be no earlier than the effective date of the Notice made pursuant to Section 12.1.

13. Security Deposit

13.1 Either Party may, in its sole discretion, require the other Party to provide a payment bank guarantee or a security deposit in either of the following instances: (i) if the other Party has not held a telecommunications licence and operated a PSTN or a PLMN in Guyana for a minimum of five (5) years; or (ii) if the other Party has failed to pay the Party any Undisputed Charges by the Bill Due Date under this Agreement or has failed to pay to the Party undisputed charges when due under any other agreement or arrangement between the Parties or Affiliates of the Parties, each for at least three (3) invoices over a twelve (12) month timeframe within the last five (5) years.

13.2 If a Party demands a security deposit from the other Party, that other Party shall provide such security deposit prior to the inauguration of any Services or within fifteen (15) calendar days of the written Notice of demand. The amount of any such security deposit shall remain consistent with three (3) months Charges for all Services used or Forecast to be used (whichever is greater) by the Party providing the security deposit. Any security deposit furnished under this Section 13.2 shall be returned to the Party with an Interest Charge, less any outstanding Charges, upon the earlier of: (i) an event of a Termination; and (ii) payment of all Undisputed Charges, on or before the Bill Due Date, for a period of twenty-four (24) months.

13.3 In the event that the usage of a Party providing a security deposit reasonably indicates that the security deposit amount, calculated pursuant to Section 13.2, is insufficient to maintain three (3) months of Charges for all Services used or Forecast to be used (whichever is greater) by the Party providing the security deposit, at any time upon written Notice, the Party requesting the security deposit may demand that the security deposit be increased so as to maintain three (3) months Charges for all Services used or Forecast to be used (whichever is greater) by the Party providing the security deposit. Any increase to the security deposit pursuant

to this Section 13.3 shall be limited to the difference between the existing security deposit, and the sum of three (3) months Charges for all Services based on the Party's current usage pattern or Forecast to be used (whichever is greater), and such increase shall be paid within seven (7) days of receipt of the written Notice of demand. Without in any way restricting any other breaches of this Agreement being deemed to be material breaches, failure to provide the increased security deposit within the timeframe established in this Section 13.3 shall be deemed to be a material breach of an obligation under this Agreement.

13.4 Any security deposit made pursuant to this Section 13 shall be shown as a credit on invoices of the Party providing the security deposit. Charges on any monthly invoice will be paid or Disputed on or before the Bill Due Date so as to maintain three (3) months Charges for all Services used or Forecast to be used (whichever is greater) by the Party providing the security deposit. For clarity, the provision of any and all Services is conditional upon the Party maintaining the security deposit for the timeframe described in Section 13.2. However, the Party requesting the security deposit may choose to waive the requirement for a security deposit for some or all of the required timeframe without prejudice to that Party's rights hereunder.

13.5 If either Party requires the other Party to provide a bank guarantee, the bank guarantee shall be in a form agreed by the Parties and shall be issued from an approved commercial bank licenced in Guyana. The bank guarantee shall provide a financial guarantee for the payment of the sum of three (3) months Charges for all Services used or Forecast to be used (whichever is greater) by the Party providing the bank guarantee, and shall be payable to the Party requesting the bank guarantee. In the event that the Party providing the bank guarantee does not keep a valid guarantee in place continuously until Termination, the Party requesting the bank guarantee may Terminate this Agreement pursuant to Section 27 (Suspension and Termination). For clarity, the provision of any and all Services is conditional upon the Party providing a bank guarantee and keeping in place such guarantee for the Term of the Agreement. However, the Party requesting the bank guarantee may choose to waive the requirement for a bank guarantee for some or all of the required timeframe without prejudice to that Party's rights hereunder.

13.6 Notwithstanding Section 13.2, Section 13.3, Section 13.4, and Section 13.5, either Party may require a new security deposit, a new or an additional bank guarantee, or a new or an increase in an existing security deposit or bank guarantee, if there is a material adverse change in the other Party's creditworthiness or financial position.

14. Numbering

14.1 Each Party shall make the necessary adjustments to its System in a timely manner to route Domestic Traffic and Domestic Roaming Traffic to other Party's System in accordance with the Service descriptions in Annex B (Services).

14.2 Each Party shall use telephone numbers in accordance with the National Numbering Plan and shall use consistent and uniform dialing patterns.

14.3 Each Party agrees that all agreements it enters into with Third Party Telecommunications Providers for the exchange Traffic in Guyana shall require that the Third

Party Telecommunications Providers shall use telephone numbers in accordance with the Guyana National Numbering Plan and shall use consistent and uniform dialing patterns.

14.4 The Parties agree that the Service descriptions in Annex B (Services) are limited solely to the exchange of Guyanese telephone numbers in the National Numbering Plan and Roaming Traffic.

14.5 The Parties shall not alter or otherwise manipulate the telephone number dialled by the Calling Party for any purpose of call routing, this includes but is not limited to terminating Domestic Traffic or Domestic Roaming Traffic on a telephone number other than the telephone number originally dialed, and re-originating Domestic Traffic or Domestic Roaming Traffic.

15. CLI

15.1 The Parties will pass the CLI in accordance with Annex D (Joint Working Manual) and any agreed code of practice for CLI from time to time in force. For the avoidance of doubt, and subject to Section 15.2, if presented with a legitimate CLI, both Parties are required to pass the CLI for all Services, and neither Party is obligated to terminate Traffic where a legitimate CLI is not conveyed or where a legitimate CLI is not available. If presented with a legitimate CLI, the conveyance of Traffic to the other Party without that legitimate CLI is Unagreed Traffic.

15.2 No Party shall create or permit the creation of a false or inaccurate CLI, alter or amend a CLI, or permit or knowingly accept the alteration or amendment of a CLI, unless such alteration or amendment is agreed in advance in writing by both Parties. Without in any way restricting any other breaches of this Agreement being deemed to be material breaches, a breach of this Section 15.2 shall be deemed a material breach of the Agreement.

15.3 Each Party agrees to convey all Traffic with unaltered CLIs. For the avoidance of doubt, in relation to all Traffic conveyed to the other Party's System under this Agreement, the CLI must be preserved thereby enabling a Called Party to return the telephone call, if their handset allows, without alteration.

16. Performance Measures and Standards

16.1 Subject to Section 16.3, the Parties shall use all reasonable endeavours to comply with the provisions relating to quality of service set out in Annex D (Joint Working Manual).

16.2 Subject to Section 16.3, the Parties shall use all reasonable endeavours to, at all times, apply standards (including signaling standards) and operating guidelines in Annex D (Joint Working Manual).

16.3 Except as is set out in Section 16.1 and Clause 16.2, the Parties provide no other warranties, representations, undertakings or commitments in respect of quality of service, including but not limited to, warranties, representations, undertakings or commitments in respect of difficulties or faults which result in a failure to establish service, in-service interruption or loss

of or distortion of communication. All implied warranties are hereby excluded, save those implied by statute.

16.4 In order to maintain service performance standards, the Parties shall ensure that all of its Services and their respective Systems are monitored by an operations centre twenty-four (24) hours a day, seven (7) days a week.

17. Safety and System Protection

17.1 Each Party shall be responsible for the safe operation of its System. The Parties shall take all steps reasonably necessary or required by Law to ensure that such operation and the implementation of this Agreement:

17.1.1 comply with any specific safety and protection requirements contained in this Agreement (including, without limitation, the Annex D (Joint Working Manual));

17.1.2 do not endanger the safety or health of the officers, employees, contractors, representatives, agents, invitees or Customers of the other Party;

17.1.3 do not damage, interfere with or cause any impairment to or deterioration in the operation of the other Party's System; and

17.1.4 do not interfere with the use or provision of licenced telecommunications services provided by the other Party, provided that this principle shall not preclude the taking of action by either Party in the normal operation of its System to protect its System, on condition that any such action is in compliance with Annex D (Joint Working Manual), or in compliance with provisions in this Agreement.

17.2 In the event that it is agreed to be necessary or desirable for representatives of a Party to access the premises of the other Party, each Party shall use its reasonable endeavours to comply with all reasonable security and safety practices and procedures applicable to access to and operations on the premises of the other Party. With the exception of permissible access granted in Section 3.10, a Party may request access by providing prior written Notice of its request to access to the Party whose premises are being visited; such request may be accepted in the sole discretion of the Party whose premises are being visited. Subject to the indemnified Party complying with Section 30 (Limitation of Liability) and Section 32 (Indemnity), each Party shall indemnify and keep indemnified the other against all damages, costs, claims and expenses arising out of any breach by the indemnifying Party of this Section 17.

17.3 In the event of any Fault in, breakdown of or problem in respect of either Party's System where such Fault, breakdown or problem may impact on the provision of Services, the affected Party shall notify the other Party pursuant to the procedures in Annex D (Joint Working Manual). Further, the affected Party and the other Party shall cooperate to resolve the Fault in, breakdown of or problem that is impacting on the provision of Services, including by providing reasonable operations and maintenance assistance, unless such Fault in, breakdown of or problem is solely within the affected Party's System.

18. Prevention of Fraud

18.1 Services provisioned under this Agreement are limited to Traffic for Legitimate Uses. Neither Party shall offer Traffic that is not for Legitimate Uses to the other Party's System on Interconnects designated to carry Services pursuant to this Agreement.

18.2 To the extent permitted by Law, the Parties will, upon becoming aware of Fraudulent Use, non-Legitimate Use, theft, or other misuse of the Parties' respective Services and associated Equipment, promptly inform the other Party of such circumstances, in writing, and shall take all required action to work with the other Party to eliminate the Fraudulent Use, non-Legitimate Use, theft or misuse of the Parties' respective Services and associated Equipment and Facilities.

18.3 The Parties shall not be obliged to convey, receive or terminate Traffic: (i) where the volume of such Traffic materially exceeds that which could reasonably be expected and such Traffic impedes the transmission of other Traffic on a Party's Systems, or (ii) where such Traffic is otherwise harmful to the integrity of the Party's System.

18.4 Subject to timeframes contained in Section 27.1, the Parties shall not be restrained from taking any reasonable actions, including not conveying, receiving or terminating Traffic, in the event of:

- (i) Fraudulent Use, non-Legitimate Use, theft, or other misuse of the Parties' respective Services and associated Equipment; or
- (ii) fraud being carried out against the Party, provided that the same action is taken in respect of all affected Services.

18.5 If requested by the Regulator, the Parties shall cooperate in the provision of information to the Regulator in relation to Fraudulent Use, non-Legitimate Use, theft or misuse of the Parties' respective Services and associated Equipment and Facilities.

18.6 On being notified of the activity described in this Section 18, the notified Party will promptly take any and all action it reasonably can to prevent the continuation of the Fraudulent Use, non-Legitimate Use, theft, or other misuse of the Parties' respective Services, Equipment, and Facilities. Notwithstanding the provisions of Section 30 (Limitation of Liability), if the notified Party fails to take such reasonable action to prevent the continuation of the fraudulent activity, it shall be liable to the other Party for any and all direct losses arising from Fraudulent Use, non-Legitimate Use, theft, or other misuse of the Parties' respective Services, Equipment, and Facilities, from the time at which the notified Party was so notified.

19. Bypass Operations

19.1 No Party shall knowingly engage, facilitate or participate in Bypass Operations. Without in any way restricting any other breaches of this Agreement being deemed to be material breaches, each Party acknowledges that the knowing conduct of Bypass Operations by

one Party on the System of the other Party shall constitute a material breach of the terms of this Agreement.

19.2 Both Parties acknowledge the serious negative impact which Bypass Operations pose to their respective Systems and business operations in Guyana (*e.g.*, through unpaid government taxes and levies as may be applicable to telecommunications services from time to time), and undertake to use their reasonable endeavours to ensure that no Bypass Operations occur on each Party's respective System. Further, both Parties undertake to cooperate in good faith and to share information relating to any actual or potential Bypass Operations relating to the other Parties' System.

19.3 Upon discovery of a potential Bypass Operation originating from the other Party's System, that Party shall notify the other Party in accordance with the escalation list in Annex D (Joint Working Manual) of the potential Bypass Operation ("Bypass Operations Notice"). The Party initiating a Bypass Operations Notice must have a good faith basis for asserting that a potential Bypass Operation is originating from the other Party's System and must provide, in the Bypass Operation Notice, a description of the potential Bypass Operations. Upon receipt of a Bypass Operations Notice, the receiving Party shall have twenty-four (24) hours to either: provide information to the Party issuing the Bypass Operations Notice demonstrating that no Bypass Operations exists, or end the conveyance of Traffic associated with the alleged Bypass Operations as described in the Bypass Operations Notice (the "Bypass Operations Cure Period"). Pursuant to Section 27.1.2, either Party may suspend one or more Services during the Bypass Operations Cure Period.

19.4 Notwithstanding the provisions of Section 30 (Limitation of Liability), if either Party receives a Bypass Operations Notice and fails to take such reasonable action to prevent the continuation of the Bypass Operations after expiration of the twenty-four (24) hour opportunity to cure described in Section 19.3, that Party shall be liable to the other Party for any and all direct losses arising from the Bypass Operations, from the time at which the notified Party received the Bypass Operations Notice.

20. Unagreed Traffic

20.1 "Unagreed Traffic" means Traffic or Roaming Traffic which is: (i) not specifically included in the Service descriptions contained in Annex B (Services); or (ii) includes an illegitimate CLI; or (iii) results from the artificial inflation of otherwise legitimate Traffic; or (iv) is Fraudulent Use Traffic, or Bypass Operations Traffic, or otherwise not for Legitimate Use; or (v) in the reasonable opinion of the receiving Party of the Traffic does not conform to the technical requirements of Annex D (Joint Working Manual). For clarity, Unagreed Traffic is not a Service.

20.2 Neither Party shall offer Unagreed Traffic to the other Party's System on Interconnects designated to carry Services pursuant to this Agreement.

20.3 The Parties agree that Unagreed Traffic represents a significant threat to the security and integrity of each other's Systems. In the event that a Party conveys Unagreed Traffic to the other Party, the receiving Party is, in addition to any other rights under this Agreement or

at Law, entitled to block or not terminate the Traffic and to take such action as it deems necessary to protect its System.

20.4 In the event that a Party conveys any Unagreed Traffic to the other Party, and the Traffic results in a successful delivery, and the other Party receives any Unagreed Traffic, then the Parties agree that the rate for such Traffic shall be equal to US\$0.23 plus US\$0.07 for administrative fees for each 60 seconds of a Call, and be equal to US\$0.03 plus US\$0.07 for administrative fees for each SMS. The Parties agree that this rate reflects the additional operational activity and the business risk associated with receiving the Unagreed Traffic. For clarity, the Party receiving Unagreed Traffic is not obligated to convey, receive, or otherwise permit, or continue to convey, receive, or otherwise permit, any Unagreed Traffic.

20.5 Any Charges levied pursuant to Section 20.4 shall be included on the relevant invoice and shall be payable in accordance with the provisions of this Agreement.

20.6 Notwithstanding the non-payment of Disputed Charges contained in Section 10 (Charges and Payments) and Section 41 (Dispute Resolution), where a Party Disputes any Charges levied pursuant to Section 20.4, the amounts so levied shall be paid pending resolution of the Dispute. Where a Party Disputes a Charge for Unagreed Traffic, the burden of proof will be on the Party disputing the categorization of Unagreed Traffic to demonstrate that the Traffic in question was legitimate.

20.7 Where any Dispute in respect of Charges for Unagreed Traffic is resolved in favour of the Party disputing the categorization of the Unagreed Traffic Charge, the other Party will credit the difference between the Charges levied pursuant to Section 20.4 and the rate for the Traffic in question as set out in Annex C (Rate Schedule) for the Service in accordance with Section 41.12.

20.8 The exercise of the provisions of this Section 20 are without prejudice to other rights in the Agreement, including the provisions of Section 27 (Suspension and Termination).

21. Confidentiality

21.1 Subject to the following provisions of this Section 21, a Party receiving Confidential Information from the other Party shall keep in confidence the Confidential Information, and will not disclose such information to any Third Party, subject to the provisions of this Section 21. A Party receiving Confidential Information also shall use its best endeavours to ensure that its directors, employees, agents, representatives, Affiliates, and professional advisers will not disclose such information to any Third Party and shall ensure that any of its directors, employees, agents, representatives, and professional advisers are bound by confidentiality and non-disclosure restrictions prior to receiving the other Party's Confidential Information.

21.2 A Party receiving Confidential Information from the other Party shall exercise no lesser security or degree of care over Confidential Information than that Party applies to its own Confidential Information and in any event such security or degree of care shall be no less than

would be exercised by a reasonable person with knowledge of the confidential nature of the information.

21.3 A Party receiving Confidential Information from the other Party shall restrict disclosure of such Confidential Information to those who have a reasonable need to know. Confidential Information shall be used solely for the purposes for which it was disclosed.

21.4 A Party receiving Confidential Information from the other Party may disclose the Confidential Information to a contractor or agent, subject to the contractor or agent having a reasonable need to know, and agreeing, in writing, to comply in writing with obligations equivalent to those contained in this Section 21.

21.5 A Party receiving Confidential Information from the other Party may disclose the Confidential Information to an Affiliate, subject to the Affiliate having a reasonable need to know, and agreeing, in writing, to comply in writing with obligations equivalent to those contained in this Section 21.

21.6 Unless otherwise agreed in writing, a Party receiving Confidential Information from the other Party shall not use the Confidential Information for commercial advantage and shall not, for any reason, share the Confidential Information with any Person responsible for sales and marketing (including supervisory responsibilities). Without in any way restricting any other breaches of this Agreement being deemed to be material breaches, and subject to Section 27 (Suspension and Termination), a breach of this Section 21.6 shall be deemed a material breach of the Agreement.

21.7 Unless otherwise agreed, the obligations of confidentiality and non-use do not apply to such Confidential Information that:

21.7.1 was at the time of receipt, already known to the receiving Party; or

21.7.2 is, or becomes publicly known through no wrongful act of the receiving Party; or

21.7.3 is rightfully received from a Third Party having no direct or indirect secrecy or confidentiality obligation to the Party that maintains the Confidential Information; *provided that* such Party receiving Confidential Information has exercised commercially reasonable efforts to determine whether such Third Party has any such obligation; or

21.7.4 is independently developed by an agent, employee representative or Affiliate of the Party, and such Person is not involved in any manner with the provision of Services pursuant to this Agreement and does not have any direct or indirect access to the Confidential Information of the other Party; or

21.7.5 is approved for release by written authorization of the Party that disclosed the Confidential Information, but only to the extent of the authorization granted; or

21.7.6 is required to be made public or disclosed pursuant to applicable Law or regulation or court order or lawful process, but only after reasonable prior written Notice to the Party that disclosed the Confidential Information.

21.8 All Confidential Information is acknowledged by the Party receiving Confidential Information of the other Party to be the property of the disclosing Party; the disclosure of the Confidential Information shall not be deemed to confer any rights to that Confidential Information on the Party receiving the Confidential Information.

21.9 The Party providing Confidential Information may request in writing, at any time, that any written Confidential Information (and/or Confidential Information in machine readable form) disclosed pursuant to the terms and conditions of this Section 21, and any copies thereof, be returned with a written statement to the effect that, upon such return, the Party receiving Confidential Information has not knowingly retained in its possession or under its control, either directly or indirectly, any Confidential Information or copies thereof and the Party receiving Confidential Information shall comply with any such request within seven (7) calendar days of receipt of such request.

22. Use of Customers' Information

22.1 Information on a Party's Customers conveyed to the other Party shall not be used by that other Party to its own commercial advantage.

22.2 Information on a Party's Customers conveyed to the other Party shall not be used by that other Party's directors, employees, agents, representatives, Affiliates, contractors and professional advisers for that other Party's commercial advantage, including but not limited to, for purposes relating to sales and marketing.

23. Intellectual Property Rights; Licences

23.1 Any IPR originating from or developed by a Party shall remain in the exclusive ownership of that Party. Except as otherwise expressly provided in this Agreement, no licence under patents, copyrights or any other IPR right (other than the limited licence to use consistent with the terms, conditions and restrictions of this Agreement) is granted by either Party or shall be implied or arise by estoppel with respect to any transactions contemplated under this Agreement.

23.2 Where any IPR is developed in connection with performance of this Agreement then, in the absence of any other Agreement between the Parties, the owner of the IPR shall remain the Party who developed the IPR. Each Party grants to the other a non-exclusive, royalty-free licence to use any IPR for the purposes of this Agreement and for its Term subject to the other provisions in this Section 23.

23.3 Notwithstanding Section 30 (Limitation of Liability), each Party (the "IPR Indemnifying Party") agrees to indemnify the other Party (the "IPR Indemnified Party") against all liability or loss arising from, and all reasonable costs, charges and expenses incurred in connection with, any claim, action, suit or demand alleging infringement by the IPR Indemnified

Party of the rights of a Third Party arising from the use by the IPR Indemnified Party of IPR disclosed or licensed by the IPR Indemnifying Party under this Agreement except where such IPR has been modified or used by the IPR Indemnified Party other than in accordance with this Agreement subject to the IPR Indemnified Party complying with this Section 30 (Limitation of Liability).

23.4 If a Party becomes aware of an infringement or threatened infringement of IPR belonging to the other Party (the “IPR Owner”) disclosed or licensed by the IPR Owner under this Agreement, then that Party shall use reasonable endeavours to notify the IPR Owner in writing of all the relevant details relating to the infringement, or threatened infringement.

23.5 The IPR Owner may take such steps and proceedings as it considers necessary or desirable to protect its rights in respect of the IPR, and any rights of the other Party in the IPR, and the other Party must render all reasonable assistance to the IPR Owner in this regard at the IPR Owner’s expense.

23.6 If a Party licenses IPR to the other Party for the purposes of this Agreement and that IPR infringes the rights of a Third Party, then the Party that licenses the IPR to the other Party must:

23.6.1 at its own expense, take such steps as are necessary to cure the infringement, or

23.6.2 if Section 23.6.1 is unreasonable having regard to the likely costs and other relevant matters, provide alternative technology as soon as reasonably practicable.

23.7 The Parties acknowledge that this Section sets out the only remedies and forms for compensation available in respect of any infringement of Third Party rights by IPR licensed for the purpose of this Agreement.

24. Publicity; Trade and Service Marks

24.1 Neither Party nor its Affiliates, subcontractors, or agents shall use in any advertising or sales promotion, press releases, or other publicity matters any endorsements, direct or indirect quotes, or pictures that imply endorsement by the other Party, its Affiliates, or any of its employees, without such first Party’s prior written approval. The Parties will submit to each other for written approval, prior to publication, all publicity matters that mention or display one another’s name and/or marks or contain language from which a connection to said name and/or marks may be inferred or implied; the Party to whom a request is directed shall respond promptly.

24.2 Nothing in this Agreement shall grant, suggest, or imply any authority for one Party or its Affiliates to use the name, trademarks, service marks, logos, proprietary trade dress or trade names of the other Party or its Affiliates in any advertising, press releases, publicity matters, marketing and/or promotional materials or for any other commercial purpose without prior written approval from such other Party.

24.3 A Party shall not use the name, trademarks, service marks, logos, proprietary trade dress or trade names of the other Party without the prior written consent of that other Party.

25. Authorised Representatives

25.1 In addition to the representatives identified in Section 40, each Party shall appoint the representatives referred to in Annex D (Joint Working Manual) to be responsible for the matters indicated in in Annex D (Joint Working Manual). Each Party shall notify the other of the identity of such additional representative(s) in writing as soon as practicable following signature of this Agreement.

25.2 Except as otherwise provided herein, all correspondence, meetings and other communications (including Notices of matters in Dispute) pertaining to issues pertaining to their responsibilities shall be directed to and conducted by and through the representatives identified in Section 40 and as identified in Section 25.1. The representative(s) shall keep an appropriate record of all communication with their counterpart(s).

25.3 Each Party is entitled to change its appointed representative(s) by Notice in writing to the other Party.

26. Review and Amendment

26.1 This Agreement is the result of negotiations between the Parties. Except as otherwise provided for in this Agreement, no provision of this Agreement shall be deemed amended or modified by either Party unless such an amendment or modification is in writing, dated, and signed by an authorized representative of both Parties. In entering into this Agreement and any amendments to such Agreement and carrying out the provisions herein, neither Party waives, but instead expressly reserves, all of its rights, remedies and arguments with respect to any orders, decisions, legislation or proceedings, and any remands thereof, and any other regulatory, legislative or judicial action(s) which the Parties have not yet fully incorporated into this Agreement or which may be the subject of further review.

26.2 Without prejudice to the provisions of Section 12 (Variation of Charge), either Party may seek to amend this Agreement by serving on the other Party a “Review Notice” if:

26.2.1 a Material Change in Law occurs or a material change in regulations governing telecommunications in Guyana subject to this Agreement occurs (including, without limitation, licence changes, and court decisions affecting this Agreement) that necessitate the amendment of this Agreement;

26.2.2 a material change occurs (including, without limitation, enforcement action by any regulatory authority, Regulator determinations, and changes to the company constitution of the Parties) which affects or reasonably could be expected to affect the commercial or technical basis of this Agreement;

26.2.3 a revised Reference Interconnection Offer is approved in whole or in part by the Regulator for either Party;

26.2.4 the Regulator exercises its powers to modify a material aspect of the Agreement; or

26.2.5 both Parties agree in writing that there should be a review.

26.3 A “Review Notice” shall be sent, in writing, providing reasonable detail of the events giving rise to the review and the nature of the amendments sought by the Party serving the Notice.

26.4 With the exception of reviews arising under Section 26.2.4, a Party must serve a Review Notice within six (6) months of the event giving rise to the review.

26.5 Upon service of a Review Notice, the Parties shall forthwith negotiate the matters to be resolved in good faith with a view to agreeing the relevant amendments to this Agreement; *provided that*, if the event giving rise to the review is as specified in either Section 26.2.3 or Section 26.2.4, this Agreement shall be modified accordingly by the Parties without the need for renegotiation and the Agreement shall be deemed amended in accordance with such determination, pending the formal amendment of the agreement in accordance with the determination by the Parties. If nevertheless the Parties disagree on the nature or extent of the modification(s) required pursuant to this Section 26, they shall in accordance with the Dispute resolution procedure in Section 41 (Dispute Resolution).

26.6 If, after a period of 60 (sixty) days from commencement of such review, the Parties fail to reach agreement, the Parties shall resolve the disagreement in accordance with the Dispute resolution procedure in Section 41 (Dispute Resolution).

26.7 For the avoidance of doubt, the Parties agree that the terms and conditions of this Agreement shall remain in full force and effect during such review until the Parties complete an agreement replacing or amending this Agreement or until such time as this Agreement is Terminated in accordance with its terms.

26.8 In entering into this Agreement and any amendments thereto, and carrying out the provisions herein, neither Party waives, but instead expressly reserves, all of its rights, remedies and arguments with respect to any orders, decisions, legislation or proceedings and any remands thereof and any other regulatory, legislative or judicial action(s) which the Parties have not yet fully incorporated into this Agreement or which may be the subject of further review.

27. Suspension and Termination

27.1 In addition to any other provision of this Agreement, either Party may, to the extent permitted by Law, suspend or Terminate this Agreement, at the sole discretion of the suspending or Terminating Party:

27.1.1 during the Term, upon at least nine (9) months’ prior Notice in writing to the other Party, contingent upon written agreement of the Parties relating to the costs and procedures relating to Termination; or

**REFERENCE INTERCONNECT OFFER
GTT LEGAL FRAMEWORK 3.0**

27.1.2 immediately suspend one or more Services following written Notice, where the other Party engages in conduct which is harmful to the Party, where the Traffic is not for Legitimate Use or is for Fraudulent Use, or where the Traffic is unlawful or interferes with the obligations of the Party under its licence, the Law or regulations, and may Terminate one or more Services if such conduct does not cease within seven (7) days after prior written Notice;

27.1.3 immediately suspend Services where the other Party engages in conduct that would endanger life or safety, or damage the property of the Party, and may Terminate if such conduct is not ceased within thirty (30) days of written Notice being given;

27.1.4 immediately suspend on Notice in writing to the other Party, in the event that any licence necessary to entitle a Party to interconnect or to enable a Party to carry out its obligations under this Agreement at any time expires or is revoked by the Regulator and is not immediately replaced or re-issued or is not in the process of being replaced or re-issued with temporary authorization during such process; or

27.1.5 on written five (5) days' prior written Notice to the other Party, either Party may suspend where suspension is necessary to deal with a material degradation or impairment of either Party's System caused by the other Party, and may Terminate Services if the conduct does not cease within seven (7) days after prior written Notice.

27.2 Unless otherwise governed by the requirements detailed in this Legal Framework, each of which supersedes this provision's requirements, including with respect to Section 27.1 or as provided in Section 19 (Bypass Operations), either Party, at its sole option, may suspend or Terminate this Agreement on written Notice for failure perform a material obligation or for a breach or breaches of a material term of this Agreement which the breaching Party fails to cure such nonperformance or breach within thirty (30) calendar days after written Notice thereof (the "Cure Period") unless a shorter timeframe is provided in the Agreement. If the breaching Party fails to cure such nonperformance or breach(es) within the specified timeframe provided for within the original Notice, then the non-breaching Party will provide a subsequent written Notice of the Termination of this Agreement and such Termination shall take effect immediately upon delivery of written Notice to the other Party. The Parties agree that, *inter alia* and without prejudice to others, the following are material breaches of the Agreement:

27.2.1 a Party fails to pay Undisputed Charges payable, when due, and fails to remedy such non-payment within the Cure Period;

27.2.2 a Party materially fails to perform under the Agreement and fails to remedy such non-payment within the Cure Period;

27.2.3 a Party fails to maintain a demanded security deposit or bank guarantee as required by Section 13 (Security Deposit); or

27.2.4 a Party ceases or threatens to cease to carry on business, enters into liquidation (other than for the purpose of merger or reconstruction where the emergent company assumes its obligations hereunder), or is dissolved or becomes bankrupt or insolvent, or takes or suffers any similar action in consequence of debt.

27.3 In each case where Service is suspended pursuant to Section 27.1 or Section 27.2, Service shall promptly be restored once the circumstances warranting suspension have ceased to apply if such restoration occurs within the Cure Period. Exercise of a right to suspend under Section 27.1 or Section 27.2 shall not prejudice the suspending Party's right to exercise any other existing right(s), including to Terminate pursuant to Section 27.1 or Section 27.2. Except in the case of Section 29 (Force Majeure), each Party shall remain liable for any Charges in respect of the Service throughout the period of suspension and thereafter.

27.4 Notwithstanding Section 27.1 or Section 27.2, either Party may suspend or Terminate without giving the Regulator prior Notice to the extent permitted by applicable Law. For the avoidance of doubt, prior notice to the Regulatory is not required for suspensions pursuant to Section 18 (Prevention of Fraud), Section 19 (Bypass Operations), and Section 20 (Unagreed Traffic). Any Notice to the other Party of suspension or Termination shall become effective in accordance with such Notice, unless the other Party applies to the Regulator for relief prior thereto and the Regulator issues a Preliminary Order preventing such suspension or Termination.

27.5 Notwithstanding Section 27.1, neither Party may Terminate this Agreement during the pendency of Dispute resolution proceedings under Section 41 (Dispute Resolution) for matters relating to the Dispute, unless authorised to do so by the Regulator, a Dispute resolution settlement, or a court of law.

27.6 Neither Party shall be liable for any direct or indirect losses arising from the exercise of any of the provisions of this Section 27.

28. Effects of Termination

28.1 Termination or expiry of this Agreement shall be without prejudice to the rights and obligations of the Parties accruing prior to such Termination or expiration, and such Termination or expiration shall not affect the continuance in force of any provision of this Agreement which is expressly or by implication intended to continue in force (including but not limited to the requirements in Annex D (Joint Working Manual)).

28.2 Termination or expiry of this Agreement, or any portion thereof, shall not operate as a waiver of any breach by a Party of this Agreement and shall be without prejudice to any rights, liabilities or obligations of either Party which have accrued up to the date of Termination or expiration.

29. Force Majeure

29.1 Neither Party shall be liable to the other for any delay or failure to perform or observe any provision of this Agreement by reason of Force Majeure Event other than the obligation to make monetary payments if the Party experiencing the Force Majeure Event circumstance makes commercially reasonable efforts to remove or overcome the effects of such circumstance. A Party shall be relieved of its obligations under this Agreement by reason of Force Majeure Event only for the period of time during which the Force Majeure Event circumstance applies.

29.2 A “Force Majeure Event” is defined as acts or occurrences beyond the reasonable control of a Party or the Parties, including acts of nature, acts of civil or military authority, any Law, order, regulation, ordinance of any Governmental Authority by which, or as a result of which, it is illegal for a Party to observe or perform an obligation under this Agreement or which frustrates the observance or performance of that obligation, embargoes, epidemics, terrorist acts, riots, insurrections, fires, explosions, earthquakes, nuclear accidents, hurricanes, floods, labor difficulties, including without limitation, strikes, slowdowns, picketing, boycotts or other work stoppages, equipment failures, cable cuts, power blackouts, volcanic action, other major environmental disturbances, unusually severe weather conditions, inability to secure products or services of other persons or transportation facilities or acts or omissions of transportation carriers, individually and collectively a Force Majeure Event.

29.3 The Party affected by any Force Majeure Event shall use reasonable efforts to promptly notify the other of the estimated extent by written Notice, including specifying the nature and date of inception of the Force Majeure Event, and duration of the Party’s inability to perform its obligations under this Agreement, whereupon such obligation or performance shall be suspended to the extent such Party is affected by such Force Majeure Event during the continuance thereof or be excused from such performance depending on the nature, severity and duration of such Force Majeure Event (and the other Party shall likewise be excused from performance of its obligations to the extent such Party’s obligations relate to the performance so interfered with). Upon cessation of the delay or failure resulting from Force Majeure Event, the Party affected shall promptly notify the other of such cessation.

29.4 If, as a result of a Force Majeure Event, performance by either Party of its obligations under this Agreement is only partially affected as described in the Notice provided pursuant to Section 29.3, that Party shall nevertheless remain liable for the performance of those obligations not affected by Force Majeure Event.

29.5 If the Force Majeure Event lasts for six (6) months or less from the date of any notification under Section 29.3, any obligation outstanding shall be fulfilled by the Party affected as soon as possible after cessation of the Force Majeure Event, save to the extent that such fulfilment is no longer practically possible or is not required to the extent so agreed to in writing by the unaffected Party.

29.6 If the Force Majeure Event lasts for more than six (6) months from the date of any such notification and Notice of cessation has not been given and such Force Majeure Event 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 thirty (30) days’ written Notice to the other after expiry of such six month period, unless Notice of cessation of the Force Majeure Event is received by the unaffected Party prior to the expiry of such thirty (30) days’ Notice. If this Agreement is not so Terminated under the provisions of this Section 29, any obligations outstanding shall be fulfilled by the Party affected by the Force Majeure Event as soon as possible after the Force Majeure Event has ended, save to the extent that such fulfilment is no longer possible or is not required by the other Party to the extent so agreed to in writing by the unaffected Party.

30. Limitation of Liability

30.1 Except as provided in Section 30.2, Section 30.4, Section 30.6, Section 30.8, and Section 30.9, under no circumstances will either Party (as used in this Section 30, the “First Party”) or its Affiliates, or any of their respective officers, employees, contractors or agents, be liable in contract, in tort (including but not limited to negligence), in equity, for breach of statutory duty, or otherwise to compensate the other Party (as used in this Section 30, the “Second Party”) for any loss, injury, liability, damage, costs or expense arising directly or indirectly from, under or in relation to this Agreement, including with respect to the following:

- 30.1.1 any act, omission or delay of the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents;
- 30.1.2 any act, omission or delay in respect of the making available, continued availability, provision, use or termination of the First Party’s Services;
- 30.1.3 the failure by the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents to connect the First Party’s network to the Second Party’s network or to make available, continue to make available or provide the First Party’s Services;
- 30.1.4 any failure of the First Party’s Services;
- 30.1.5 any failure of anything which is part of, or associated with, the First Party’s Services;
- 30.1.6 any interception, distortion or interruption of any communication or attempted communication (including but not limited to any Traffic) using the First Party’s Services; or
- 30.1.7 subject to Section 30.2.3, any act or omission of any Customer of the First Party or its Affiliates and any other Third Party for whom the First Party or its Affiliates is not responsible.

30.2 Notwithstanding Section 30.1, but subject to all other provisions of this Section 30, the First Party does not by this Agreement exclude liability, whether imposed by the Regulator, by an arbitrator, or by a court:

- 30.2.1 for Losses (as defined below) suffered by the Second Party as a result of the wilful misconduct (including wilful misconduct causing breach) or fraud of the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents, in each case in the course of their performance of this Agreement;
- 30.2.2 for Losses suffered by the Second Party as a result of the gross negligence of the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents, in each case in the course of their performance of this Agreement, (for purposes of this Section 30, *gross negligence* is any conscious

or voluntary act or omission which results in injury or damage by a person who was aware of a clear and present threat or danger that such injury or damage would occur or was reasonably likely to occur);

- 30.2.3 for physical damage to the Second Party's property occurring in the course of the use, provision, operation, servicing or termination of the First Party's Services that is attributable, directly or indirectly and in whole or in part, to:
- (a) the negligence of the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents in each case in the course of their performance of this Agreement; or
 - (b) the acts or omissions of a Customer of the First Party in the course of making use of services which incorporate, in whole or in part, the Services provided by or on behalf of the First Party;
- 30.2.4 to indemnify the Second Party under Section 32 or any other express indemnity, from time to time, under this Agreement, but only to the extent that the liability arises in the course of or out of the provision, operation, servicing or termination of Services or the performance or non-performance of obligations by the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents, in each case in the course of their engagement by the First Party, under or in relation to this Agreement.

For the purposes of Sections 30.2.2 *Losses* means:

the revenues:

- (a) which would be directly attributable to the First Party, or which would be attributable to the First Party as a reasonably foreseeable consequence of:
 - (i) each Service which could not reasonably be provided by the Second Party (the "Relevant Service"); or, as the case may be,
 - (ii) a part of a Service which could not reasonably be provided by the Second Party (the "Relevant Part of a Service");

because of wilful misconduct or the gross negligence; and

- (b) which the Second Party would reasonably expect to gain (but which the Second Party did not in fact gain) from the Relevant Service or the Relevant Part of a Service, as the case may be (but not other Services or other parts of Services) for the period during which the wilful misconduct or gross negligence directly affected the Relevant Service or the Relevant Part of a Service, as the case may be;
 - (i) less the costs and expenses that would reasonably be expected to have been incurred by the Second Party (but which the Second Party did not in fact

incur) in providing the Relevant Service (or the Relevant Part of a Service, as the case may be) during that period; together with

(ii) any costs and expenses which the Second Party has reasonably incurred in mitigating such wilful misconduct or gross negligence; less

any revenues:

(A) which the Second Party gained as a result of any mitigation by the Second Party of the wilful misconduct or gross negligence; and

(B) which would not have been gained by the Second Party except for the mitigation by the Second Party of the wilful misconduct or gross negligence.

30.3 In any event, under no circumstances (except to the extent necessary to give effect to Section 30.2.1 and Section 30.2.2) will the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents be liable to the Second Party in contract, in tort (including but not limited to negligence), in equity, for breach of statutory duty, or otherwise for loss of profits, business or anticipated savings or for any indirect or consequential loss whatever, under or in relation to this Agreement, notwithstanding that the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents have been advised of the likelihood of such losses.

30.4 If for any reason the First Party, its Affiliates and/or any of their respective officers, employees, contractors and/or agents is or are liable to the Second Party in contract, in tort (including but not limited to negligence), in equity, for breach of statutory duty, or otherwise, the combined maximum liability of the First Party, its Affiliates and their respective officers, employees, contractors and agents to the second party under or in relation to this Agreement shall be:

30.4.1 US\$1.0 million in respect of any one event or related series of events; and

30.4.2 in any 12 month period, US\$1.5 million irrespective of the number of events.

30.5 Each limitation or exclusion of this Section 30 and each protection given to the First Party or its Affiliates, or any of their respective officers, employees, contractors or agents, by any provision of this Section 30 is to be construed as a separate limitation, exclusion or protection applying and surviving even if for any reason any of the other provisions is held inapplicable in any circumstances.

30.6 Nothing in this Section 30 shall exclude liability of the First Party to pay when due the Charges, Interest Charges, Late Payment Charge, or other amounts specified to be payable to the Second Party under this Agreement (including amounts payable pursuant to an indemnification obligation set forth in this Agreement).

30.7 The Second Party shall use its reasonable endeavours to ensure that a provision shall (to the extent that it is not now included) be included in:

30.7.1 each contract with a Customer of the Second Party for the provision of its service which excludes (to the maximum extent permitted by Law) any liability of:

- (a) the First Party, its Affiliates, and their respective officers, employees, contractors and agents; and
- (b) any Third Party Telecommunications Provider (whose System is connected to and with the First Party's System), and their respective officers, employees, contractors and agents;

arising directly or indirectly from or in connection with the Second Party's Service; and each contract with any Third Party Telecommunications Provider (where the Third Party Telecommunications Provider's System is connected to and with the Second Party's System) which excludes (to the maximum extent permitted by Law) any liability of the First Party, its Affiliates, and their respective officers, employees, contractors and agents arising directly or indirectly from Service provided by the Second Party to the Third Party Telecommunications Provider.

30.8 The Second Party agrees that under no circumstances will any Third Party Telecommunications Provider (whose System is connected to and with the First Party's System), or its subsidiaries now or from time to time, or any of their respective officers, employees, contractors or agents, be liable to compensate the Second Party for any loss, injury, liability, damage, costs or expense arising directly or indirectly from the provision by the First Party of a Service that includes a component provided to the First Party by that Third Party Telecommunications Provider.

30.9 Notwithstanding anything to the contrary, the provisions of this Section 30 shall (i) not apply to a breach by the First Party, its Affiliates and/or any of their respective officers, employees, contractors and/or agents, of Section 18, Section 19, Section 20, Section 21, Section 22, Section 23, Section 24, Section 32, Section 46 of the Agreement; or (ii) limit a Party's right to seek equitable or interim relief.

31. Disclaimer of Representations and Warranties

DISCLAIMER. EXCEPT AS SPECIFICALLY PROVIDED TO THE CONTRARY IN THIS AGREEMENT, NEITHER PARTY MAKES ANY REPRESENTATIONS OR WARRANTIES TO THE OTHER PARTY CONCERNING THE SPECIFIC QUALITY OF ANY SERVICES PROVIDED UNDER THIS AGREEMENT. THE PARTIES DISCLAIM, WITHOUT LIMITATION, ANY WARRANTY OR GUARANTEE OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING, OR FROM USAGES OF TRADE.

32. Indemnity

32.1 Except as otherwise expressly provided herein, each Party shall be responsible only for the Services which are provided by that Party, its authorized agents, subcontractors, or others retained by such Party, and neither Party shall bear any responsibility for the Services provided by the other Party, its agents, subcontractors, or others retained by such Party.

32.2 Except as otherwise expressly provided herein, and to the extent not prohibited by Law, each Party (the “Indemnifying Party”) shall release, defend and indemnify the other Party (the “Indemnified Party”) and hold such Indemnified Party harmless against any loss to a Third Party arising out of the negligent, reckless, or willful misconduct (“Indemnification Fault”) of such Indemnifying Party, its agents, its Customers, contractors, or others retained by such Parties, in connection with the Indemnifying Party’s provision of Services under this Agreement; *provided, however*, that (i) with respect to employees or agents of the Indemnifying Party, such Indemnification Fault occurs while performing within the scope of their employment, (ii) with respect to subcontractors of the Indemnifying Party, such Indemnification Fault occurs in the course of performing duties of the subcontractor under its subcontract with the Indemnifying Party, and (iii) with respect to the Indemnification Fault of employees or agents of such subcontractor, such Indemnification Fault occurs while performing within the scope of their employment by the subcontractor with respect to such duties of the subcontractor under the subcontract.

32.3 In the case of any loss alleged or claimed by a Customer of either Party, the Party whose Customer alleged or claimed such loss (the “Indemnifying Party”) shall defend and indemnify the other Party (the “Indemnified Party”) against any and all such claims or losses by its Customer, regardless of whether the underlying Service giving rise to such claim or loss was provided or provisioned by the Indemnified Party, unless the claim or loss was caused by the reckless or willful misconduct of the Indemnified Party.

32.4 A Party (the “Indemnifying Party”) shall also defend, indemnify and hold harmless the other Party (“Indemnified Party”) against any claim or loss arising from the Indemnifying Party’s use of Services provided under this Agreement involving:

32.4.1 Any claim or loss arising from such Indemnifying Party’s use of Services offered under this Agreement, involving any claim for libel, slander, invasion of privacy, or infringement of Intellectual Property rights arising from the Indemnifying Party’s or its Customer’s use.

(a) The foregoing includes any claims or losses arising from disclosure of any Customer-specific information associated with either the originating or terminating numbers used to provision Services provided hereunder and all other claims arising out of any act or omission of the Customer in the course of using any Services provided pursuant to this Agreement.

(b) The foregoing includes any losses arising from claims for actual or alleged infringement of any Intellectual Property Right of a Third Party to the extent that such loss arises from an Indemnifying Party’s or an Indemnifying

Party's Customer's use of Services, provided under this Agreement; provided, however, that an Indemnifying Party's obligation to defend and indemnify the Indemnified Party shall not apply where an Indemnified Party or its Customer modifies Services provided under this Agreement and no infringement would have occurred without such modification.

32.5 Each Party acknowledges that its right under this Agreement to interconnect with the other's System may be subject to or limited by Intellectual Property Rights (including without limitation, patent, copyright, trade secret, trade mark, service mark, trade name and trade dress rights) and contract rights of Third Parties.

32.6 The Parties do not and shall not indemnify, defend or hold the other Party harmless, nor be responsible for indemnifying or defending, or holding the other Party harmless, for any claims or losses for actual or alleged infringement of any Intellectual Property Right or interference with or violation of any contract right that arises out of, is caused by, or relates to the other Party's use of Equipment, Facilities, or Services furnished under this Agreement.

32.7 A Party shall reimburse the other Party for damage to Equipment and Facilities utilized to provide Services hereunder caused by the negligent, reckless, or willful act of the Party, its agents or subcontractors or the Party's Customers or resulting from the Party's improper use of Equipment and Facilities, or due to malfunction of any Equipment, Facilities, functions, products, services or equipment.

32.8 Indemnification Procedures:

32.8.1 Whenever a claim shall arise for indemnification under this Section 32, the relevant Indemnified Party, as appropriate, shall promptly notify the Indemnifying Party and request in writing the Indemnifying Party to defend the same. Failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that the Indemnifying Party might have, except to the extent that such failure prejudices the Indemnifying Party's ability to defend such claim.

32.8.2 The Indemnifying Party shall have the right to defend against such liability or assertion, in which event the Indemnifying Party shall give written Notice to the Indemnified Party of acceptance of the defense of such claim and the identity of counsel selected by the Indemnifying Party.

32.8.3 Until such time as the Indemnifying Party provides written Notice of acceptance of the defense of such claim, the Indemnified Party shall defend such claim, at the expense of the Indemnifying Party, subject to any right of the Indemnifying Party to seek reimbursement for the costs of such defense in the event that it is determined that Indemnifying Party had no obligation to indemnify the Indemnified Party for such claim.

32.8.4 Upon accepting the defense, the Indemnifying Party shall have the exclusive right to control and conduct the defense and settlement of any such claims, subject to consultation with the Indemnified Party. So long as the Indemnifying Party is controlling and conducting the defense, the Indemnifying Party shall not be liable for any settlement by the

Indemnified Party unless such Indemnifying Party has approved such settlement in advance and agrees to be bound by the agreement incorporating such settlement.

32.8.5 At any time, an Indemnified Party shall have the right to refuse a compromise or settlement, and, at such refusing Party's cost, to take over such defense; provided that, in such event the Indemnifying Party shall not be responsible for, nor shall it be obligated to indemnify the refusing Party against, any cost or liability in excess of such refused compromise or settlement.

32.8.6 With respect to any defense accepted by the Indemnifying Party, the Indemnified Party will be entitled to participate with the Indemnifying Party in such defense if the claim requests equitable relief or other relief that could affect the rights of the Indemnified Party, and shall also be entitled to employ separate counsel for such defense at such Indemnified Party's expense.

32.8.7 If the Indemnifying Party does not accept the defense of any indemnified claim as provided above, the Indemnified Party shall have the right to employ counsel for such defense at the expense of the Indemnifying Party.

32.8.8 In the event of a failure to assume the defense, the Indemnified Party may negotiate a settlement, which shall be presented to the Indemnifying Party. If the Indemnifying Party refuses to agree to the presented settlement, the Indemnifying Party may take over the defense. If the Indemnifying Party refuses to agree to the presented settlement and refuses to take over the defense, the Indemnifying Party shall be liable for any reasonable cash settlement not involving any admission of liability by the Indemnifying Party, though such settlement may have been made by the Indemnified Party without approval of the Indemnifying Party, it being the Parties' intent that no settlement involving a non-monetary concession by the Indemnifying Party, including an admission of liability by such Party, shall take effect without the written approval of the Indemnifying Party.

32.8.9 Each Party agrees to cooperate and to cause its employees and agents to cooperate with the other Party in the defense of any such claim and the relevant records of each Party shall be available to the other Party with respect to any such defense, subject to the restrictions and limitations set forth in Section 21 (Confidentiality).

33. Relationship of the Parties

33.1 In giving effect to this Agreement, the relationship of the Parties to each other shall be that of independent contractors. Nothing in this Agreement shall be construed as or shall constitute the relationship of the Parties as an agency, partnership, franchise, employment, joint venture or other joint venture relationship between the Parties.

33.2 Each Party has and hereby retains the right to exercise full control of and supervision over its own performance of its obligations under this Agreement and retains full control over the employment, direction, compensation and discharge of its employees and subcontractor(s) assisting in the performance of such obligations. Each Party and each Party's subcontractor(s) shall be solely responsible for all matters relating to payment of such employees

or subcontractors, including the withholding or payment of all applicable taxes, contributions or other obligations with respect to its employees and subcontractor(s). Each Party has sole authority and responsibility to hire, fire and otherwise control its employees and subcontractor(s).

33.3 Nothing contained herein shall constitute the Parties as joint venturers, partners, employees or agents of one another, and neither Party shall have the right or power to bind or obligate the other. Nothing herein will be construed as making either Party responsible or liable for the obligations and undertakings of the other Party. Except for provisions herein expressly authorizing a Party to act for another, nothing in this Agreement shall constitute a Party as a legal representative or agent of the other Party, nor shall a Party have the right or authority to assume, create or incur any liability or any obligation of any kind, express or implied, against or in the name or on behalf of the other Party unless otherwise expressly permitted by such other Party. Except as otherwise expressly provided in this Agreement, no Party undertakes to perform any obligation of the other Party, whether regulatory or contractual, or to assume any responsibility for the management of the other Party's business.

33.4 No Party shall have the right to enter into contracts or pledge the credit of or assume or incur expenses or liabilities or any obligation of any kind (including but not limited to the making of any representation or warranty), express or implied, on behalf of the other Party unless otherwise expressly permitted by such other Party in writing.

33.5 The only Parties to this Agreement are [Legal Name] ("Telco") and GTT Inc. ("GTT"). This Agreement confers benefits and imposes burdens only upon the Parties to this Agreement and does not confer any benefit of any kind whatsoever or impose any burden of any kind whatsoever upon any person or entity who is not a Party.

33.6 Subject to any express provision of this Agreement to the contrary, this Agreement does not provide any Person who is not a Party with any remedy, defense, claim, action, claim of action or other right of any kind, or impose any liability upon such Person that that Person did not have before this Agreement commenced.

34. Representations of the Parties

34.1 Each Party represents that it is now and will remain in all material compliance with all applicable Laws, regulations, and orders applicable to its performance of its obligations under this Agreement and that it is in material compliance with all obligations as a holder of a valid licences deemed or granted under the Telecommunications Act. Each Party shall promptly notify the other Party in writing of any governmental or regulatory action that suspends, cancels, withdraws, limits or otherwise materially affects its ability to perform its obligations under this Agreement.

34.2 Each Party represents and warrants to the other that it:

(a) is an entity duly incorporated or continued and validly existing under the laws of Guyana and has all necessary corporate power and capacity to own its properties and carry on its business in Guyana as presently carried on and is duly licensed, registered or

qualified under the relevant company or corporate legislation in all jurisdictions where the character of its property owned or leased or the nature of the activities conducted by it makes such licencing, registration or qualification necessary or desirable;

(b) has all necessary corporate power, authority and capacity to enter into this Agreement and to carry out its obligations in accordance with their terms subject to necessary regulatory approval, and that the execution and delivery of this Agreement have been duly authorised by all necessary corporate action on its part; and

(c) is duly qualified to act as a Telecommunications Provider under the Telecommunications Act and shall hold all valid licences or permits as deemed or granted under the Telecommunications Act to entitle it to Interconnect and to own and operate the telecommunications Facilities and to provide the specified services necessary to enable it to carry out its obligations under this Agreement.

35. Severability

35.1 The invalidity or enforceability for any reason of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement.

35.2 If further lawful performance of this Agreement or any part hereof shall be rendered impossible by the final judgement or final order of any court of competent jurisdiction, Regulator, or governmental agency or similar authority having jurisdiction over either Party, the Parties undertake that they will exert their best efforts to agree on an amendment or amendments to this Agreement or on modifications of their practices hereunder in such manner as will fully comply with such judgement or order and render further performance lawful.

35.3 The enforceability of all rights or obligations of the Parties under this Agreement or the portion thereof judged invalid, illegal or otherwise unenforceable by such judgement or order, shall be suspended as from the date thereof pending the outcome of negotiations between the Parties as aforesaid though without prejudice to all or any accrued rights of the Parties in respect of the past performance or observance thereof.

36. No Waiver

36.1 Failure or delay by either Party at any time to enforce any of the provisions of this Agreement shall not be construed by the other as a waiver of any such provision nor in any way affect the validity of this Agreement or any part thereof.

36.2 Waiver by either Party of any default or breach by the other Party shall not be deemed a waiver of any other default or breach.

36.3 Subject to Section 26 (Review and Amendment), no variation, modification or waiver of any provisions of this Agreement shall in any event be of any force or effect, unless the same is in writing signed by each of the Parties hereto.

36.4 No forbearance, delay, course of dealing, or indulgence by either Party in enforcing the provisions of this Agreement or in insisting on performance of any term or

condition of this Agreement shall prejudice or restrict the rights of such Party nor shall any waiver of its rights operate as a waiver of any subsequent default or breach. No right, power or remedy herein conferred upon or reserved for either Party is exclusive of any right, power or remedy available to such Party and each such right, power or remedy shall be cumulative.

36.5 Each Party's agreement herein shall not waive or prejudice any rights or remedies which each Party may have in respect of the subject matter hereof (including with respect to the Charges for Services) before the Regulator, all of which rights and remedies are hereby expressly reserved notwithstanding this Agreement.

37. Entire Agreement

37.1 This Agreement incorporates a number of Annexes, and any valid amendments which, together with this Legal Framework, constitute the entire Agreement between the Parties with respect to the subject matter hereof, superseding all prior agreements, understandings, proposals and other communications, oral or written between the Parties during the negotiations of this Agreement and through the execution and/or Effective Date of this Agreement. This Agreement shall not operate as or constitute a novation of any agreement or contract between the Parties that predates the execution and/or Effective Date of this Agreement.

37.2 This Agreement shall be construed without regard to the Party or Parties responsible for its preparation. This Agreement shall not be deemed to have been prepared, and shall not be construed against any Party hereto on the basis that a Party prepared or drafted a particular provision to this Agreement.

38. Assignment

38.1 Neither Party may assign the whole or any part of this Agreement or its rights or obligations hereunder, whether by operation of Law or otherwise, other than with the prior consent in writing of the other Party. Subject to Section 38.2, such consent shall not be unreasonably withheld or delayed. Notwithstanding the foregoing, neither Party shall require the consent of the other Party to assign the whole or any part of this Agreement or its rights or obligations hereunder to a subsidiary, parent or Affiliate. Any attempted assignment or transfer that is not permitted is void *ab initio*.

38.2 A Party may only perform an assignment under Section 38.1 if:

38.2.1 the assignee is granted all applicable licences by the Regulator with respect to the ownership and operation of all or part of the Equipment and Facilities of the assigning Party, and the provision of all or part of the telecommunications services of the assigning Party as is necessary to entitle the assignee to Interconnect;

38.2.2 in cases where the assignee is an Affiliate of the assigning Party and ceases to be an Affiliate, the assigning Party shall give prior written Notice of that fact to the other Party hereto and shall procure that, prior to such cessation, such assignee reassigns such rights and obligations to it; and

38.2.3 the assigning Party shall procure that the assignee enters into an agreement with the other Party whereby the assignee agrees to observe all of the terms and conditions of this Agreement and, if required by the other Party, the assigning Party shall join in such agreement to guarantee the performance of it by the assignee.

39. Subcontracting

39.1 Subject to Section 3.4, either Party may engage subcontractors for the provision of its Services or obligations under this Agreement, provided that, in such case, it will not be relieved of its obligations as specified in this Agreement.

39.2 If either Party retains or engages any subcontractor to perform any of that Party's obligations under this Agreement, each Party will remain fully responsible for the performance of this Agreement in accordance with its terms, including any obligations either Party performs through subcontractors.

39.3 Each Party will be solely responsible for payments due to that Party's subcontractors, and for management and supervision of that Party's subcontractors.

39.4 No subcontractor will be deemed a Third Party beneficiary for any purposes under this Agreement.

39.5 No contract, subcontract or other agreement entered into by either Party with any Third Party in connection with the provision of Services hereunder will provide for any indemnity, guarantee or assumption of liability by the other Party to this Agreement with respect to such arrangement, except as consented to in writing by the other Party.

39.6 Any subcontractor that gains access to Confidential Information covered by this Agreement shall be required by the subcontracting Party to protect such Confidential Information to the same extent the subcontracting Party is required to protect such Confidential Information under the terms of this Agreement.

40. Notices

40.1 Any Notice which may be given by either Party under this Agreement shall be deemed to have been duly given if: (i) hand delivered or by facsimile transmission (confirming the same by post); (ii) where the Parties expressly agree in writing, by electronic mail, to an electronic e-mail address to which Notices, invoices or other documents may be sent; or by post to a Party's principal place of business as set out in Section 40.3.

40.2 Unless otherwise stated in this Agreement, any such Notice shall be deemed to have been served on the other Party: (i) if hand delivered, on the date of delivery or if by facsimile, on the first Business Day after the transmission of the facsimile; (ii) if by electronic mail, on the day on which the communication is first stored in the receiving Party's electronic mailbox; or (iii) if by post to a Party's principal place of business, on the third Business Day after posted.

40.3 All Notices under this Agreement shall be sent:

To GTT:

79 Brickdam, Stabroek
Georgetown, Guyana
Attention: [_____]]
Email: [_____]]
Invoice Email: [_____]]

To Telco:

Address Line One [_____]]
Address Line Two [_____]]
Attention: [_____]]
Email: [_____]]
Invoice Email: [_____]]

40.4 Either Party may unilaterally change its designated contact name, address, and/or facsimile number for the receipt of Notices by giving written Notice to the other Party in compliance with this Section 40. Any Notice to change the designated contact name, address, and/or facsimile number for the receipt of Notices shall be deemed effective ten (10) calendar days following receipt by the other Party.

40.5 If either Party undertakes a change of address (physical or electronic), that Party is responsible for notifying the other Party of such change.

41. Dispute Resolution

41.1 Subject to the provisions of this Agreement including in Annex D (Joint Working Manual) and Part VII of Regulations, should a Dispute arise with respect to, but not limited to, differences with respect to Services, a demand for payment or Charges, quality of service, or any other aspect of this Agreement, which are not otherwise settled under other terms of this Agreement, the Parties agree to use the following procedures to resolve the Dispute.

41.2 Finality of Disputes

41.2.1 Except as otherwise specifically provided for in this Agreement, unless otherwise agreed to in writing by both Parties, no claim may be brought for any Dispute arising from this Agreement more than six (6) months from the date the occurrence which gives rise to the Dispute is discovered or reasonably should have been discovered with the exercise of due care and attention.

41.2.2 Notwithstanding anything contained in this Agreement to the contrary, a Party shall be entitled to Dispute only those Charges which appeared on an invoice dated within the six (6) months immediately preceding the date on which the billing party received Notice of such Disputed Amounts unless otherwise agreed to in writing by both Parties.

41.3 The Parties desire to resolve Disputes arising out of this Agreement without litigation, if possible. Accordingly, the Parties agree to use the following Dispute resolution procedures with respect to any controversy or claim arising out of or relating to this Agreement or its breach before instituting any regulatory or legal adjudication of any Dispute.

41.4 A Party that wishes to invoke Dispute resolution procedures shall indicate its intention to do so by Notice in writing to the other Party. Such Notice shall be served on the

other Party within the timeframe indicated in Section 41.2.1 and Section 41.2.2, and shall contain all relevant details including the nature and extent of the Dispute, including, at a minimum, the following information relating to a Disputed Charge(s):

41.4.1 the date of the invoice in question;

41.4.2 the account number and invoice number or identifier of the invoice in question;

41.4.3 telephone number, international A-number where relevant, and circuit ID number or trunk number in question;

41.4.4 any descriptive information relating to the item questioned;

41.4.5 amount billed;

41.4.6 amount in question; and

41.4.7 the reason that the disputing party Disputes the billed amount.

41.5 Each Party shall maintain reports, records and data relevant to this Agreement, including billing, invoices, clearing house records, and documents to support the classification and provision of Services, a demand for payment or Charges, and quality of service for Traffic that is the subject matter of the Agreement, for a period of not less than twenty-four (24) months after creation thereof, unless a longer period is required by Law. The documents and information described in this provision shall be made available to the arbitrator appointed pursuant to Section 41.10.

41.6 A Party in receipt of the written Notice of Dispute shall acknowledge receipt of such Notice within five (5) Business Days.

41.7 Within fifteen (15) Business Days of receipt of the Notice of Dispute pursuant to Section 41.6, the Parties shall commence good faith negotiations with the objective of resolving the Dispute. If the Dispute is not resolved within thirty (30) calendar days following receipt of the Notice of Dispute, either Party may escalate the Dispute pursuant to Section 41.8.

41.8 If the Dispute is not resolved pursuant to the process in Section 41.7, either Party may request in writing that the Dispute be escalated, identifying the Party's representative to whom that Party has escalated the Dispute. The Party in receipt of such Notice shall acknowledge receipt of the Notice within five (5) Business Days, and will identify its representative to whom it has escalated the Dispute within five (5) Business Days.

41.9 Following issuance of a second Notice under Section 41.8, the Parties shall continue to negotiate in good faith to try to resolve the Dispute at the level of the appropriate senior managers.

41.10 In the event that the Dispute is not resolved within fifteen (15) calendar days of receipt of the second Notice under Section 41.8, the Parties shall agree to refer the Dispute to: (i)

the International Chamber of Commerce (“ICC”) arbitration, in Guyana or other mutually agreeable location, and in accordance with any rules agreed to in writing by the Parties and in compliance with applicable legislation and procedural convention for commercial issues; or (ii) to the Regulator for resolution for regulatory issues. If referred to ICC arbitration, the arbitration will be adjudicated by one (1) arbitrator to be selected in accordance ICC rules and practices. The Parties will request the ICC to attempt to appoint an arbitrator who is knowledgeable and has arbitration or dispute resolution experience in the relevant subject matter of the Dispute. If no such arbitrator can be appointed, the normal appointment process shall apply. The arbitrator shall issue a reasoned, written decision in support of the award. The language of the arbitration shall be English. Judgment upon the award rendered by the arbitrator may be entered and enforced in any court of competent jurisdiction. The cost of the arbitration, including the fees and expenses of the arbitrator or arbitrators, and the administrative and other fees of the ICC, shall be shared equally by the Parties unless the award otherwise provides; *provided however*, that the prevailing Party in the arbitration shall in all events be entitled to recover its reasonable attorneys’ fees from the non-prevailing Party. In no event shall the arbitrator have the power to award any punitive, consequential, indirect, exemplary damages or other damages in excess of the limitations of liability set forth herein. If the Parties are unable to agree, within ten calendar (10) days of the commencement of discussions regarding the referral of the Dispute to either ICC arbitration (*e.g.*, for commercial issues) or the Regulator (*e.g.*, for regulatory issues), on whether the Dispute should be referred to arbitration or the Regulator, the Dispute shall be referred to the Regulator.

41.11 Nothing herein shall prevent a Party from:

41.11.1 Using other dispute resolution procedures agreed to by the Parties in writing;

41.11.2 Seeking (including obtaining or implementing) interim relief in circumstances where the Party is, or will immediately be, subject to a substantial and immediate harm due to the conduct of the other Party, or agents and representatives acting on behalf of the other Party. Notwithstanding any application for interim relief, the Parties shall resolve the substantive issue in Dispute in accordance with Sections 41.4 to 41.10; or

41.11.3 Referring the Dispute to the Regulator for resolution.

41.12 Upon resolution of a Dispute relating to Charges or any non-payment of Charges under the Agreement: (i) if the resolution of a Dispute results in a finding that Charges were overcharged, the Party that erred must make a full refund of the overcharge amount in the form of a credit on the invoice for the first full billing cycle after the Dispute is resolved; (ii) if the resolution of a Dispute results in a finding that Charges associated with those Services were undercharged, the Party that erred must include the total undercharge amount due as a result of the resolved Dispute in a separate line item on the invoice for the first full billing cycle after the Dispute is resolved, and the other Party must make a full payment of the undercharge amount as payment to the invoice; and (iii) in the case of (i) and (ii), interest may be assessed on the unpaid undercharge amount or overcharge amount, with interest being the based lending rate of the Republic Bank of Guyana from time to time in force plus two percent (2%) compounded annually assessed on the number of calendar days from the date on which such undercharge or

overcharge originated until the invoice date for such credit or additional Charge. Charges and credits described in this Section 41.12 shall not be Disputed.

42. [Section Intentionally Omitted]

43. Insurance

43.1 At all times during the Term of this Agreement, each Party shall keep and maintain in force at its own expense the following minimum insurance coverage and limits and any additional insurance and/or bonds as may be required by Law:

43.1.1 With respect to each Party's performance under this Agreement, and in addition to each Party's obligation to indemnify, each Party shall, at its sole cost and expense:

(a) maintain the insurance coverage and limits required by this Section 43 and any additional insurance and/or bonds required by Law at all times during the term of this Agreement and until completion of all work associated with this Agreement is completed, whichever is later;

(b) require each subcontractor who may perform work under this Agreement or enter upon the work site to maintain coverage, requirements, and limits at least as broad as those listed in this Section 43 from the time when the subcontractor begins work, throughout the term of the subcontractor's work; and

(c) deliver to the other Party certificates of insurance stating the types of insurance and policy limits upon request. The Party shall provide or will endeavor to have the issuing insurance company provide at least thirty (30) days advance written notice of cancellation, non-renewal, or reduction in coverage, terms, or limits to the other Party. Each Party shall deliver such certificates to the other Party, upon request, prior to execution of this Agreement and prior to commencement of any work; and prior to expiration of any insurance policy required in this Section 43.

43.2 The Parties agree that:

(a) the failure to demand such certificate of insurance or failure to identify a deficiency will not be construed as a waiver of the obligation to maintain the insurance required under this Agreement;

(b) that the insurance required under this Agreement does not represent that coverage and limits will necessarily be adequate to protect a Party, nor be deemed as a limitation on the Party's liability in this Agreement;

(c) The Party may meet the required insurance coverages and limits with any combination of primary and umbrella/excess liability insurance; and

(d) The Party is responsible for any deductible or self-insured retention.

43.3 The insurance coverage required by this Section 43 includes:

43.3.1 Workers' compensation insurance with benefits afforded under the laws where the work is to be performed and employers liability insurance with limits of at least GY\$500,000 for bodily injury, for each accident; and

43.4 The commercial general liability insurance policy must include the other Party, its Affiliates, and their directors, officers, and employees as additional insureds. The additional insured endorsement may either be specific to the other Party or may be "blanket" or "automatic" addressing any person or entity as required by contract; include a waiver of subrogation in favor of the other Party, its Affiliates, and their directors, officers and employees; and be primary and non-contributory with respect to any insurance or self-insurance that is maintained. Either Party may request a copy of the additional insured endorsement within sixty (60) calendar days of execution of this Agreement and within sixty (60) calendar days of each commercial general liability policy renewal.

43.5 This Section 43 is a general statement of insurance requirements and shall be in addition to any specific requirement of insurance elsewhere required by Law or otherwise.

44. Regulatory Approval

44.1 The Parties understand and agree that this Agreement and any amendment or modification hereto will be filed with the Regulator for approval in accordance with the Telecommunications Act. The Parties believe in good faith and agree that the Services to be provided under this Agreement are in the public interest. Each Party covenants and agrees to fully support approval of this Agreement by the Regulator without modification.

45. Governing Law and Venue

45.1 This Agreement shall be governed by and construed and interpreted in accordance with the Telecommunications Act, rules and regulations interpreting the Telecommunications Act, and other Laws of Guyana. Proper venue shall be in Georgetown, Guyana.

46. Compliance

46.1 Each Party shall comply at its own expense with all Laws that relate to that Party's obligations to the other Party under this Agreement. Nothing in this Agreement shall be construed as requiring or permitting either Party to contravene any mandatory requirement of applicable Law.

46.2 Each Party warrants that it has obtained all necessary licences, certifications, and authorizations required prior to ordering any Services from the other Party pursuant to this Agreement. Upon request, each Party shall provide proof of all necessary licences, certifications, and authorizations.

46.3 Each Party shall be responsible for obtaining and keeping in effect all approvals from, and rights granted by, Governmental Authorities, building and property owners, other

Telecommunications Providers, and any other Third Parties that may be required in connection with the performance of its obligations under this Agreement.

47. Law Enforcement

47.1 GTT and Telco shall reasonably cooperate with the other Party in handling law enforcement requests.

47.2 If a Party receives a request for information for law enforcement or Governmental Authorities concerning a Party or a Person the Party knows to be Customer of the other Party, it shall refer the request to the requesting party with an indication that the other Party is the responsible company.

47.3 Each of the Parties agree to comply with the applicable law enforcement authorities, Laws, and requirements, and to report to any applicable enforcement authorities as required by Law.

48. Cooperation

48.1 Subject always to their respect rights and obligations under the Agreement and at Law, to the extent not expressly addressed in another provision of the Agreement, the Parties acknowledge and agree that they shall cooperate in good faith with each other and use their respective commercially reasonable efforts to amicably resolve any matters that require their cooperation in the operation of this Agreement.

49. Conflict of Interest

49.1 The Parties represent that no employee or agent of either Party has been or will be employed, retained, paid a fee, or otherwise received or will receive any personal compensation or consideration from the other Party, or any of the other Party's employees or agents, in connection with the negotiation of this Agreement or any associated documents.

50. Counterparts

50.1 This Agreement may be executed in counterparts. Each counterpart shall be considered an original and such counterparts shall together constitute one and the same instrument.

Signed as an Agreement on the [] day of [], []

Signed for and on behalf of GTT Inc.

By: _____

Signed for and on behalf of [Legal Name]

By: _____

Annexes

Annex A (Definitions);

Annex B (Services);

Annex C (Rate Schedule);

Annex D (Joint Working Manual).

###

Annex A

Reference Interconnect Offer

Definitions Annex 3.0

February 24, 2023

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

Acceptance Testing	Shall have the meaning described in <u>Annex D (Joint Working Manual)</u> .
Affiliate	With respect to a specified Person, a Person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the Person specified; and for purposes of this definition, “control” (including “controlled by” and “controlled”) means the possession, directly or indirectly, of the power to direct or cause the direction of management and policies of such other Person, whether through the ownership of voting securities or by agreement.
Agreement	This agreement and all of its attachments, inclusive of the Legal Framework, Annexes, and mutually agreed-upon other attachments, together with any mutually agreed-upon amendments, constitute the entire Agreement between the Parties with respect to the subject matter hereof.
Annex	The attachments to the Legal Framework identified as <u>Annex A (Definitions)</u> , <u>Annex B (Services)</u> , <u>Annex C (Rate Schedule)</u> , and <u>Annex D (Joint Working Manual)</u> .
Answered Call	A Call in which “answer supervision” is provided, indicating that two-way communication has commenced.
Bill Due Date	Shall have the meaning described in <u>Section 10.5</u> of the <u>Legal Framework</u> .
Business Day	A day, Monday through Friday, that is a normal working day for government offices in Guyana.
Bypass Operations	The use of Equipment and/or Facilities by a Party or a Third Party Telecommunications Provider to circumvent, or attempt to circumvent, valid Charges (including Taxes) associated with the Traffic Service type where the Party receives such Services.
Bypass Operations Cure Period	Shall have the meaning described in <u>Section 19.3</u> of the <u>Legal Framework</u> .
Bypass Operations Notice	Shall have the meaning described in <u>Section 19.3</u> of the <u>Legal Framework</u> .

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

Call	A signal or series of signals, and Messages, generally falling within the audio bandwidth of 300 Hz to 3400 Hz or signals contained within a standard digital CCITT/ITU 64 kBits channel between two or more simultaneously present Persons for the purpose of exchanging voice communications between and among Domestic Traffic end points, whether or not that signal, series of signals, or Messages are so conveyed to effect actual communication between the Calling Party and the Called Party.
Call Availability	Shall have the meaning described in <u>Annex D (Joint Working Manual)</u> .
Called Party	Any Person that is the Transmission end point of Call or SMS, as the case may be, whether or not the Called Party receives the Call or SMS, as the case may be.
Calling Party	Any Person that initiates a Transmission of a Call or SMS, as the case may be.
Charges	Any amount due to the other Party under the Agreement.
Confidential Information	Means the non-public information of a Party, consisting of, <i>inter alia</i> , trade-secret information or competitively sensitive information (such as financial records or financial information).
CLI	Calling Line Identity, information delivered by network signaling that correctly identifies the telephone number to the Called Party of the line from which Traffic has been originated.
Circuit Terminating Unit or CTU	A fibre electronics, circuit terminating unit.
Cure Period	Shall have the meaning described in <u>Section 27.2</u> of the <u>Legal Framework</u> , or such other timeframe to cure specific breaches of the Agreement as otherwise provided in the Legal Framework.
Customer	Any Domestic Person (including but not limited to entities that provide services on a machine-to-machine basis) that originates or receives Traffic in Guayana from or through a Party to the Agreement.

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

Deemed Receipt Date	Shall have the meaning described in <u>Section 10.5</u> of the <u>Legal Framework</u> .
Dispute	A difference among the Parties with respect to a Services, a demand for payment or a demand for Charges, quality of service, or any other aspect of this Agreement, provided it complies with the requirements of <u>Section 10.8</u> and <u>Section 41</u> of the Legal Framework.
Domestic	As it relates to Traffic, a Message, Call, or SMS that originates either from a Person assigned a valid Guyanese telephone number which has been allocated by the Regulator for the purposes of assignment in Guyana under the Guyanese National Numbering Plan or is Roaming Traffic, and which terminates to a Person assigned a valid Guyanese telephone number which has been allocated by the Regulator for the purposes of assignment in Guyana under the Guyanese National Numbering Plan. As it relates to a Person, an individual, partnership, joint-stock company, joint venture, corporation, limited liability company, trust, unincorporated organization, or other entity, or a Governmental Authority or subdivision thereof, situated in and authorized to operate in Guyana.
Duration	The period determined in accordance with methodologies employed by a Party to determine the actual duration of Answered Calls.
Effective Date	The first business day following the date of execution.
Emergency Maintenance	Shall have the meaning described in <u>Annex D (Joint Working Manual)</u> .
Equipment	Any electronic devices, amplifiers, power supplies, vaults and pedestals, grounding and pole hardware, test equipment, tower equipment, microwave equipment, and any other similar equipment.
Facilities	Any trunks and distribution coaxials, copper lines, optical fiber cables, drops, conduits, and any other similar facilities.

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

Fault	A hard failure or a performance degradation so serious as to destroy the ability of a System network element to function effectively, in part or in full.
Force Majeure Event	Shall have the meaning provided in <u>Section 29.2</u> of the Legal Framework.
Forecast	A specific quantitative prediction of Traffic and Services made by each Party in the manner described in <u>Annex D (Joint Working Manual)</u> .
Fraudulent Use	An intentional and willful act, or a conscious or voluntary act or omission which results in injury or damage by a person who was aware of a clear and present threat or danger that such injury or damage would occur or was reasonably likely to occur, resulting in a misuse of a Parties' Services or a Parties' System by the other Party or by a Third Party.
Governmental Authority	Any: (a) foreign, national, municipal, local or other government, court, tribunal, judicial or arbitral body, arbitrator, official, agency, administrative agency, instrumentality, commission, entity, branch, division or department; (b) other governmental, government appointed or regulatory authority; or (c) quasi-governmental authority exercising any regulatory, expropriation or taxing authority under or for the account of any of the above, including the Regulator, and any municipal or local government that is responsible for the registration, enforcement, taxation, and compliance of Telecommunications Providers, each to the extent it has jurisdiction over the subject matter at issue.
IPR or Intellectual Property Rights	Any and all intellectual property and all past, present and future rights therein or thereto of any nature, form or kind, including all patents, copyrights (registered or unregistered), works of authorship, mask-works, technology, trade secrets, know-how, processes, inventions, data, formulae, data bases, moral rights, domain names (and any part thereof), manufacturing methods and data, specifications, drawings, schematics, algorithms, prototypes, designs, design rights, design tools, white papers, research and development protocols,

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

computer software programs, applications, source and object codes, trademarks, trade names, service marks, service names, trade dress and all other source identifiers, whether or not intended as such; all registrations, applications, recordings, licenses and common-law rights relating to, arising out of or in connection with any of the foregoing, all rights to sue at law or in equity for any infringement, interference or other impairment thereto, including the right to receive all proceeds and damages therefrom, and all rights to obtain reissues, renewals, continuations, continuations-in-part, divisions or other extensions of legal protections pertaining thereto; and all other Guyanese and foreign intellectual property and any intellectual property right relating thereto.

Interconnect

The physical and logical linking of the telecommunications network Systems of the Parties necessary for the routing and/or termination of Traffic.

Interconnection Link

A link between the Parties' Systems consisting of two optical fibre cables (2 strands/cable), with: (i) the CTU at one Party's end of the link, (ii) a Joint Box at the other Party's end of the link, and (iii) the point-to-point optical fibre between the two consisting of two optical fibre cables (2 strands/cable).

Interconnect Location or IL

The geographic location at which the Parties establish and maintain a Point of Connection as identified by address in Annex D (Joint Working Manual).

Interest Charge

Shall have the meaning described in Section 10.6 of the Legal Framework.

Joining Box

A box containing a digital fibre panel for the purpose of establishing a Point of Connection between the Parties.

Joint Services

Services provided to Customers with both Parties as the customer-facing provider.

Landline or Fixed

A telecommunications line, service, or connection wherein a Calling Party initiates or Called Party

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

receives a Call using a circuit of wire or cable running over land or underground to transmit or receive communications.

Law

All national, local or other statutes, laws, ordinances, regulations, rules, codes, directives, court or other orders, or similar instruments or determinations or awards of a court or other Governmental Authority, statutory guidances, assessments, common laws, treaties or acts of any Governmental Authority that apply to the Parties or the subject matter of this Agreement.

Legal Framework

The legal terms of the Agreement so-designed as “Legal Framework,” to which Annexes are affixed.

Legitimate Use

As it relates to Traffic, Services provided in this Agreement, which are Domestic Traffic destined for a Customer of one of the Parties, and which are not Fraudulent Use Traffic, Unagreed Traffic, or Bypass Operations Traffic.

Material Change in Law

Any circumstance, event, development, effect, occurrence or change in Law that, individually or in the aggregate with any other fact, circumstance, event, development, effect, occurrence or change, has, has had or would reasonably be expected to have a material adverse effect on the business, results of operations, assets, liabilities or condition (financial or otherwise) of either of the Parties’ provision of Services under the Agreement, in each case taken as a whole.

Message

Units of information exchanged between Switches for the purpose of control consisting of 3.1Khz speech and the associated CCSS7 protocol used to convey a Call or SMS setup, clear-down and supplementary service information.

Minister

The Minister of Public Telecommunications

Misrouted Traffic

Shall have the meaning described in Section 3.2 of the Legal Framework

Mobile

A telecommunications line, service, or connection wherein a Calling Party or Called Party uses cellular

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

or radio wave to transmit or receive communications.

National Numbering Plan

The numbering regime for Guyana’s geographical telephone numbers, including the NXX national prefixes and local number portion, for telephone numbers assigned to Persons located in Guayana.

Notice

Shall have the meaning set forth in Section 40 of the Legal Framework.

NXX

The current general configuration for exchange codes within each Area Code. (Note that NNX codes were formally used)

Network Fault

A Fault located within the Telco System (Telco Network Fault) or within the GT&T System (GT&T Network Fault). Network Faults include Faults within the signalling networks.

Order

A request for the provision of services pursuant to this Agreement and in the format set out in Annex D (Joint Working Manual) or as otherwise reasonably required by a Party.

PLMN

Public Land Mobile Network.

PSTN

Public Switched Telephone Network.

Party

Either GT&T or Telco, as identified in the recitals to this Agreement, or both according to context.

Person

Any individual, partnership, joint-stock company, joint venture, corporation, limited liability company, trust, unincorporated organization, or other entity, or a Governmental Authority or subdivision thereof.

Planned Maintenance

Shall have the meaning described in Section 2.8.8.1 of Annex D (Joint Working Manual).

Point of Connection

The physical point of an Interconnect Link where the provision of and responsibility for the Interconnection Link and Services starts or ends, as further specified in Annex B (Service Description) and in Annex D (Joint Working Manual).

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

Preliminary Order	An order that makes an initial determination on the merits made in advance of a final decree or decision.
Reference Interconnection Offer	An agreement for Interconnection approved by the Regulator.
Regulations	Rules, directives, and orders duly promulgated by the Regulator pursuant to Law, which govern Telecommunications Providers.
Regulator	The Public Utilities Commission established under Guyana law by section 5 of the Public Utilities Commission Act of 2016, Act No. 19 of 2016.
Review Notice	Shall have the meaning provided in <u>Section 26.3</u> of the Legal Framework.
Roaming Traffic	Shall have the meaning provided in <u>Section 3.2</u> of the Legal Framework.
SDH	Synchronous Digital Hierarchy.
SMS	A Message of up to 160 characters sent by means of a SS7 signalling channel to or from terminal equipment connected to a Party's PLMN.
Service Affecting Fault or SA Fault	Shall have the meaning described in <u>Annex D (Joint Working Manual)</u> .
Services	Solely those items identified in <u>Annex B (Services)</u> . For clarity, Unagreed Traffic is not a Service.
Service Description	The technical identification of Services subject to this Agreement.
Switch	The Equipment which opens or closes circuits, completes or beaks electrical paths, or selects paths or circuits.
System	The telecommunications networks and related Equipment, Facilities, and apparatus now and hereafter operated by each respective Party for the provision of certain telecommunications services in Guyana, including but not limited to the Services identified in <u>Annex B (Services)</u> .

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

System Fault	A Fault resulting in the total loss of ability by either Party to transmit Calls between the two Systems due to transmission faults on the E1 link for Interconnect or an entire System.
Taxes	Any and all taxes, levies, imposts, duties, assessments, charges, escheat or unclaimed property obligations, withholdings and other like charges and obligations imposed or required to be collected by or paid over to any Governmental Authority, including income, franchise, profits, business occupation, gross receipts, premium, sales, use, property, severance, stamp, transfer, recording, capital gain, minimum or alternative minimum, environmental, license, payroll, employment, excise, occupation, windfall profits, customs duties, capital stock, social security (or similar), unemployment, disability, registration, value added, estimated or other tax of any kind whatsoever, including any interest, penalty, fine, assessment or addition thereto, whether disputed or not.
Telecommunications Provider	A provider of public telecommunication networks and/or publicly available telecommunication services, including mobile services, licenced in Guyana for such telecommunications services.
Telecommunications Act	The Law identified as Act No. 18 of 2016.
Term	Shall have the meaning described in <u>Section 2.1</u> of the <u>Legal Framework</u> .
Terminate or Termination	The end of the Agreement as described in <u>Section 2</u> of the Legal Framework, or the end of a specific Service as described in <u>Section 27</u> of the Legal Framework, or as otherwise provided in the Legal Framework as to the Agreement, or a portion thereof, or a specific Service, or a portion thereof.
Third Party	Any Person other than a Party. The scope of a Third Party encompasses an Affiliate of a Party.
Third Party Telecommunications Provider	An entity other than a Party that is a Telecommunications Provider licenced in Guyana.
Traffic	A flow of Messages, Calls, or SMS, or attempts for Messages, Calls, or SMS. Traffic permissible

**REFERENCE INTERCONNECT OFFER
GTT ANNEX A – DEFINITIONS 3.0**

pursuant to this Agreement is Domestic Traffic or Roaming Traffic associated with Services, as described in Annex B (Services).

Transit

The use of the other Party's System to exchange Traffic with the System of a Third Party Telecommunications Provider.

Transmission

Transmission is the process of sending and propagating an analogue or digital signal or Message using a wired, optical, or wireless electromagnetic transmission Facilities. Transmission of a digital Message, or of a digitized analogue signal, is known as data Transmission.

Unagreed Traffic

Shall have the meaning provided in Section 20.1 of the Legal Framework.

Undisputed Charges

Any Charge for which a Dispute is not properly claimed under Section 10.8 and Section 41 of the Legal Framework.

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Annex B

Reference Interconnect Offer

Services Annex 3.0

February 24, 2023

TABLE OF CONTENTS

Part 1. INTERCONNECTION LINK SERVICES	1
1.1 Interconnection Links between the Parties’ Systems.....	1
Part 2. DOMESTIC TERMINATION SERVICES	1
2.1 Domestic Landline Call Termination Service.....	1
2.2 Domestic Mobile Call Termination Service	2
2.3 Domestic SMS Termination Service	2
Part 3. DOMESTIC TRANSIT SERVICES	3
3.1 Domestic Call Transit Service	3
3.2 Domestic Originating Call Transit Service.....	3
3.3 Domestic SMS Transit Service	4
3.4 Domestic Originating SMS Transit Service	4
Part 4. SPECIAL ACCESS SERVICES	5
4.1 Emergency Services Access Service	5
4.2 National Directory Assistance Access Service	5

PART 1. INTERCONNECTION LINK SERVICES

1.1 Interconnection Links between the Parties' Systems

1.1.1 The Parties will establish Interconnection Links between them as described in Section 3 of the Legal Framework. Each such Interconnection Link shall be planned, provisioned, ordered, and accepted as described in Annex D (Joint Working Manual).

1.1.2 GTT offers an Interconnection Links to Telco at the Charges detailed in Annex C (Rate Schedule). Traffic that uses the GTT-provided Interconnection Links shall be payable at the Charges detailed in Annex C (Rate Schedule) or as otherwise provided in the Agreement.

1.1.3 Telco may elect to provide its own Interconnection Links pursuant to Section 3.4 of the Legal Framework. Traffic that uses the Telco-provided Interconnection Links shall be payable at the Charges detailed in Annex C (Rate Schedule) or as otherwise provided in the Agreement.

1.1.4 The technical standards, operational processes, and quality of services that apply to Interconnection Links are defined in Annex D (Joint Working Manual).

PART 2. DOMESTIC TERMINATION SERVICES

2.1 Domestic Landline Call Termination Service

- **Telco Domestic Customer → GTT Domestic Landline Customer**
- **GTT Domestic Customer → Telco Domestic Landline Customer**

2.1.1 Domestic Landline Call Termination Service is offered by GTT to Telco and by Telco to GTT. Domestic Landline Call Termination Service is the acceptance, at the Point of Connection, of a Domestic Call that originates from a Domestic Customer on the System of one Party, where the Call is conveyed for termination to a Domestic Landline Customer of the other Party, and delivery or offer of delivery of each such Call. Domestic Landline Call Termination Service provided by GTT can only be provided on Interconnection Links provided by GTT. Domestic Landline Call Terminating Service provided by Telco can be provided on Interconnection Links provided by either GTT or Telco.

2.1.2 The technical standards, operational processes, and quality of services that apply to Domestic Landline Call Termination Services are defined in Annex D (Joint Working Manual).

2.1.3 The Charges that apply to Domestic Landline Call Termination Services are defined in Annex C (Rate Schedule).

2.2 Domestic Mobile Call Termination Service

- **Telco Domestic Customer → GTT Domestic Mobile Customer**
- **GTT Domestic Customer → Telco Domestic Mobile Customer**

2.2.1 Domestic Mobile Call Termination Service is offered by GTT to Telco and by Telco to GTT. Domestic Mobile Call Termination Service is the acceptance, at the Point of Connection, of a Domestic Call that originates from a Domestic Customer on the System of one Party, where the Call is conveyed for termination to a Domestic Mobile Customer of the other Party, and delivery or offer of delivery of each such Call. Domestic Mobile Call Termination Service provided by GTT can only be provided on Interconnection Links provided by GTT. Domestic Mobile Call Terminating Service provided by Telco can be provided on Interconnection Links provided by either GTT or Telco.

2.2.2 The technical standards, operational processes, and quality of services that apply to Domestic Mobile Call Termination Services are defined in Annex D (Joint Working Manual).

2.2.3 The Charges that apply to Domestic Mobile Call Termination Services are defined in Annex C (Rate Schedule).

2.3 Domestic SMS Termination Service

- **Telco Domestic Mobile Customer–Sent SMS → GTT Domestic Mobile Customer**
- **GTT Domestic Mobile Customer–Sent SMS → Telco Domestic Mobile Customer**

2.3.1 Domestic SMS Termination Service is offered by GTT to Telco and by Telco to GTT. Domestic SMS Termination Service is the acceptance, at the Point of Connection, of a Domestic SMS that originates from a Domestic Mobile Customer on the System of one Party, where the SMS is conveyed for termination to a Domestic Mobile Customer of the other Party, and delivery or offer of delivery of each such SMS. Domestic SMS Termination Service provided by GTT can only be provided on Interconnection Links provided by GTT. Domestic SMS Termination Service provided by Telco can be provided on Interconnection Links Service provided by either GTT or Telco.

2.3.2 The technical standards, operational processes, and quality of services that apply to Domestic SMS Termination Services are defined in Annex D (Joint Working Manual).

2.3.3 The Charges that apply to Domestic SMS Termination Services are defined in Annex C (Rate Schedule).

PART 3. DOMESTIC TRANSIT SERVICES

3.1 Domestic Call Transit Service

- **Domestic Call → Telco Systems → GTT Domestic Landline Customer or GTT Domestic Mobile Customer**
- **Domestic Call → GTT Systems → Telco Domestic Landline Customer or Telco Domestic Mobile Customer**

3.1.1 Domestic Call Transit Service is offered by GTT to Telco and by Telco to GTT. Domestic Call Transit Service is the acceptance, at the Point of Connection, of a Domestic Call that originates on the System of a Domestic Third Party Telecommunications Provider, where the Call is conveyed to one Party, and that Party then conveys the Call for termination to the Domestic Customer of the other Party, and delivery or offer of delivery of each such Call. Domestic Call Transit Service provided by GTT can only be provided on Interconnection Links provided by GTT. Domestic Call Transit Service provided by Telco can be provided in on Interconnection Links provided by either GTT or Telco.

3.1.2 The technical standards, operational processes, and quality of services that apply to Domestic Call Transit Services are defined in Annex D (Joint Working Manual).

3.1.3 The Charges that apply to Domestic Call Transit Services are defined in Annex C (Rate Schedule).

3.1.4 For purposes of Sections 3.2 of the Legal Framework, Domestic Call Transit Service Traffic does not need to be segregated separately as Domestic Call Transit Service Traffic; instead, Domestic Call Transit Service Traffic will be included with either Domestic Landline Call Termination Service Traffic or Domestic Call Mobile Service Termination Traffic, as the case may be.

3.2 Domestic Originating Call Transit Service

- **Telco Domestic Call → GTT Systems → Third Party Telecommunications Provider**

3.2.1 Domestic Originating Call Transit Service is offered by GTT to Telco. Domestic Originating Call Transit Service is the acceptance, at the Point of Connection, of a Domestic Call that originates on the System of Telco, where the Call is conveyed to GTT, and GTT then conveys the Call for termination to a Domestic Third Party Telecommunications Provider, and delivery or offer of delivery of each such Call. Domestic Originating Call Transit Service provided by GTT can only be provided on Interconnection Links provided by GTT.

3.2.2 The technical standards, operational processes, and quality of services that apply to Domestic Originating Call Transit Services are defined in Annex D (Joint Working Manual).

3.2.3 The Charges that apply to Domestic Originating Call Transit Services are defined in Annex C (Rate Schedule).

3.3 Domestic SMS Transit Service

- **Domestic SMS → Telco Systems → GTT Domestic Mobile Customer**
- **Domestic SMS → GTT Systems → Telco Domestic Mobile Customer**

3.3.1 Domestic SMS Transit Service is offered by GTT to Telco and by Telco to GTT. Domestic SMS Transit Service is the acceptance, at the Point of Connection, of a Domestic SMS that originates on the System of a Domestic Third Party Telecommunications Provider, where the SMS is conveyed to one Party, and that Party then conveys the SMS for termination to the Domestic Mobile Customer of the other Party, and delivery or offer of delivery of each such SMS. Domestic SMS Transit Service provided by GTT can only be provided on Interconnection Links provided by GTT. Domestic SMS Transit Service provided by Telco can be provided on Interconnection Links provided by either GTT or Telco.

3.3.2 The technical standards, operational processes, and quality of services that apply to Domestic SMS Transit Services are defined in Annex D (Joint Working Manual).

3.3.3 The Charges that apply to Domestic SMS Transit Services are defined in Annex C (Rate Schedule).

3.3.4 For purposes of Sections 3.2 of the Legal Framework, Domestic SMS Transit Service Traffic does not need to be separately segregated as Domestic SMS Transit Service Traffic; instead, Domestic SMS Transit Service Traffic will be included with Domestic SMS Termination Service Traffic.

3.4 Domestic Originating SMS Transit Service

- **Telco Domestic SMS → GTT Systems → Third Party Telecommunications Provider**

3.4.1 Domestic Originating SMS Transit Service is offered by GTT to Telco. Domestic Originating SMS Transit Service is the acceptance, at the Point of Connection, of a Domestic SMS that originates on the System of Telco, where the SMS is conveyed to GTT, and GTT then conveys the SMS for termination to a Domestic Third Party Telecommunications Provider, and delivery or offer of delivery of each such SMS. Domestic Originating SMS Transit Service provided by GTT can only be provided on Interconnection Links provided by GTT.

3.4.2 The technical standards, operational processes, and quality of services that apply to Domestic Originating SMS Transit Services are defined in Annex D (Joint Working Manual).

3.4.3 The Charges that apply to Domestic Originating SMS Transit Services are defined in Annex C (Rate Schedule).

PART 4. SPECIAL ACCESS SERVICES

4.1 Emergency Services Access Service

4.1.1 Emergency Services Access Service is offered by GTT to Telco and by Telco to GTT. Emergency Services Access Service is the acceptance, at the Point of Connection, of a Domestic Call that originates from a Domestic Customer on the System of one Party, where the Call is conveyed by the other Party to valid emergency service access numbers of the specific emergency center indicated by the called number, and delivery or offer of delivery of each such Call. Emergency Services Access Service provided by GTT can only be provided on Interconnection Links provided by GTT. Emergency Services Access Service provided by Telco can be provided on Interconnection Links provided by either GTT or Telco.

4.1.2 The technical standards, operational processes, and quality of services that apply to Emergency Services Access Service are defined in Annex D (Joint Working Manual).

4.1.3 The Charges that apply to Emergency Services Access Service are defined in Annex C (Rate Schedule).

4.2 National Directory Assistance Access Service

4.2.1 National Directory Assistance Access Service is offered by GTT to Telco. National Directory Assistance Access Service is the acceptance, at the Point of Connection, of a Domestic Call that originates from a Domestic Customer on the System of Telco, where the Call is addressed to National Directory Assistance Service (“092”) and conveyed to GTT, and then by GTT to the specific Customer Call Center indicated by the called number, and delivery or offer of delivery of each such Call. National Directory Assistance Access Service provided by GTT can only be provided on Interconnection Links provided by GTT.

4.2.2 The technical standards, operational processes, and quality of services that apply to National Directory Assistance Access Service are defined in Annex D (Joint Working Manual).

4.2.3 The Charges that apply to the National Directory Assistance Access Service are defined in Annex C (Rate Schedule).

4.2.4 This Service limits Customers to one telephone number inquiry per call, with the minimum information needed from the Customer being a name and (partial) address. If more than one listing is found, the telephone numbers relating to the two principal listings will be given. If the listing that is found to be ex-directory, the Customer Call Center will state that the requested number is unlisted or that the requested telephone number cannot be disclosed. Where no listing is found the Customer Call Center will state that the requested number is unlisted or cannot be found.

4.2.5 The information available in the National Directory Assistance database will depend on agreements among the Parties with Third Party Telecommunications Providers for the

**REFERENCE INTERCONNECT OFFER
GTT ANNEX B – SERVICES 3.0**

inclusion of their Customer information in the database. GTT has no responsibility or liability for inaccuracies or omissions relating to the National Directory Assistance database.

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Annex C

Reference Interconnect Offer

Rate Schedule Annex 3.0

February 24, 2023

**Note: All rates referred to in this schedule are in Guyanese dollars, exclusive of VAT,
unless specifically stated otherwise.**

TABLE OF CONTENTS

	Page
PART 1. INTERCONNECTION LINK SERVICES	1
1.1 GTT Interconnection Link Non-Recurring Charges	1
1.2 Telco Interconnection Link Non-Recurring Charges	1
1.3 GTT Interconnection Link Monthly Recurring Charges	1
1.4 Telco Interconnection Link Monthly Recurring Charges	2
PART 2. DOMESTIC TERMINATION SERVICES	2
2.1 Domestic Landline Call Termination Service Charges	2
2.2 Domestic Mobile Call Termination Service Charges	3
2.3 Domestic SMS Termination Service Charges	3
PART 3. DOMESTIC TRANSIT SERVICES	3
3.1 Domestic Call Transit Service Charges	3
3.2 Domestic Originating Call Transit Service Charges	4
3.3 Domestic SMS Transit Service Charges	4
3.4 Domestic Originating SMS Transit Service Charges	5
PART 4. SPECIAL ACCESS SERVICES	5
4.1 Emergency Services Access Service Charges	5
4.2 National Directory Assistance Service Charges	5

PART 1. INTERCONNECTION LINK SERVICES

1.1 GTT Interconnection Link Non-Recurring Charges

For Interconnection Links provided by GTT, non-recurring Charges apply, and shall be paid by Telco, for any additional or new Interconnection Link E1 circuits that Telco elects to receive from GTT (*i.e.*, not provisioned as of the Effective Date). These non-recurring Charges and the necessary technical parameters shall be established between the Parties, with Charges at the prices for such circuits to be determined by agreement, in writing, between the Parties on an individual case basis. The Parties agree to use their respective reasonable endeavours to negotiate agreement as to all such Interconnection Link E1 circuits, associated costs (and each component thereof) and Charges, giving consideration to the following:

- Telco shall be assessed an activation Charge of at least GYD 50,000 per Interconnection Link E1 circuit;
- Non-recurring Charges for a new an Interconnection Link shall include installation, testing and, where ordered, reconfiguration. These Charges will be payable by Telco. The Charges payable by Telco will also cover the labour, material, and other costs, plus a markup; and
- Future reasonable non-recurring Charges for capacity expansion, installation, testing and reconfiguration shall be paid by Telco, and shall be based on an agreement, in writing, between the Parties.

For the avoidance of doubt, any Interconnection Links existing between the Parties on the Effective Date will not incur a non-recurring Charge to either Party, relating to, as examples, any immediate and necessary reconfiguration, or reduction of capacity resulting from this Agreement during the Segregation Transition Period.

1.2 Telco Interconnection Link Non-Recurring Charges

To the extent Telco elects to provide its own Interconnection Links pursuant to Section 3.4 of the Legal Framework, there shall be no non-recurring Charge for that Interconnection Link Service to either Party. For the avoidance of doubt, GTT will not impose any non-recurring Charges for Telco-provided Interconnection Links and Telco will not impose any non-recurring Charges for Telco-provided Interconnection Links.

1.3 GTT Interconnection Link Monthly Recurring Charges

Monthly recurring Charges associated with the Equipment and Facilities for the entire span of each Interconnection Link provided with GTT Interconnection Link Services are the combined Charge amount of Line Charge and Port Charges, at the rates shown below, per E1, at the rate for either uni-directional or bi-directional Traffic, as the case may be.

Uni-directional E1 Charge Monthly Recurring Charge VAT Exclusive	
Line Charge	Port Charge
GYD 58,500.00	GYD 4,500.00

Bi-directional E1 Charge Monthly Recurring Charges VAT Exclusive	
Line Charge	Port Charge
GYD 29,250.00	GYD 2,250.00

1.4 Telco Interconnection Link Monthly Recurring Charges

To the extent Telco elects to provide its own Interconnection Links pursuant to Section 3.4 of the Legal Framework, there shall be no monthly recurring Charge for that Interconnection Link Service to either Party. For the avoidance of doubt, GTT will not impose any recurring Charges for Telco-provided Interconnection Links and Telco will not impose any recurring Charges for Telco-provided Interconnection Links.

PART 2. DOMESTIC TERMINATION SERVICES

2.1 Domestic Landline Call Termination Service Charges

- **Telco Domestic Customer → GTT Domestic Landline Customer**
- **GTT Domestic Customer → Telco Domestic Landline Customer**

Termination Charge per 60 seconds VAT Exclusive
GYD 8.71

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

Single Tandem Charge per 60 seconds VAT Exclusive
2.00

The Single Tandem Charge applies in addition to the Domestic Landline Call Termination Service Charge above for all Domestic Landline Call Termination Calls. Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

2.2 Domestic Mobile Call Termination Service Charges

- Telco Domestic Customer → GTT Domestic Mobile Customer
- GTT Domestic Customer → Telco Domestic Mobile Customer

Termination Charge per 60 seconds VAT Exclusive
GYD 11.42

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

2.3 Domestic SMS Termination Service Charges

- Telco Domestic Mobile Customer–Sent SMS → GTT Domestic Mobile Customer
- GTT Domestic Mobile Customer–Sent SMS → Telco Domestic Mobile Customer

Termination Charge per each SMS VAT Exclusive
GYD 2.00

Charges apply on a per SMS Message basis.

PART 3. DOMESTIC TRANSIT SERVICES

3.1 Domestic Call Transit Service Charges

- Domestic Call → Telco Systems → GTT Domestic Landline Customer
- Domestic Call → GTT Systems → Telco Domestic Landline Customer

Termination Charge per 60 seconds VAT Exclusive
GYD 8.71

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

Single Tandem Charge per 60 seconds VAT Exclusive
GYD 2.00

The Single Tandem Charge applies in addition to the Domestic Transit Call Termination Service Charge above for Landline Domestic Transit Call Termination Calls. Charges apply on a per

second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

- **Domestic Call → Telco Systems → GTT Domestic Mobile Customer**
- **Domestic Call → GTT Systems → Telco Domestic Mobile Customer**

➤ Termination Charge per 60 seconds VAT Exclusive
GYD 11.42

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

3.2 Domestic Originating Call Transit Service Charges

- **Telco Domestic Call → GTT Systems → Third Party Telecommunications Provider**

Charge per 60 seconds GYD, VAT Exclusive
Pass through plus 25%

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

3.3 Domestic SMS Transit Service Charges

- **Domestic SMS → Telco Systems → GTT Domestic Mobile Customer**
- **Domestic SMS → GTT Systems → Telco Domestic Mobile Customer**

Charge per each SMS VAT Exclusive
GYD 2.00

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

3.4 Domestic Originating SMS Transit Service Charges

- **Telco Domestic SMS → GTT Systems → Third Party Telecommunications Provider**

Charge per each SMS GYD, VAT Exclusive
Pass through plus 25%

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

PART 4. SPECIAL ACCESS SERVICES

4.1 Emergency Services Access Service Charges

Access Charge per 60 seconds GYD VAT Exclusive
12.00

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

4.2 National Directory Assistance Service Charges

Access Charge per 60 seconds GYD VAT Exclusive
140.00

Charges apply on a per second basis being 1/60th of the per-minute charge payable for each second of the Duration of the Call.

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**REFERENCE INTERCONNECT OFFER
GTT ANNEX D – JOINT WORKING MANUAL 3.0**

Annex D

Reference Interconnect Order

Joint Working Manual Annex 3.0

February 24, 2023

Submitted to the Commission February 24, 2023

TABLE OF CONTENTS

	<u>Page</u>
1. CHAPTER 1 – TECHNICAL SPECIFICATION	1
1.1 Introduction	1
1.2 Technical Characteristics for Interconnection Links	1
1.2.1 Principles.....	1
1.2.2 Diverse Routing	2
1.2.3 Circuit Termination Unit Specifications	2
1.2.4 2.048 Mbit/s Network Link Characteristics.....	2
1.2.5 Electrical Characteristics	3
1.2.6 Functional Characteristics.....	3
1.2.7 Synchronisation.....	3
1.2.8 Safety and Protection	4
1.2.9 Electromagnetic Compatibility	4
1.3 Quality of Service for Interconnection Links	4
1.3.1 Definitions.....	5
1.3.2 Quality of Service Levels.....	5
1.4 Signalling Principles	5
1.4.1 Signalling Principles	5
1.4.2 Circuit Related Signalling.....	5
1.4.3 Protocols	6
1.4.4 Parameter fields	6
1.4.5 Voice Signalling Procedure	6
1.4.6 Signalling Quality of Service.....	6
1.5 Traffic Handling of Services	7
1.5.1 Trunk Groups	7
1.5.2 Signalling Links	7
1.5.3 Quality of Service for Access Services.....	7
1.5.4 Calling Line Identity	9
1.6 ITU-T Code References	10
2. CHAPTER 2 - OPERATIONS AND MAINTENANCE.....	11
2.1 Operations and Maintenance: Introduction	11
2.2 Roles and Responsibilities	13
2.3 Operational Meetings	14
2.4 Service Implementation	15
2.5 Performance Reports	16
2.6 Interconnect Resolution Log	16

TABLE OF CONTENTS

	<u>Page</u>
2.7	Technical Disagreements..... 16
2.8	Forecasting, Ordering, and Provisioning..... 16
2.8.1	Forecasting.....
2.8.2	Ordering.....
2.8.3	Provisioning.....
2.8.4	Acceptance Testing.....
2.8.5	Fault Management.....
2.8.6	Fault Classification.....
2.8.7	Fault Restoration.....
2.8.8	Planned and Emergency Maintenance.....
2.8.9	Miscellaneous Operations and Maintenance Procedures.....
3.	CHAPTER 3 – TESTING..... 24
3.1	Interconnect Testing - Objectives & Scope 24
3.2	Interconnect Testing Framework..... 26
3.3	Test Phase Specifications for Testing..... 27
3.3.1	Test Phase Specifications.....
3.3.2	Individual Location Test.....
3.3.3	Network Interconnection Test.....
3.3.4	First Live Traffic.....
3.3.5	Operational Field Trial.....
3.3.6	Test Sheets and Test Report.....
3.4	Test Suites..... 33
3.4.1	The Interconnect Test Suites.....
3.4.2	Conformance Testing.....
3.4.3	Interoperability Testing.....
3.4.4	Stability and Security Test.....
3.4.5	Service Test.....
3.4.6	Billing.....
3.4.7	Processes.....
3.5	Testing Fault Procedure..... 35
3.6	Additional Roles and Responsibilities for Testing..... 37
3.7	Interconnect Testing Documentation..... 38

1. CHAPTER 1 – TECHNICAL SPECIFICATION

1.1 Introduction

1.1.1 This chapter describes the technical specifications applicable to the Interconnection Links the Services as described in Annex B (Services) to the Agreement. The specifications in this chapter are applicable to both Parties.

1.2 Technical Characteristics for Interconnection Links

1.2.1 Principles

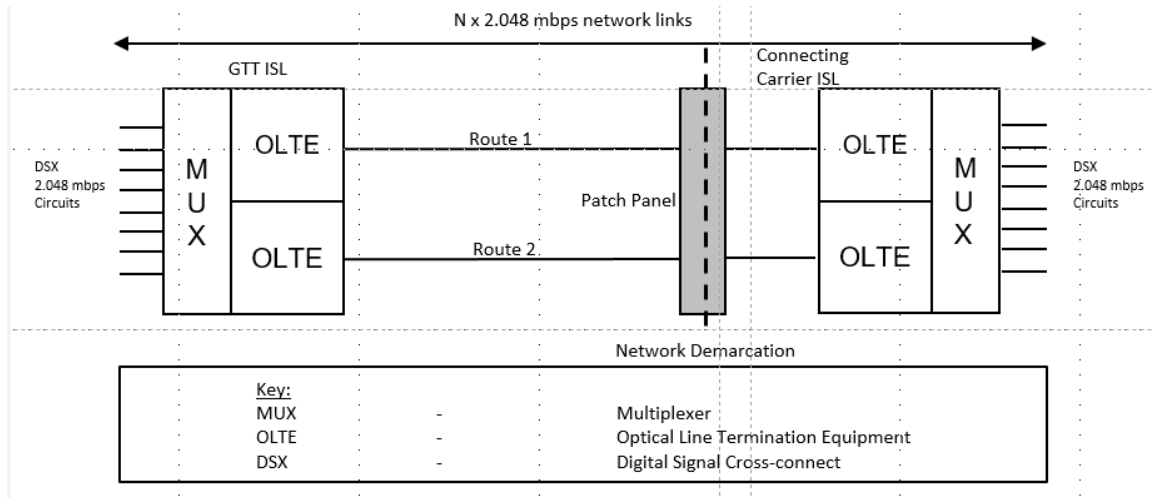
1.2.1.1 The Interconnection Location (“IL”) for all Interconnection Links shall be in Georgetown, Guyana on or within 30 metres of [Address], Georgetown, Guyana for Interconnection Links provided by GTT or on or within 10 metres of 79 Brickdam, Stabroek, Georgetown, Guyana for Interconnection Links provided by Telco. The Point of Connection for Interconnection Links will be on fibre patch panel, configured for FC (“Ferrule Assembly”). For the avoidance of doubt, the physical interface on the fibre patch panel is the Point of Connection.

1.2.1.2 All Interconnection Links will comprise of at least two optical fibre cables (2 strands/cable) connecting GTT’s IL to Telco’s IL and Telco’s IL to GTT’s IL.

1.2.1.3 All Interconnection Links will comprise of: (i) the fibre electronics, circuit terminating unit (“CTU”) at one Party’s end of the Interconnection Link, (ii) a Joining Box at the other Party’s end of the Interconnection Link, and (iii) the point-to-point optical fibre between the two.

1.2.1.4 All Interconnection Links provided by either Party will be based on Synchronous Digital Hierarchy (“SDH”). ETSI standard G.703 interface will be used. All SDH Facilities and telecommunications Equipment should conform to SDH transport system standards in an N x E1 methodology. Figure 1 below visually depicts an Interconnection Link and shows two fibre routes in different locations, and terminal equipment in one Interconnect location, as further described below.

Figure 1: The Interconnection Link



1.2.2 Diverse Routing

1.2.2.1 Apart from where cables enter and traverse cable vaults, the Transmission routes (Route –1 and Route –2 in [Figure 1](#)) will be diversely routed. Separation distances will depend on cable design parameters and on the Parties’ confirmation of their IL locations.

1.2.2.2 Single mode optical fibre cable parameters are as follows:

Wavelength nm		1300	1285-1330	1550
Attenuation (dB/Km):	Typical	0.36	0.36	0.24
	Maximum	0.40	0.42	0.25

The non-uniformity will be ≤ 0.01 dB.

1.2.3 Circuit Termination Unit Specifications

1.2.3.1 All CTU Facilities and telecommunications Equipment must conform to SDH standards and any additional standards specified in this Chapter, and must be compatible with the other Parties’ facilities and telecommunications Equipment.

1.2.3.1.1 The telecommunications Equipment used by Telco to connect to the GTT Interconnection Links conforms to ETSI SDH G.703.

1.2.3.1.2 The telecommunications Equipment used by used by GTT to connect to the Telco Interconnection Links conforms to ETSI SDH G.703.

1.2.4 2.048 Mbit/s Network Link Characteristics

1.2.4.1 The links for Interconnect are based on the 2048 Kbit/s signalling system as described in ITU-T G. 703 ETSI standards.

1.2.4.2 The Parties shall adopt the same standards as set out in the ITU-T recommendations for the links for Interconnect, for the following:

- Tolerance on links
- Alarms on links
- Filter on links
- Errors on links

1.2.5 Electrical Characteristics

1.2.5.1 The output jitter for the links for Interconnect shall not exceed 0.75 UI under worst-case operating conditions when measured in the frequency range 20 Hz to 100 KHz, as defined in ITU-T G.921 Table 3.

1.2.5.2 The tolerance of each Party's input ports to jitter shall be as defined in ITU-T Recommendation G.823. A jitter measuring set conforming to the requirements of ITU-T Recommendation O.171 (Timing Jitter Measuring Equipment for Digital Systems) shall be used to measure jitter. The Parties shall cooperate in the application of testing methods as described in ITU-T Recommendation G.823. The wander specification for the links for Interconnect is set out in ITU-T recommendation G.823. The maximum values of wander at input ports must conform to section 3.1.1 of ITU-T Recommendation G.823. Functional Characteristics Each 2.048 Mbit/s link for Interconnection shall be transparent and independent of any Traffic stream passed across it. The functional characteristics of the interface for the 2.048 Mbit/s links for Interconnect must conform to ITU-T recommendations G.704 and G.706 and the additional requirements specified below. 2048 Kbit/s interfaces shall conform to ITU-T G.803 and G.821 for generation of AIS and RAI alarms, and with G.823 for slipping conditions.

1.2.6.4 At the digital interface, the analogue information shall be encoded using the 8bit, A-law characteristic in accordance with ITU-T Recommendation G.711 such that a 64Kbit/s time slot at the Point of Connection can be decoded using an 8 bit, A-law decoder. The bit pattern of a free channel shall be in conformity with ITU-T recommendation Q.522.

1.2.7 Synchronisation

1.2.7.1 Each Party will use its own synchronisation conforming to the synchronisation standards addressed in ITU-T G.703.

1.2.7.2 When the Parties synchronise, it shall do so via nominated links for Interconnect consistent with the telecommunications Equipment specifications in Section 1.2.3, above.

1.2.7.3 The Parties will provide each other the 2.048 mbps interface for synchronisation on any two links. (Accuracy of 1.6×10^{-8} and stability of 1×10^{-10} /day). Clock will be referenced to a stratum 1-system clock.

1.2.7.4 The nominated synchronisation channels will be time slot (zero) on any network link.

1.2.7.5 The maximum wander shall conform to ITU-T G.811 and G.812. The synchronisation shall meet the requirements of ITU-T G.703 and is traceable to Stratum 1 source (minimum accuracy of $\pm 1 \times 10^{-11}$).

1.2.8 Safety and Protection

1.2.8.1 All telecommunications Equipment will comply with UL 1950 and/or national safety standards whichever is the most stringent.

1.2.8.2 For high voltages, telecommunications Equipment will comply with ITU-T K.11.

1.2.8.3 If radio equipment is used, it will comply with the international standard ITU-T K.37 to protect employees from electromagnetic radiation with a power in excess of 1 milliwatt per centimetre.

1.2.8.4 The screen of the cable at an output port must be connected to the metal cabinet, which holds the equipment. The screen of the cable at an input port must be earthed.

1.2.9 Electromagnetic Compatibility

1.2.9.1 All links for Interconnect telecommunications Equipment must comply with ITU-T K.43 for network equipment Electromagnetic Compatibility (“EMC”) requirements and must comply with any national regulations relating to electromagnetic and electrostatic compatibility.

1.2.9.2 All links for Interconnect telecommunications Equipment must comply with ITU-T K.42 for immunity to radiated electromagnetic energy.

1.2.9.3 All links for Interconnect telecommunications Equipment must comply with national standard and/or ITU K.32 whichever is more stringent for electrostatic discharge.

1.2.9.4 All links for Interconnect telecommunications Equipment must comply with EN 55022 class B or FCC Part 15 for radiated and conducted emissions.

1.2.9.5 All links for Interconnect telecommunications Equipment must comply with any national regulations relating to electromagnetic and electrostatic compatibility.

1.2.9.6 The links for Interconnect telecommunications Equipment must be immune to radiated electromagnetic field of up to 3V/m.

1.3 Quality of Service for Interconnection Links

1.3.1 Definitions

1.3.1.1 Interconnection Link Availability, Errored Seconds, and Severely Errored Seconds are the parameters used to measure the quality of service of the links for Interconnect. These quality of service parameters are applicable to all Interconnection Links that are delivered by the Parties. Measurements of these service quality parameters will be specified in minutes per calendar months and will be on a per link basis.

1.3.1.2 The definition of “Interconnection Link Availability” (%) for a Party is:

$100 * \frac{(\text{total time} - \text{time allocated to Planned Maintenance} - \text{time link not available for traffic due to System Faults})}{\text{total time} - \text{time allocated for Planned Maintenance}}$

(total time – time allocated for Planned Maintenance)

where the unit of time is minutes and total time is calculated as the number of days in the month multiplied by 1440 minutes.

1.3.1.3 The definition of “Errored Second” is a one second interval with one or more bit errors.

1.3.1.4 The definition of “Severely Errored Second” is a one-second period, which has a bit error ratio greater than or equal to 10^{-3} .

1.3.2 Quality of Service Levels

1.3.2.1 The following quality of service levels are applicable to the Interconnection Links and is based on ITU standard G703:

1.	Network Link Availability	> 99.9%
2.	Percentage of Severely Errored Seconds	≤ 0.055%
3.	Error Free Seconds	> 99.0%

1.4 Signalling Principles

1.4.1 Signalling Principles

1.4.1.1 Signalling applied to Interconnection Links shall be Signalling System No. 7, which conforms to ETSI standards. Operator dependent implementations of the signalling protocol at the network interface will not be supported.

1.4.2 Circuit Related Signalling

1.4.2.1 3.1KHz audio and speech bearer services shall be supported.

1.4.2.2 In principle, the Parties will transfer signalling messages transparently through its System. However, neither Party can guarantee proper end-to-end interworking of signalling messages originating or terminating outside their System.

1.4.3 Protocols

1.4.3.1 The MTP (ETS 300 008) and ETSI ISUP V1 (ETS 300 121) protocols shall be supported.

1.4.3.2 The signalling mode shall be fully associated.

1.4.4 Parameter fields

1.4.4.1 Network indicator 11 (binary notation) and the National Transit Domain point-codes shall be used. The CLI represents the national significant number; the nature of address indicator shall be set accordingly. For the avoidance of doubt, point codes will need to be coordinated between operators and nationally in conjunction with the Regulator. The address presentation restriction indicator shall not contain the values “spare” or “address not available”.

1.4.5 Voice Signalling Procedure

1.4.5.1 All Traffic to national significant numbers shall use en-bloc-signalling mode of operation.

1.4.5.2 In case of overlap signalling mode of operation, an address complete message shall be sent as soon as all digits necessary to complete the Traffic are received.

1.4.5.3 Stop digits for indicating that the full number is transmitted shall not be used.

1.4.5.4 The required called party number format, nature of address, number length (range) and signalling mode of operation, as passed, between the Systems shall conform with the standards indicated below. Note that codes approved by the Regulator are mandatory.

Signalling

Called party number format	10 Digit – 592 NXX NNNN
Calling party number format	ITU E.164
Number length (range)	1-10 Digits

1.4.6 Signalling Quality of Service

1.4.6.1 The following quality of service levels for signalling availability on links for Interconnect are as follows:

**REFERENCE INTERCONNECT OFFER
GTT ANNEX D – JOINT WORKING MANUAL 3.0**

1	Signalling Availability on Interconnection Links	≥ 99.9 %
2	Percentage of Severely Errored Seconds	≤ 0.055 %
3	Error Free Seconds	≥ 99.5 %

1.5 Traffic Handling of Services

1.5.1 Trunk Groups

1.5.1.1 Both Parties will undertake the routing/translation for all codes that require re-routing/re-translation across its System. However, all CLI and codes must comply with international and national standards.

1.5.1.2 Separate trunk groups per Service category identified in Annex B (Service Descriptions) or for a group of services will be agreed in writing, in advance of the provision of any Service.

1.5.1.3 All trunk groups shall be uni-directional.

1.5.1.4 Every separate trunk group that traverses between the Points of Connection between the Parties shall be identified exchanged by the Parties in the form identified in Appendix 1.

1.5.2 Signalling Links

1.5.2.1 A minimum of two signalling links will be provided between the Telco System and the GTT System, operating in a failover configuration.

1.5.2.2 Telco and GTT will maintain equal loading of the signalling links.

1.5.2.3 Telco and GTT will operate the signalling links in a redundant mode of operation.

1.5.2.4 The signalling links will be designed for a normal load of 0.2E and a maximum load of 0.4E following the guidelines of ETS 300 008.

1.5.2.5 The dimensioning of signalling links will be determined by the number of Call attempts using Erlangs formula.

1.5.2.6 This formula is applicable when signalling links are used for circuit related signaling; the number of links will be subsequently monitored, and adjusted, should this be necessary, according to specific traffic type.

1.5.2.7 The signalling links shall be used exclusively for the exchange of signalling messages.

1.5.3 Quality of Service for Access Services

1.5.3.1 The quality of service for Services described in Annex B (Service Descriptions) is represented by the following parameters: Call Availability, Dial Set-up Delay and Propagation Delay, each as defined below.

1.5.3.2 Depending on the Service, the Parties will have a role as:

- **Originating Party.** In this role, the entity handles Traffic from a Calling Party Customer in its originating System to the Point of Connection;
- **Transiting Party.** In this role, the entity handles Traffic from a Third Party Telecommunications Provider to a Party's Point of Connection with the other Party.
- **Terminating Party.** In this role, the entity handles Traffic from its Point of Connection to terminate through the terminating System to the Called Party.

1.5.3.3 For each quality of service parameter a value is defined.

1.5.3.4 Call Availability

1.5.3.4.1 The definition of "Call Availability" (%) is

$$100 * \frac{(\text{Total call attempts} - \text{total call releases with cause codes of network fault})}{(\text{Total call attempts})}$$

WHERE:

Time is in seconds and

Total time is the total seconds during a particular calendar month

1.5.3.4.2 Release causes marked as network Faults are the following causes specified in ITU-T rec. Q.850:

- no circuit/channel available
- network out of order
- temporary failure
- switching equipment congestion
- access information discarded
- requested circuit/channel not available
- resource unavailable, unspecified
- bearer capability not presently available
- protocol error, unspecified
- interworking, unspecified.

1.5.3.4.3 The Call Availability is > 99%. The apportionment for the Call Availability budget for Telco and GTT is as follows:

Originating party	Transit party	Terminating party
≥99.6 %	≥99.8 %	≥99.6 %

1.5.3.5 Dial Setup Delay

1.5.3.5.1 “Dial Setup Delay” or (“DSD”) is defined as the interval from the moment that the last digit of the called party number is keyed by the calling party to the time a relevant tone (ring tone/busy/information tone/message) is received by the calling party.

1.5.3.5.2 Dial Set-up Delay quality of service parameters are ≥ 1 sec and ≥ 8 sec for interior locations or ITU E400, whichever is greater.

1.5.3.5.3 The apportionment for the Dial Setup Delay value for Telco and GTT is as follows:

Originating party	Transit party	Terminating party	Database access if applicable
575 ms	700 ms	575 ms	500 ms

1.5.3.6 Propagation Delay

1.5.3.7 “Propagation Delay” is defined as the round trip delay between the received signal and the transmitted signal.

1.5.3.8 The Propagation Delay quality of service parameter shall be no more than 22ms. Both Parties will take appropriate actions (such as echo cancellation, etc.) if this Propagation Delay parameter is exceeded.

1.5.3.9 The apportionment for the Propagation Delay budget for Telco and GTT is as follows:

Originating PBX network if applicable	Originating party	Transit party	Terminating party	Terminating PBX network
5 ms	4.5 ms	3 ms	4.5 ms	5 ms

1.5.4 Calling Line Identity

1.5.4.1 All trunks for Interconnection will utilise Q.731 signalling through which the “Calling Line Identity” (“CLI”) shall be passed transparently.

1.5.4.2 All numbers with CLI shall be transparent between Systems. Calling Number Delivery Blocking (“CNDB”) shall be applied to all private numbers within the Telco System and the GTT System. Telco and the GTT should ensure that CLIs associated with numbers with the CNDB are capable of termination in both Systems.

1.6 ITU-T Code References

G.703	“Physical/electrical characteristics of hierarchical digital interfaces”
G.711	“Pulse code modulation (PCM) of voice frequencies”
G.821	“Error performance of an international digital connection forming part of an integrated services digital network”
G.824	“The control of Jitter and wander within digital networks which are based on the 1.544 Mbit/s hierarchy”.
O.171	“Timing Jitter measuring equipment for digital systems”
K.11	“Principles of protection against over voltage and over current”
K.42	“Preparation of emission and immunity requirements for telecommunications equipment”
K.43	“Immunity requirements for telecommunications equipment”
K.37	“Public Telecommunications network equipment EMC requirements Part I: Product family overview, compliance criteria and test levels”
UL 1950	“Standard for Safety for Information Technology Equipment, 3rd Edition”
G.111	“Loudness ratings (LRs) in an international connection”
G.113	“Transmission impairments”
G.703	“Physical/electrical characteristics of hierarchical digital interfaces”
G.704	“Synchronous frame structures used at primary and secondary hierarchical levels”
G.706	“Frame alignment and cyclic redundancy check (CRC) procedures relating to basic frame structures defined in Recommendation G.704”
G.711	“Pulse code modulation (PCM) of voice frequencies”
G.811	“Timing characteristics of Primary Reference Clocks”
G.812	“Timing requirements of slave clocks suitable for use as node clocks”
G.813	“Timing characteristics of SDH slave clocks”

- G.821 “Error performance of an international digital connection forming part of an integrated services digital network”
- G.823 “The control of Jitter and wander within digital networks which are based on the 2048 Kbit/s hierarchy”.
- G.826 “Error performance parameters and objectives for international, constant bit rate digital paths at or above the primary rate”
- G.841 “Types and characteristics of SDH network protection architectures”
- G.921 “Digital sections based on the 2048 Kbit/s hierarchy”
- G.957 “Optical interfaces for equipment and systems relating to SDH”
- O.151 “Error performance measuring equipment operating at the primary rate and above”
- O.171 “Timing Jitter measuring equipment for digital systems”
- Q.522 “Digital exchange connections, signalling and ancillary functions”
- ETS 300 008 (1991) “Integrated Service Digital Network (ISDN); ITU-T Signalling System No.7; Message Transfer Part (MTP) to support international interconnection”
- ETS 300 121 “Integrated Service Digital Network (ISDN); ITU-T Signalling System No.7; Application of the ISDN User Part (ISUP) of CCITT Signalling System No.7 for international ISDN interconnections.”
- ETS 300 356 -1 (1995) “Integrated Services Digital Network (ISDN); Signalling System No.7. ; ISDN User Part (ISUP) version 2 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1993), modified].”
- ETS 300 356 -3 (1995) “Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 3: Calling Line Identification Presentation (CLIP) supplementary service [ITU-T Recommendation Q.731, clause 3 (1993), modified].”
- ETS 300 356 -4 (1995) “Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 4: Calling Line Identification Restriction (CLIR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993), modified].”

2. CHAPTER 2 - OPERATIONS AND MAINTENANCE

2.1 Operations and Maintenance: Introduction

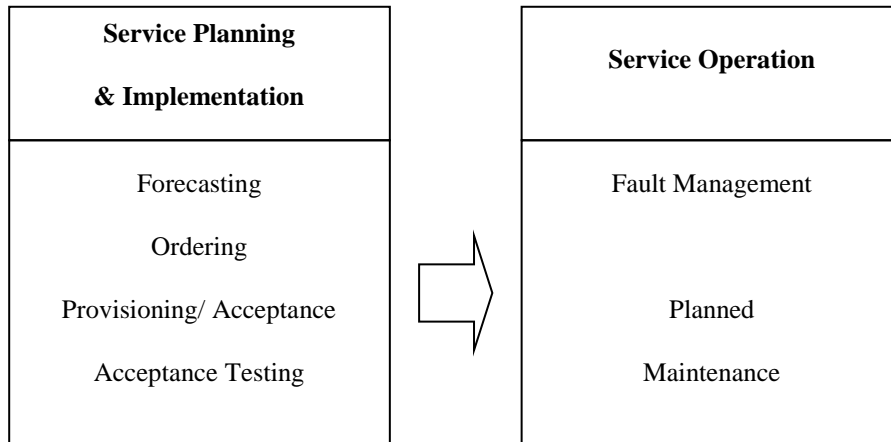
2.1.1 This Chapter specifies the operations and maintenance principles that Telco and GTT shall be required to conform to from the Effective Date. It describes the processes for Services provided by each Party and the exchange of information between Parties. The specifications in this Annex D (Joint Working Manual) are applicable to both Parties’

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GTT ANNEX D – JOINT WORKING MANUAL 3.0**

provision of Services. For the avoidance of doubt, only Services described in Annex B (Services) are available, even if described herein.

2.1.2 The following processes are covered in this Chapter.

Figure 2: Operational Processes



2.2 Roles and Responsibilities

2.2.1 Below are the functions, for both Parties, that are required to assure the effective management and execution of processes. These functions are described under sample roles, which may be arranged, combined, and managed at the sole discretion of each Party.

I. Liaison Manager

The Liaison Manager has overall responsibility for preliminary discussions regarding service planning, implementation, provisioning, and operational processes. Information should be exchanged between Liaison Managers, unless stated otherwise in this Joint Working Manual.

III. Project Manager

The Project Manager has responsibility for the service planning, commissioning, testing and implementation for new and additional Services. The Project Manager will track the activities relating to forecasting, ordering, provisioning and testing and will keep the Liaison Manager abreast of related issues.

V. Fault Control Manager

The Fault Control Manager has responsibility for managing Services and Network 24 hour, all days a year, and will own, identify and resolve relevant Faults.

II. Operations Manager

The Operations Manager has responsibility for managing the day-to-day quality of Services, including operational processes.

IV. Planning Manager

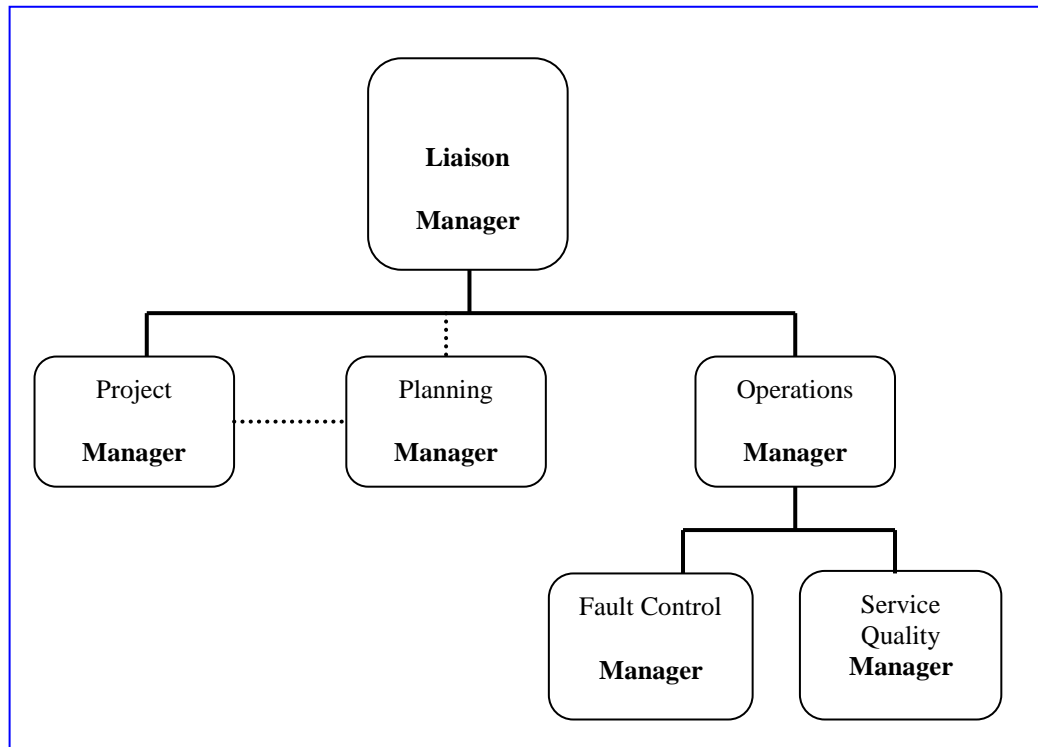
The Planning Manager has responsibility for forecasting and planning services and dimensioning of facilities for new and additional Services. Communications will generally be through the Project Manager to allow project coordination and monitoring.

VI. Service Quality Manager

The Service Quality Manager has responsibility for monitoring Service performance.

2.2.2 The relationship between the roles is illustrated in the Figure 3 below:

Figure 3: Operational Roles



2.3 Operational Meetings

2.3.1 Periodic meetings involving representatives from both Parties will be held once quarterly, unless the Parties agree that more frequent or infrequent meetings are required, to discuss the implementation and operation of Services provided pursuant to the Agreement. If a record of frequent performance failures or Faults is established, the Parties agree to hold monthly meetings to address the failures or Faults until such time as the Parties mutually agree failures or Faults have been addressed.

2.3.2 Service Implementation Meetings will include Forecasting Meetings, Order Planning Meetings, Provisioning Meetings, and Testing Meetings.

2.3.3 “Forecasting Meetings” will consider, *inter alia*, the Services Forecasts of both Parties and will seek to validate any assumptions used in making the Forecasts.

2.3.4 “Order Planning Meetings” will consider, *inter alia*, the final Forecast for each Party, and will lead to the production of an Order Plan.

2.3.5 “Provisioning Meetings” will, *inter alia*, review progress against plans and lead to agreement on any changes required.

2.3.6 “Testing Meetings” will, *inter alia*, review the process, the Test Suites, the Test Plan, and Service Acceptance. Any additional inter-operability testing that is required as a result of differences in standards or the introduction of new technology will also be included in the Testing Meetings process.

2.3.7 Additional technical meetings may be held prior to the provisioning phase to facilitate the early exchange of information regarding technical standards, the numbering scheme of each network, switch identification, routing etc.

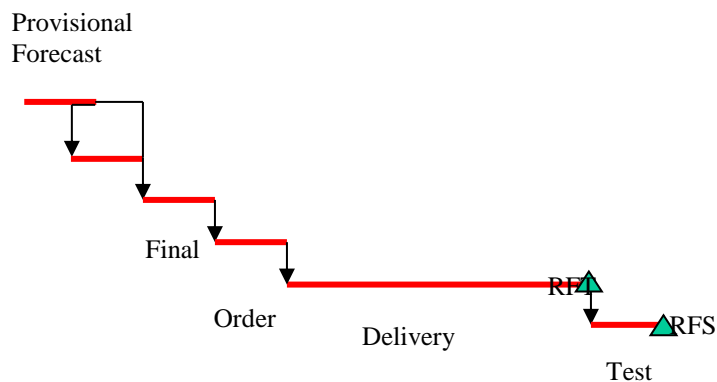
2.3.8 “Operational Meetings” will include discussions of, *inter alia*:

- review process performance by comparing actual and agreed quality of Service levels
- review operational problems that affect the quality of Service levels
- review of Interconnect Resolution Log
- agree on quality initiatives
- discuss performance reports (such as scheduled service interruptions and procedures to minimize disruptions)
- update the list of Fault Escalation contacts in Section V of Appendix 5

2.4 Service Implementation

2.4.1 The Service implementation process is shown graphically in Figure 4 below.

Figure 4: Service Implementation Process



2.4.2 The steps for Service implementation are as follows: a) provisional Forecast is exchange by the Parties, b) final Forecast is agreed, c) an Order Plan is exchanged by the Parties, d) a Service is delivered as ready for test (“RFT”), e) tests are conducted to ensure everything is ready for service (“RFS”). The stages in the sequence of the Service implementation are explained in more detail in the Paragraphs below in this Chapter.

2.5 Performance Reports

2.5.1 Written performance reports will be exchanged quarterly, and will include:

- Services that have been Forecasted and ordered, in the role of Service Taker, and Services that have been delivered in the role of Service Provider; and
- Service performance data.

2.5.2 The minimum set of items to be included in the performance report are shown in Appendix 2.

2.6 Interconnect Resolution Log

2.6.1 The resolution process is a mechanism for recording, tracking, and ultimately resolving interconnect issues, that have not been resolved within established time periods and through normal processes.

2.6.2 An Interconnect Resolution Log will be maintained to keep track of Interconnect Link issues and their status. This log (which will include the items set out in Appendix 1) will be maintained by the Parties and shall be reviewed at the Operational Meetings.

2.7 Technical Disagreements

2.7.1 In the event of any disagreement arising in respect of any technical matter in connection with this Agreement (other than technical matters in relation to Fault resolution prior to the exhaustion of the fault escalation procedure) (a “Technical Disagreement”), such Technical Disagreement shall in the first instance be referred to the Parties’ respective Liaison Managers for resolution. In the event that the Liaison Managers shall fail to resolve such Technical Disagreement within thirty (30) days of the matter being referred to them, either Party may (i) refer the Technical Disagreement for determination by such person as the Parties may agree, whose decision shall be binding, or (ii) in the absence of such agreement, the matter shall be considered to be a Dispute and settled in accordance with the procedures set out in Section 41 of the Legal Framework. The Parties shall co-operate in such determination and will make all relevant information and technical data available.

2.8 Forecasting, Ordering, and Provisioning

2.8.1 Forecasting

2.8.1.1 The Forecasting process requires both Parties to plan and exchange Forecasts for each applicable Service provided pursuant to this Agreement, and to ensure that changes to the Forecasts are communicated in a timely fashion.

2.8.1.2 The exchange of Forecast information is required to enable each Party to plan and manage its System and human resources. The process is ongoing, requiring information from a rolling 24-month period provided in bi-annual updates.

2.8.1.3 Each Party shall have the opportunity to comment on the validity of provisional Forecast information during Forecasting Meetings, and to review any assumptions used. Each Party is encouraged to provide appropriate supplementary information to aid the development of Forecasts.

2.8.1.4 All information exchanged relating to Forecasts shall be treated as confidential, and will not be used for any purpose other than as set out in this Joint Working Manual.

2.8.1.5 Each Party shall provide a provisional Forecast for all Services that they require to purchase (in the role of Service Taker) from the other Party (in the role of Service Supplier) for the ensuing two-year period, to the extent known. This provisional Forecast will consist of the Interconnection capacity, as well as traffic Forecasts for all other Services provided pursuant to this Agreement. The form of the Forecasts are contained in Appendix 3.

2.8.1.6 The Parties will meet shortly the exchange of provisional Forecasts to agree on the Forecast data; such agreed Forecast data will be called the “Final Forecast” and will include the combined provisional Forecasts of both parties (with any agreed amendments). For the first calendar year following execution of the Agreement, if the Parties do not reach agreement on a provisional Forecast despite diligent good faith efforts, the Parties shall agree on Forecast data in relation to the following month, which shall become the Final Forecast.

2.8.1.7 The review of provisional Forecasts and production of the Final Forecast, should take no longer than one month.

2.8.1.8 The Forecasting process requires both Parties to plan and exchange Forecasts for each applicable Service provided pursuant to this Agreement, and to ensure that changes to the Forecasts are communicated in a timely fashion.

2.8.2 Ordering

2.8.2.1 The Parties shall agree to an Order Plan for each Quarter at an “Ordering Meeting” and, following sign-off by both Parties of the Order Plan, the Order Plan shall be treated as submitted and shall constitute a binding Order Plan from each Party for capacity. The relevant Final Forecast will be an integral component of the Order Plan. The form of the Order Plan is given at Appendix 4.

2.8.2.2 The Order Plan will include a Ready for Test (“RFT”) date and a Ready for Service (“RFS”) for any increased capacity. These dates will depend on the nature of the additional capacity requirements, and will be agreed between the Parties on a case by case basis. For the avoidance of doubt, since the Order Plan will be based on the Final Forecast, it will represent an order for capacity in both directions.

2.8.2.3 The Order Plan will not be required to include a requirement for any specific use for any specific Service.

2.8.2.4 The RFT date and RFS date may be subject to Force Majeure Event circumstances, including delays caused by Third Parties, or delays caused by the Service Taker not complying with its obligations, providing insufficient or inaccurate information or not cooperating with the Service Provider. In the event of any delay attributable to a Force Majeure Event circumstance or by events and delays caused by the Service Taker, the RFT date and/or RFS date shall be deemed extended by the number of days of delay and the Service Provider shall not be liable therefore.

2.8.2.5 In the event that either Party shall notify the other that it wishes to cancel any capacity specified in an Order Plan (whether prior to or following provisioning), the notifying Party shall be required to Terminate that Service under any relevant provisions of this Agreement.

2.8.2.6 In the event that a Party determines that capacity specified in an Order Plan is insufficient to meet actual traffic volumes and meet the quality of service measures stated in this Joint Working Manual, then that Party shall promptly notify the other Party, and if the other Party agrees that capacity is insufficient, then the Parties shall: (i) establish a plan to increase capacity, including any agreed upon modifications to the RFT dates or RFS dates necessary to meet the actual Traffic volumes and quality of service measures in this Joint Working Manual; (ii) identify the applicable Charges associated with such plan and modifications; and (iii) in cases where the lack of sufficient capacity has been caused by one Party's rejection of bona fide Forecasts made by the other Party in good faith, and without compromising the general principle that the Party ordering additional capacity must pay any relevant up-front Charges, negotiate in good faith the allocation of costs to be borne by each Party, including but not limited to sharing of those costs by the Parties.

2.8.3 Provisioning

2.8.3.1 After the submission of the Order Plan, both Parties shall carry out the necessary preparations required for installation of the Services.

2.8.3.2 The Parties will use their reasonable endeavours to perform all activities to ensure that the facilities and telecommunications Equipment are in place to meet the agreed RFT date and RFS date.

2.8.3.3 If a Party envisages a delay to the RFT date or RFS date, it will inform the other Party in writing within twenty-four (24) hours of obtaining knowledge thereof, clearly indicating the reasons for the delay and any proposed revised RFT date or RFS date, and the Parties shall seek to agree a revised date.

2.8.3.4 Both Parties shall seek to minimise delay and the effects of delay.

2.8.4 Acceptance Testing

2.8.4.1 The Acceptance Testing process requires both Parties to ensure that all required E1 Interconnection Links, and any other applicable Services, are operational by the agreed RFS date (or other agreed date) to the agreed operational specifications and at the lowest practicable cost.

2.8.4.2 Plans for Acceptance Testing will be included in the Order Plan and shall consist of the standard suite of tests in accordance with this Joint Working Manual.

2.8.4.3 If a subset of the standard suite of tests is to be used, it must be agreed by both Parties on a case-by-case basis. The Parties shall co-operate fully in the performance of acceptance tests.

2.8.4.4 The two Parties shall jointly develop a test plan in accordance with this Joint Working Manual. The test plan shall include all required tests to be performed at specified intervals throughout the implementation of the Order Plan and the contact names and telephone numbers of representatives of both Parties.

2.8.4.5 Both Parties shall sign the Test Plan at least one month before the expected start of Acceptance Testing. Any delay in signing the test plan may result in a consequential delay of all previously scheduled implementation dates.

2.8.4.6 Prior to the scheduled RFT date (or other agreed date), all Systems, Interconnection Links, and signalling links to be used during Acceptance Testing must be in place and individual location tests must have been successfully completed.

2.8.4.7 At least five (5) Business Days before the scheduled RFT date (or other agreed date), the Service Provider shall advise the Service Taker whether the provisioning has been completed and Acceptance Testing can commence.

2.8.4.8 All Acceptance Test results will be recorded in a test report in accordance with this Joint Working Manual and both Parties will retain copies for future reference.

2.8.4.9 If the Acceptance Testing is successful, each Party will sign the acceptance test reports within two (2) Business Days of completion.

2.8.4.10 If Acceptance Testing is unsuccessful within the initially agreed time frame, the Parties may agree on a partial Acceptance Testing, with the understanding that full compliance will be met by an agreed date.

2.8.4.11 If either Party does not accept the Acceptance Testing, then the reasons for non-acceptance should be documented and the report signed indicating non-acceptance. The Parties will agree what action should be taken, including any timeframe for remedial work and re-testing. Any Technical Disagreements or Disputes will be resolved in accordance with the terms of the Agreement.

2.8.4.12 The details of the Test Suites are presented in Chapter 3 of this Joint Working Manual.

2.8.5 Fault Management

2.8.5.1 The Fault management process adopted by both Parties shall ensure the prompt restoration of agreed quality of Service. The level of detail for reporting Faults will be agreed in advance of Service activation by the two Parties and will be reciprocal.

2.8.5.2 The Fault management process adopted by both Parties shall ensure the prompt restoration of agreed quality of Service.

2.8.6 Fault Classification

2.8.6.1 Faults will be generally classified as follows:

- “System Fault”: A Fault resulting in the total loss of ability by either Party to transmit Calls between the two Systems due to transmission faults on the E1 Interconnection Link or an entire System;
- “Network Fault”: A Fault located within the Telco System (“Telco Network Fault”) or within the GTT System (“GTT Network Fault”). Network Faults include Faults within the signalling networks.

2.8.6.2 Faults will be addressed depending on individual circumstances, with Service Affecting Faults having the higher priority:

2.8.6.3 “Service Affecting Faults” (“SA Faults”) mean a Faults that result in a noticeable deterioration in the quality of service according to the classifications defined in Section 2.8.6.5 below, and for which the Fault Reporting Party can demonstrate:

- severely restricted ability by either Party to convey Calls between the two networks; or
- total loss of, or severely restricted access to one or more of the Services provided through the other Party’s System; or
- total loss of, or severely restricted access to Services provided through a Third Party Telecom Provider’s System, where the Calls are transited via either Party’s System; or
- a loss of Service deemed as “business critical” by either Party.

2.8.6.4 “Non Service Affecting Faults” (“NSA Faults”) means a Fault which is not a Service Affecting Fault.

2.8.6.5 Each Fault will be classified as Critical Link Failure, Major Link Failure, and Critical Route Failure, Major Route Failure, and Minor Route Failure, each of which are classified as follows:

Fault type	Classification
Critical Link Failure	<i>100% of total signalling capacity is unavailable</i>
Major Link Failure	<i>50% of total signalling capacity is unavailable</i>
Critical Route Failure	<i>50% or more of total capacity of the route is unavailable to carry traffic.</i>
Major Route Failure	<i>25% to < 50% of total capacity of the route is unavailable to carry traffic</i>
Minor Route Failure	<i>1% to < 25% of total capacity of the route is unavailable to carry traffic</i>

2.8.6.6 Each Party is required to provide Fault reporting and Fault management. Each Party should operate monitor the Services and Systems twenty-four (24) hours per day, seven (7) days per week and all days per year, and each Party should have specified contact numbers for Fault reporting and Fault management.

2.8.6.7 Either Party can report a Fault. Each Party will maintain a unique set of Log Numbers for Faults. When one Party reports a Fault to the other, the Parties will exchange Log Numbers for Faults.

2.8.6.8 Both Parties will exchange sufficient information to allow for efficient Fault resolution of all affected Services. A standard Fault management will be used by both Parties to report and receive Faults, in the form of [Appendix 5](#).

2.8.6.9 Each reported Fault will be investigated by the reporting Party to ensure that the Fault exists and to attempt to establish the location of the Fault.

2.8.6.10 For internally detected Faults, i.e., where a Party believes a Fault exists within its own System, the Party will inform the other Party about any such Faults which are Service Affecting Faults. This also applies to known Service Affecting Faults in a connected Third Party Telecommunications Provider’s System.

2.8.7 Fault Restoration

2.8.7.1 The stages associated with Fault restoration are presented in [Figure 5](#):

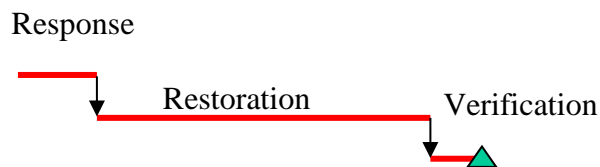


Figure 5: Fault Restoration Process

2.8.7.2 If, during a Fault restoration, it is established that the Fault is in the System of the other Party, then the roles will be reversed.

2.8.7.3 A Fault is classified as cleared when the Party with the Fault informs the other Party that the Fault has been rectified and the other Party has verified this.

2.8.7.4 The Fault response time (maximum thirty (30) minutes) is the period in which:

- The Parties agree as to responsibility for the Fault
- The Fault priority is determined; whether Fault is Service Affecting or Non Service Affecting. If there is no agreement, then by default the Fault is classified as Service Affecting; and
- The Party with the Fault specifies expected Restoration Time.

2.8.7.5 The Restoration Time is the period in which:

- Party with the Fault clears the Fault;
- Party with the Fault informs the non-Fault Party of progress and when the Fault is cleared.

2.8.7.6 Fault Restoration Times are specified in the Appendix 6.

2.8.7.7 The Verification Time (maximum fifteen (15) minutes) is the period in which the non-Fault Party reports its acceptance or rejection of the Fault clearance to the Party with the Fault.

2.8.7.8 Disrupted Services may be restored promptly on a temporary basis, to be followed by permanent Fault resolution at a later date. This form of Fault resolution shall only be used when the temporary resolution costs are considered by the Party with the Fault to be reasonable.

2.8.7.9 At any time during the resolution of a Fault, the non-Fault Party may, with sufficient documented justification, request the change in status of the Fault from a Non Service Affecting Fault to Service Affecting Fault, at which point the Fault Restoration Time will be reviewed. Similarly, the Party with the Fault may also request a change in status of a Fault from a Service Affecting Fault to a Non Service Affecting Fault with the required documented justification.

2.8.7.10 If for any reason a resolution of a Fault is impeded, due to the non-Fault Party, the Party with the Fault may, with proper documented justification, suspend the measurement of the Fault Restoration Time.

2.8.7.11 Fault escalation can be instigated when:

- the non-Fault Party raises concerns about the speed of resolution; or

- when the Party with the Fault requires greater cooperation from the non-Fault Party; or
- when the target Fault Restoration Time, as stated in the Appendix 6, has elapsed without Restoration.

2.8.7.12 Initiation of the escalation process shall be done by phone, fax or other agreed media. Documented records must be kept of the entire escalation process.

2.8.7.13 Every effort shall be made by both Parties to reach agreement at each escalation level before proceeding to the next level.

2.8.7.14 The Parties can agree on set escalation deadlines for specific circumstances.

2.8.8 Planned and Emergency Maintenance

2.8.8.1 “Planned Maintenance” consists of the following:

- work that affects, or has the potential to affect the System or its underlying E1 Interconnection Links or their quality of Service; or
- work that affects, or has the potential to affect the quality of Service provided to a Subscriber; or
- work that affects, or has the potential to affect, the quality of Service provided by the other Party’s System.

2.8.8.2 The Party planning to carry out a Planned Maintenance activity (the “Maintenance Party”) should provide at least ten (10) Business Days’ notice to the other Party.

2.8.8.3 If the other Party determines that the Planned Maintenance has the potential to affect its Services adversely, then it should contact the Maintenance Party within five (5) Business Days of the first notice, with a view to negotiating a mutually agreed date for Planned Maintenance activity.

2.8.8.4 Both Parties must be in possession of the final schedule for Planned Maintenance at least three (3) Business Days before the commencement of the Planned Maintenance activity. If an agreement cannot be reached within this time frame, then the escalation procedure for Faults described above should be applied.

2.8.8.5 “Emergency Maintenance” is a type of maintenance work that needs to be carried out immediately due to the impact or potential impact to the Parties’ System or services. If this work affects, or has the potential to affect the other Party’s Services, then, as much advance notice will be given as the situation permits.

2.8.9 Miscellaneous Operations and Maintenance Procedures

2.8.9.1 Procedure for Number Alteration:

2.8.9.1.1 Each Party will notify the other in writing of any alterations to the number ranges (or numbers) to which Traffic are to be conveyed pursuant to the Service. The date on which such notification is deemed to be received will be the date of receipt for purposes of alterations to the number ranges (or numbers).

2.8.9.1.2 Within three (3) Business Days of date of receipt, each Party will notify all interconnected Third-Party Telecommunications Providers of any alterations to the number ranges (or numbers).

2.8.9.1.3 Each Party will perform the necessary alterations to its respective Systems to facilitate the alteration to the number ranges within five (5) Business Days of date of receipt of notice, and will inform the other Party of completion of the necessary alterations within one (1) Business Day of completion the necessary alterations.

2.8.9.1.4 The Parties will cooperate in order to conduct any necessary testing for alterations to the number ranges (or numbers), where applicable, and will use all reasonable endeavours to complete such testing within five (5) Business Days of alteration.

2.8.9.2 Procedure for Directory Number inclusion and Publication Service

2.8.9.2.1 The Parties will provide information for Directory Number and Publication Service in an ASCII (plain) text files in the form: <Telco name><date>DQ FILE.DAT, with date in the format: mmddy. [e.g. Celstar050303 DQ FILE.DAT].

2.8.9.2.2 The cut-off dates for submission of data will vary each year; the Parties will advised each other sufficiently in advance.

3. CHAPTER 3 – TESTING

3.1 Interconnect Testing - Objectives & Scope

3.1.1 This Chapter specifies the processes related to testing applicable to the Services provided between the Parties for Services described in Annex B (Services). Only Services described in Annex B (Services) are available even if described herein.

3.1.2 The objectives of the testing are:

- to maintain the integrity of both Systems
- to meet the contractual specifications
- to locate and enable resolution of Faults with the Interconnect;

- to ensure that billing is completed correctly.

3.1.3 The chapter describes:

- process to support the testing
- project plan to support the testing
- roles and responsibilities
- phases of testing with entry and exit criteria
- detailed test cases
- results sheets
- how to manage a test failure

3.2 Interconnect Testing Framework

3.2.1 The following general framework is to be used to support Interconnect testing.

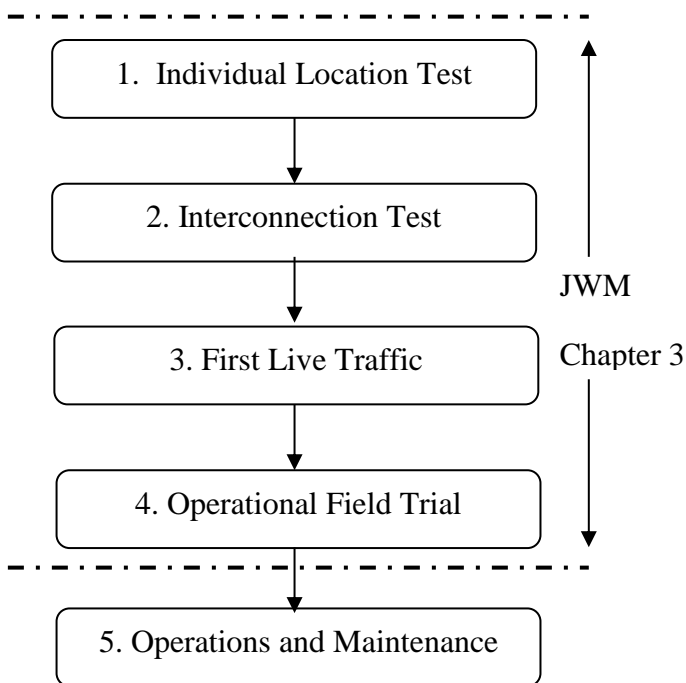


Figure 6: Interconnection Testing Processes

Individual Location Test (“<u>ILT</u>”)	This phase of the testing verifies that the network of Telco and the GTT are suitable to interconnect. Each Party must demonstrate that its interface conforms to the requirements of the Joint Working Manual.
Network Interconnection Test (“<u>NIT</u>”)	The Network Interconnection Test ensures the interoperability of the Systems, management of the Interconnect Links, tests whether all types of Calls can be made and includes CCSS7 tests and exchange of CDR records.
First Live Traffic (“<u>FLT</u>”)	This is the first trial of the interconnect in a test field environment with limited non-billable traffic. This phase considers maintenance and fault handling procedures, and verifies that the correct bills are delivered. It also tests that the roles and responsibilities are clear.
Operational Field Trial (“<u>OP</u>”)	This is the phase prior to the general operation of the interconnection. During this phase, fine-tuning of operational procedures takes place. All functions must be verified including start-up/shut-down procedures, disaster recovery, security, and performance under severe load. This phase uses non-billable and billable traffic depending on the test.

Figure 7: Interconnection Testing Process Definitions

3.2.2 The Interconnection testing framework will be performed in test phases, as shown below in Figure 8. Each of the test phases will follow the same structure to derive and document the tests.

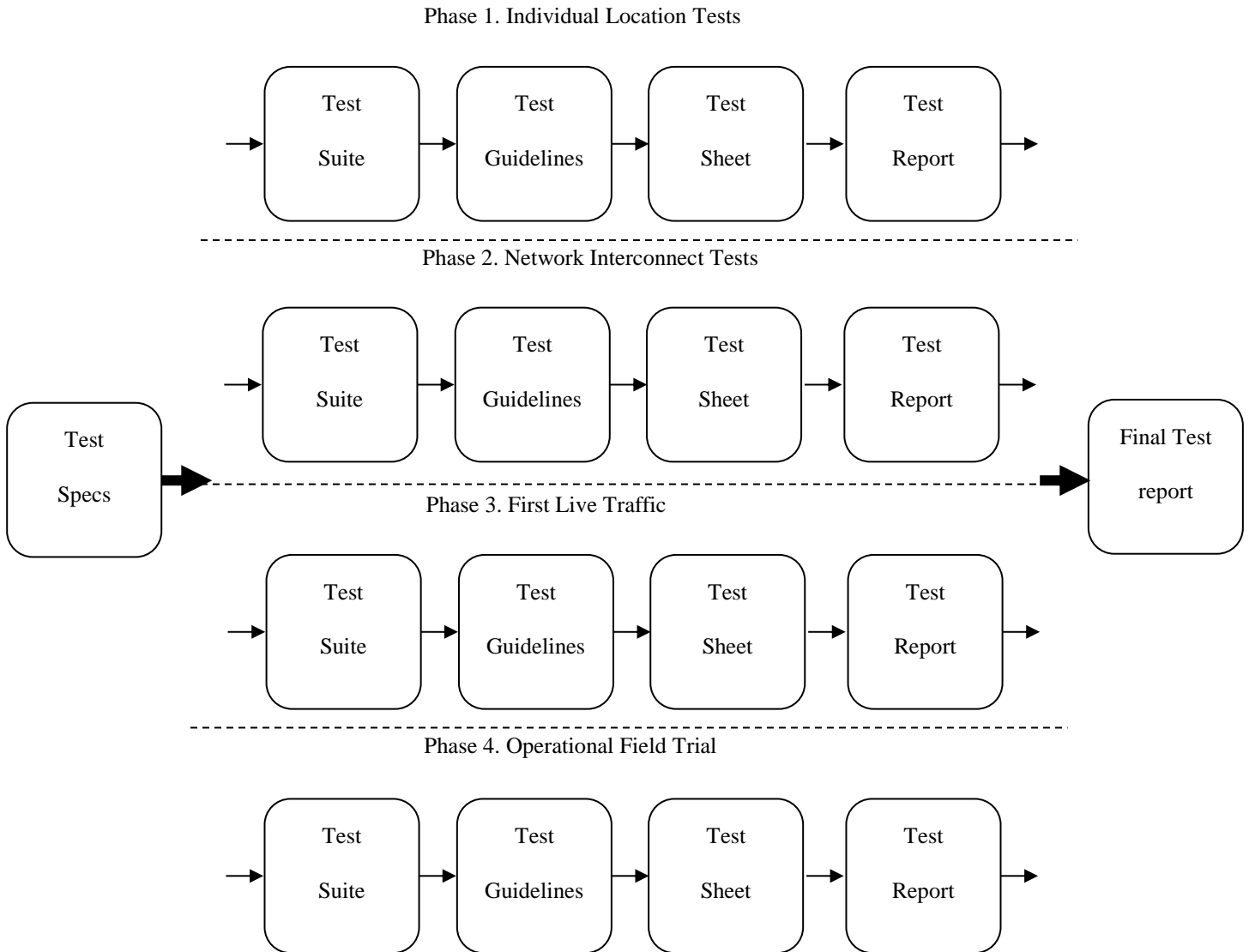


Figure 8: Interconnection Testing Phases

3.3 Test Phase Specifications for Testing

3.3.1 Test Phase Specifications: The Test Phase Specification contains the total set of Test Suites and Test Guidelines agreed between both parties to support the testing. Key terminology relating to the Test Phase Specification is defined below.

3.3.1.1 “Test Suite”: The Test Suite is a set of defined Test Guidelines that relate to a particular functionality e.g., billing, inter-operability. A Test Suite can be tested in whole or in part against any of the four test phases.

3.3.1.2 “Test Guidelines”: The Test Guidelines contain:

- list of all the test cases to be completed
- justification for test cases
- detailed test case procedures
- test case pass/fail criteria
- details of other test data to be recorded
- planning to co-ordinate and track the testing progress.

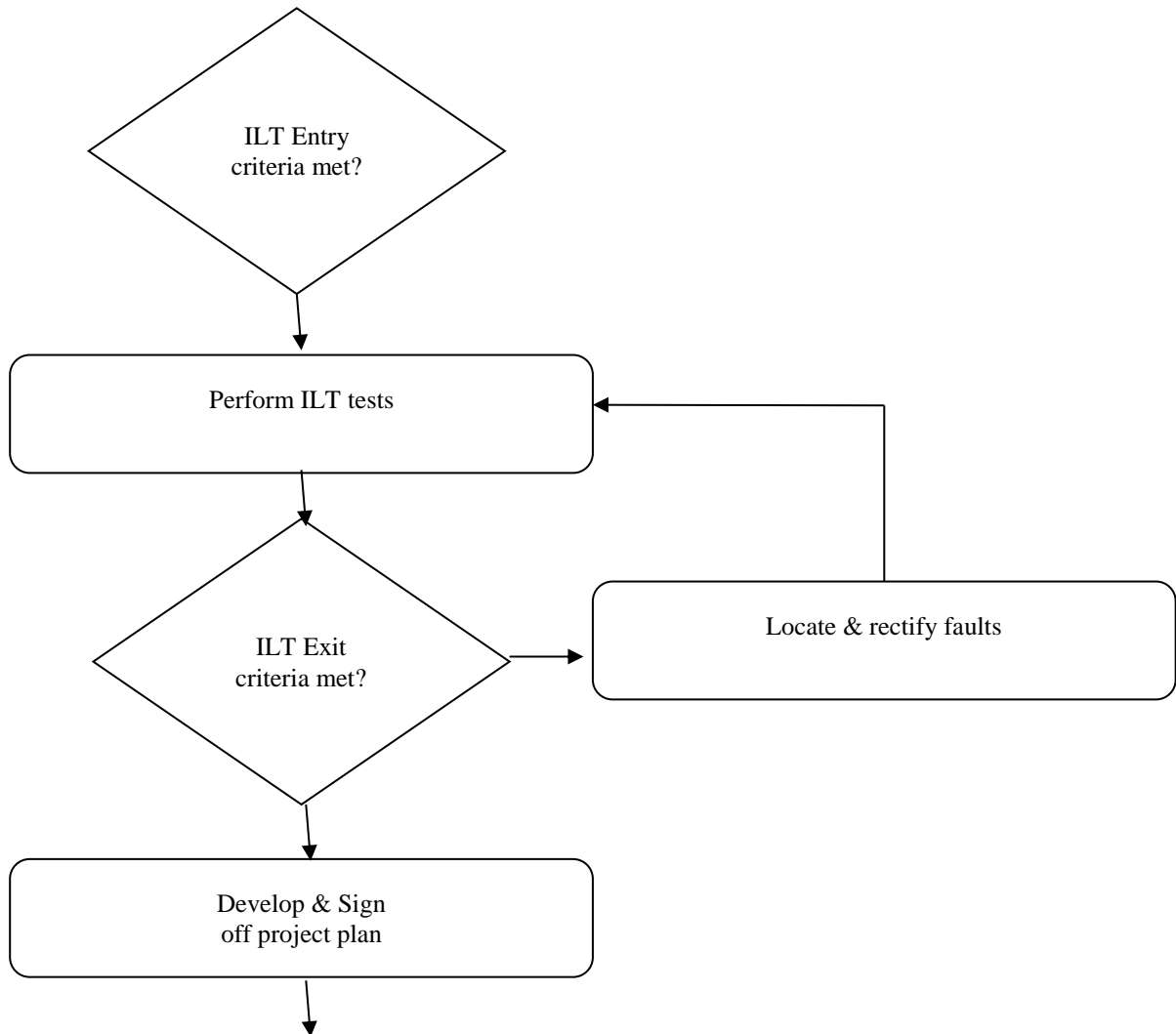
3.3.1.3 “Test Sheet”: The Test Sheet contains an accurate record of the test completed and the outcome of the test.

3.3.1.4 “Test Report”: The Test Report is a summary of the tests executed. It also provides details on faults, re-tests and exceptions. The Test Report is signed by both parties and is proof that the testing was completed. It is the main input to deciding whether the current phase of work can be exited.

3.3.1.5 “Final Test Report”: Final Test Report is compiled at the end of all the testing and highlights any outstanding faults, issues and concerns. It is the main input into deciding whether the Interconnect is ready to become fully operational.

3.3.2 Individual Location Test

3.3.2.1 Individual Local Test Workflow Process



3.3.2.2 The goal of the Individual Local Test is to determine whether the infrastructure of each Party exhibits sufficient functionality to support an Interconnect. The tests consider the following areas:

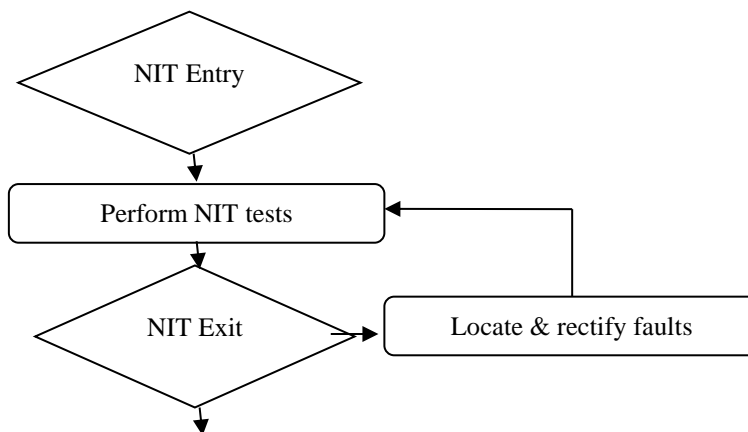
- Conformance to relevant communication standards and technical specifications as described in the technical chapter
- Implementation of the charging mechanisms
- Charging calibration.

3.3.2.3 Each Party performs its own Individual Local Test. If either Party fails the testing, the Interconnect cannot proceed until the fault(s) have been corrected. Each Party is responsible for correcting any Faults, and carrying out any modifications or additions to its own interconnect equipment to rectify the situation.

Entry Criteria	Signed Order Plan / agreement on the connection; Test Guidelines completed for this phase; Each Party has sufficient resource available to complete this phase of testing; Provisional project plan drafted.
Exit Criteria	Each Party has completed Individual Location Test and passed all tests; List of known deviations and imperfections available; No known fatal, inadmissible or major faults; Test results made available to each party; Test Report is approved and signed by both parties.

3.3.3 Network Interconnection Test

3.3.3.1 Network Interconnection Test Workflow Process



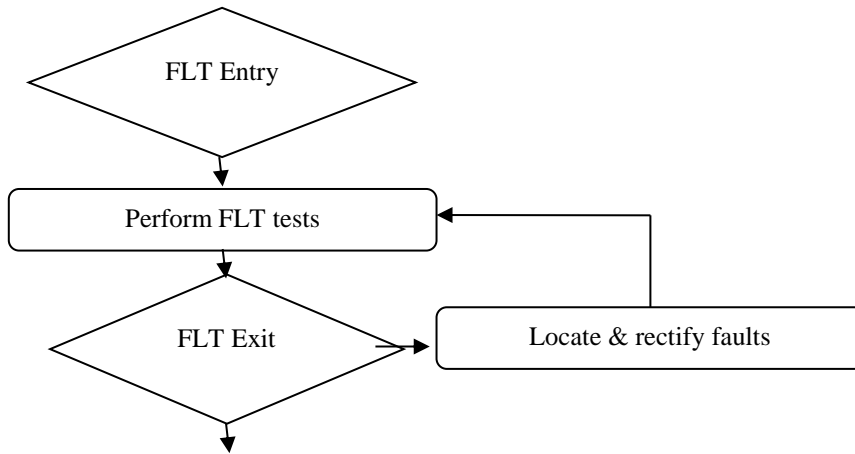
3.3.3.2 This phase of testing minimises operational risk for both Parties. The Network Interconnection Test consider the following areas:

- Interoperability of the signalling traffic
- Checking whether charging mechanisms of both Parties are in line.

Entry Criteria	Project plan, documented and signed by both Parties; List of known deviations and imperfections available; Test Guidelines have been completed for this phase; Both Parties have sufficient resource available to complete this phase of testing; The interconnection between Telco’s Point of Connection and GTT’s Point of Connection is ready for this phase of testing.
Exit Criteria	Successful completion of the Network Interconnection Tests; No known fatal, inadmissible or major faults; Planned solution for all faults has been documented; Test results made available to each party; Test Report is approved and signed by both parties.

3.3.4 First Live Traffic

3.3.4.1 First Live Traffic Workflow Process



3.3.4.2 The First Live Traffic determines whether the Systems of both Parties are correctly interconnected. In addition to testing the basic Interconnect, billing and supporting processes are tested during the First Live Traffic tests.

3.3.4.3 No billable traffic should be used during this phase of the testing.

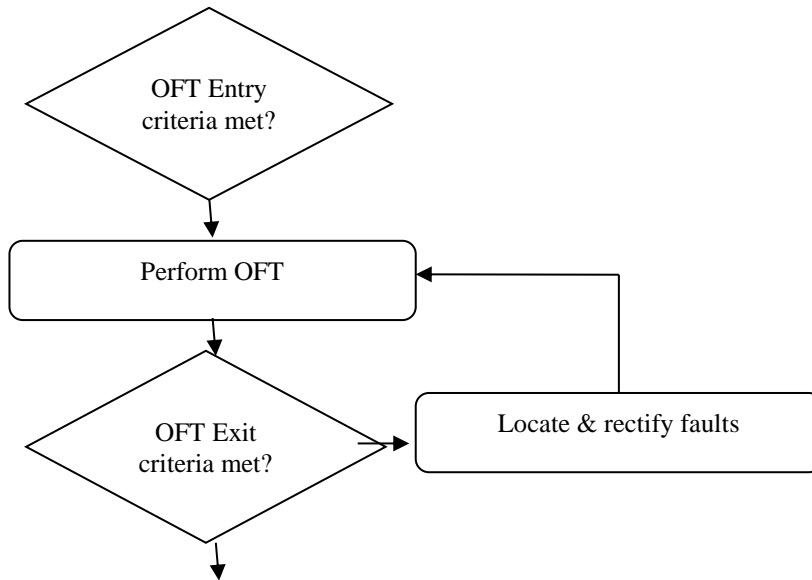
3.3.4.4 The First Live Traffic tests consider the following areas:

- Interoperability of signalling traffic
- Service tests (can all types of calls be established)
- Routing tests (is the GTT System or Telco System reachable from all locations)
- Whether charging mechanisms of both Parties are in line
- Bill test (on basis of CDRs from test traffic)
- Process test (e.g. maintenance and error procedure).

Entry Criteria	List of known deviations and imperfections available; Both Parties have sufficient resource available to complete this phase of testing; The interconnection that traverses the Point of Connection is fully installed and operational; List of known deviations and imperfections available; Test Guidelines have been completed for this phase; O&M procedures are available.
Exit Criteria	Successful completion of the First Live Traffic tests; No fatal, inadmissible or major faults are present, and calls are billed accurately; Planned solution for all faults has been documented; Test results made available to each Party; Test Report is approved and signed by both Parties .

3.3.5 Operational Field Trial

3.3.5.1 Operational Field Trial Workflow Process



3.3.5.2 The Operational Field Trial is the phase prior to general availability of the Interconnection. During the Operational Field Trial all outstanding faults from previous test phases have to be resolved. During this phase billable traffic is passed for the first time. The objective of this Trial is to ensure that the operational and maintenance procedures are effective to deal with any issues that will arise.

Entry Criteria	No changes in the interconnection since conclusion of the previous phase of testing; List of known deviations and imperfections available; Test Guidelines completed for this phase; Both Parties have sufficient resource available to complete this phase of testing.
Exit Criteria	No faults are present; Support for further Field introduction is available; Performance and stability statistics are within the limits defined in the contractual agreement, and calls are billed accurately; Applicable O&M procedures approved; Test results made available to each Party; Operational Field Trial Test Report is approved and signed by both Parties; Final Test Report is approved and signed by both Parties.

3.3.6 Test Sheets and Test Report

3.3.6.1 The Test Sheets contain the results of executed tests for each test phase. These results can be positive (passed), or negative (failed), and where applicable additional information may need to be recorded.

3.3.6.2 For each phase of testing a test report must be completed. In all cases the Test Report should be completed and signed by both Parties. The Test Report should at a minimum reflect what tests have been performed, whether the result was as expected or if deviations were observed.

3.4 Test Suites

3.4.1 The Interconnect Test Suites required are shown below. Within each Test Suite there are key areas of testing, which are shown below. Agreement to this needs to be confirmed through the Project Plan and then further detailed in the Test Guidelines.

	Test Suites	Tests Phases			
		ILT	NIT	FLT	OP
1	Conformance tests: 1. Protocol conformance 2. Electrical conformance 3. EMC conformance 4. Local Operation Tests	X X X X			
2	Interoperability tests: 1. End to end transmission 2. Network Synchronisation 3. CCSS7 signalling 4. Network routing 5. Network management		X X X X X	X X X X X	X X X X X
3	Stability and Security tests: 1. Load tests 2. Stress tests (fault situations) 3. Fraud	X	X X X	X X	
4	Service tests: 1. Services from Service Provider to Service Taker 2. Changed services 3. New services			X X X	X X X
5	Billing: 1. Charging calibration 2. Charging per service (CDRs) 3. Billing aggregates 4. Billing service	X	X X	X X X X	X X X X
6	Processes: 1. Service & Element management 2. Operation processes 3. Maintenance processes 4. Customer processes			X X X X	X X X X

3.4.1.1 The Test Suites are described in overview below.

3.4.2 Conformance Testing

3.4.2.1 The Test Suite confirms that the protocol supported meets the technical specification through conformance testing. Conformance Testing deals with the behaviour of the protocol, and not with processing capacity under critical load conditions. It may also address invalid behaviour testing.

3.4.3 Interoperability Testing

3.4.3.1 An Interoperability test involves at least two networks which are interconnected. In these tests it is verified whether elements of a procedure (including parameters) across the common boundary, are in compliance with the specification. The Test Sequences across the point of observation are not generated or inserted at the point of observation itself, but at interfaces contained within the systems under test.

3.4.4 Stability and Security Test

3.4.4.1 Stability tests consist of load and stress tests. Load tests are tests of the interconnection in situations of relatively heavy use. Stress tests are tests in which fault situations are introduced in the interconnection. The point of observation is the common boundary between the interconnected systems. In both tests it should be verified that the interconnection works under extreme circumstances. Network fraud testing is included in this test suite.

3.4.5 Service Test

3.4.5.1 These tests ensure the services supplied by either Party will operate in a manner that is compliant with the Service Descriptions and technical characteristics.

3.4.6 Billing

3.4.6.1 Billing verifies that the charging mechanism (based on CDR generation) supported by both parties is accurate and meets the agreed specification.

3.4.7 Processes

3.4.7.1 Process tests involve the testing of operation, maintenance and customer processes. They also include documentation, training of personnel and support of the interconnection. In some of these areas an actual test case cannot be written to test a process and the relevant people, as part of the exit criteria, will review the process.

3.5 Testing Fault Procedure

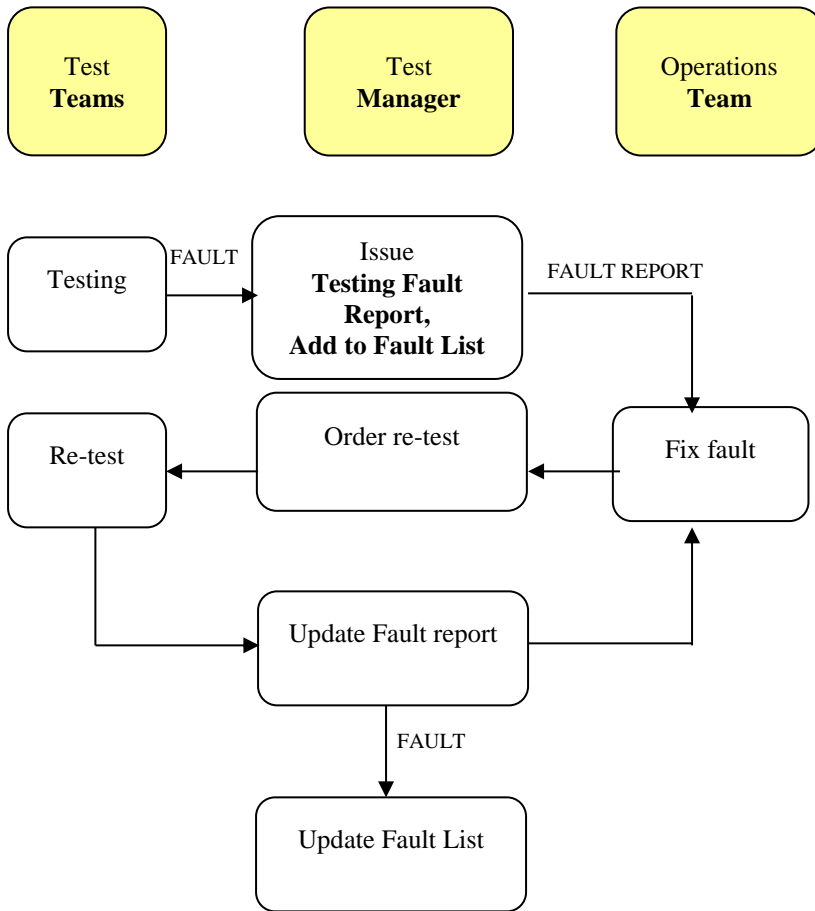
3.5.1 If a Testing Fault is identified in a testing phase it should be registered and the test manager for the phase informed. The Testing Fault will then be classified, passed on to the installation / development team and resolved. When the Testing Fault is resolved the new implementation may need to be tested again and the result recorded. When the retest is successful, the Testing Fault can be closed on the Fault list that the test manager controls.

3.5.2 The test teams of either party can detect faults. The test manager for the corresponding test phase will issue a Testing Fault report in the format set out in Appendix 5 and register it on the Testing Fault list in the format set out in Appendix 5. The Testing Fault report shall include Testing Fault classification. The classification is defined by mutual agreement between the test managers. If there is a conflict about the classification, the Overall Test Managers will be consulted.

3.5.3 The Testing Fault report and fault list will use the same numbering convention so that a fault number will relate to only one specific Testing Fault throughout the end to end Fault Resolution process. The numbering convention consists of x.y. Where x indicates the phase number when the Fault was identified, and y is a number allocated to identify the Fault, starting at one.

Phase Name	Phase Number (ie x.y)
Individual Location Tests	1.y
Network Interconnection Tests	2.y
First Live Traffic	3.y
Operational field trial	4.y

3.5.4 The operations and development team is responsible for resolving the Testing Fault. Once the Testing Fault is resolved the team updates the Testing Fault report with details of the solution. If the Testing Fault is solved before the end of the related test phase, the test manager organises a retest, otherwise the Overall Test Manager should arrange a retest. When the retest is successful the Testing Fault report can be closed. If the retest is not successful, the Testing Fault is sent back to the operations and development team.



3.5.6 Testing Fault Classification

3.5.6.1 There are five categories to which a Testing Fault can be allocated during testing. A Testing Fault must always be allocated to one of these categories and for each Testing Fault it should be determined which operator will take responsibility for resolving it. Corrections of the Testing Faults should be made within the time agreed for each fault category.

Testing Fault Category	Repair Time
Fatal	Immediately
Inadmissible	3 days
Major	4 weeks
Minor	before Operational Phase
Imperfections	before general availability

3.5.6.2 Fatal Testing Faults

3.5.6.2.1 A Testing Fault is classified ‘fatal’ if this Testing Fault causes a situation in which it is not possible or useful to continue testing.

Fatal Testing Faults have a significant impact on the test schedule, as all test activities will be stopped until the Testing Fault is rectified. Fatal Testing Faults therefore need to be fixed immediately.

3.5.6.3 Inadmissible Testing Faults

3.5.6.3.1 Inadmissible Testing Faults are Testing Faults which are not allowed in the operational phase but can be allowed in a test phase. Although a test phase can be continued if such a Testing Fault occurs, the solution for the Testing Fault has to be available within 3 days unless otherwise agreed.

3.5.6.4 Major Testing Faults

3.5.6.4.1 Major Testing Faults affect the quality of the service in operational status. After a major Testing Fault has been detected, the solution for the problem has to be available within four weeks unless otherwise agreed.

3.5.6.5 Minor Testing Faults

3.5.6.5.1 Minor Testing Faults also affect the quality of a service in an operational situation. However these Testing Faults are not perceived by an end-user and are less urgent to resolve. Both parties need to determine the period of time in which the solution for these Testing Faults need to be made available/ deployed and must be completed by at least the start of the operational phase.

3.5.6.6 Imperfections

3.5.6.6.1 Imperfections are all Testing Faults that do not affect the Quality of Service. The Testing Faults must be solved before general availability. Depending on the possibility, the solution may be covered in future upgrades.

3.5.7 Where there are issues concerning Testing Fault classification and/or the cause of the Testing Fault, the Overall Test Managers should be consulted.

3.5.8 Testing Faults have to be documented in the corresponding test reports and handled as described in the previous section.

3.6 Additional Roles and Responsibilities for Testing

3.6.1 The Acceptance of any testing is the responsibility of both Parties who must verify the quality of the testing process and the test results. The following sections describe the roles and responsibilities that need to be filled in order to keep the test process clear and manageable. The project plan will contain details of test organisations.

3.6.2 Overall Test Manager

3.6.2.1 At each stage of testing there needs to be regular contact between the operators to track the progress of testing and resolve any issues that could arise. Each operator will appoint a person who is in charge of testing and known as the Overall Test Manager. The Overall Test Managers should overview all test activities, planning and constantly monitor interconnect testing progress.

3.6.3 The Overall Test manager has the following responsibilities:

- completion of the project plan
- tracks progress of each test phase
- checks entry and exit criteria for each phase
- overall ownership of the Testing Fault List for the operator
- confirms completion of all test phases
- delivery of the final test report
- delivery of interconnection to the O&M phase.

3.6.4 Test Manager

3.6.4.1 For each phase a test manager will be assigned with the following responsibilities:

- detailed planning of the test phase (documented in the Test Guidelines);
- execution of the tests for the corresponding test phase;
- reporting testing progress to the Overall Test Manager;
- issuing Testing Fault Reports;
- maintaining the Testing Fault Report list (with the Overall Test Manager);
- completing the Test Report.

3.7 Interconnect Testing Documentation

3.7.1 The Interconnect testing documentation, the form of which is Appendix 7, is as follows:

	Document	Responsible persons
Overall	Project Plan	Overall Test Manager
	Testing Fault List	Overall Test Manager
	Final Test Report	Overall Test Manager
Individual Location Test	ILT Test Plan	ILT Test Manager
	ILT Test Guidelines	ILT Test Manager(s)/ ILT Testers
	Testing Fault Reports	ILT Test Manager(s)
	ILT Test Report	ILT Test Manager(s)

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Network Interconnection Test	NIT Test Plan	NIT Test Manager(s)
	NIT Test Guidelines	NIT Test Manager(s)/ NIT Testers
	Testing Fault Reports	NIT Test Manager(s)
	NIT Test Report	NIT Test Manager(s)
First Live Traffic	FLT Test Plan	FLT Test Manager(s)
	FLT Test Guidelines	FLT Test Manager(s)/ FLT Testers
	Testing Fault Reports	FLT Test Manager(s)
	FLT Test Report	FLT Test Manager(s)
Operational field trial	OFT Test Plan	OFT Test Manager(s)
	OFT Test Guidelines	OFT Test Manager / OFT Testers
	Testing Fault Reports	OFT Test Manager(s)
	OFT Test Report	OFT Test Manager(s)

APPENDICES

APPENDIX 1	Trunk Group Classifications
APPENDIX 2	Performance Reports and Issue Resolution Reports
APPENDIX 3	Forecast Forms
APPENDIX 4	Order Plan
APPENDIX 5	Fault Management Form
APPENDIX 6	Fault Restoration Times
APPENDIX 7	Testing Templates

And additional Appendices to which the Parties agree in writing.

Appendix 1 - Trunk Group Classifications

Services shall be designated to the following trunk groups.

Trunk Groups

Classification	Outgoing/Incoming	Group

Appendix 2 – Performance Reports and Issue Resolution Reports

INSTRUCTIONS:

The Service taker will indicate in Section 1, all existing and ordered services. In each quarter following the report period, both Parties will exchange the information in Sections 2 and 3 for each service.

Section 1 – Existing and Ordered Services

Service Taker						
Report date						
Existing network links						
				Trunk Route		
Service no.	Origin	Destination	No. Links	Name	Type IC/OG	No.
Ordered services						
				Trunk Route		
Service no.	Origin	Destination	No. Links	Name	Type IC/OG	No.

Section II – Quarterly Report

Service being reported													
Report period													
Report Items	Report	Previous 12 months											
	Month	1	2	3	4	5	6	7	8	9	10	11	12
1. Traffic Volumes													
No. of minutes/service (source: billing system)													
No. of calls/service (source: billing system)													
Busy hour (time)													
No. of calls in busy hour													
2. Performance Measures													
Link Availability													
Call Completion Rate													
Total No of Faults													
No. of network faults													
Total network restoration time													
No. of link faults													
Total link restoration time													

Section 3 – Detailed Fault Information Report

Service Taker						
Service being reported						
Report period						
Fault Details						
Fault log #	Fault reported	Fault class	Other affected party	Cause of fault	Target restoration time	Actual restoration time

Appendix 3 – Forecast Forms

Section 1 – Contact Details

Service Taker				
	Name	Address	Telephone #	Fax #
Liaison Manager				
Planning Manager				
Operations Manager				
Fault Control Manager				
Service Quality Manager				
Project Manager				
<i>This forecast has been submitted as part of the interconnect forecasting procedure and represents our current understanding of the traffic (liaison manager and planning manager unless stated otherwise)</i>				
Signature		Signature		
Name		Name		
Position		Position		
Date		Date		

Section 2 – Interconnection Forecast

Service Taker												
Existing point of Interconnection												
GTT POI								Telco POI				
Service	Service ref.	Carrier System	E1 links forecast									
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	TOTAL	
TOTAL												
New point of Interconnection												
GTT POI								Telco POI				
Service	Service ref.	Carrier System	E1 links forecast									
			Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	TOTAL	
TOTAL												

Section 3 – Bi-Annual Traffic Forecasts

Forecast Quarter						
Start Date			End Date			
Service ref.	Origin	Destination	SERVICE TRAFFIC FORECAST			
			Total traffic (Erlangs)	Busy Hour period	Busy Hour traffic (Erlangs)	No. E1 Links <i>(copy to section II)</i>

Appendix 4 – Order Plan

Section 1 – Contact Details

Service Taker				
	Name	Address	Telephone #	Fax #
Liaison Manager				
Planning Manager				
Operations Manager				
Fault Control Manager				
Service Quality Manager				
Project Manager				
Signature			Signature	
Name			Name	
Position			Position	
Date			Date	

Section 2 – Existing Services

Service Taker				Date		
Existing Network Links						
Service ref	Origin/ Destination	Carrier type	No of Links	Trunk		
				Route name	I/C or O/G	No.

Section 3 – New Requirements

New requirements							
Interconnect Switches				Carrier system			
Service Taker	Point code	Service Provider	Point code	Carrier type	No. Links	Link Usage	Order type new/change
Link Requirements							
Origin	Destination	Trunk route name	Trunk route type I/C or O/G	No of trunks	Line code signalling & framing	Ready for test date	Ready for service/termination date
Change Details							
Service	Change Increase Decrease Relocate Reconfigure POC New POC	Trunk route name	Trunk route type I/C or O/G	Time slot info	CIC assignment	Dialled digit info	

Section 4 – Network or Circuit Diagram

Separate attachment.

Appendix 5 – Fault Management Form

Both Parties shall maintain a log of the information relating to all reported Faults. This information shall be made available to either Party at agreed intervals or as required.

SECTION I – TECH. FAULT REPORT

ITEMS	DETAILS
Telco Tech. Fault Log No.	
GTT Tech. Fault Log No. #	
Fault report date	
Time detected	
Person detected	
Time Reported	
Person Reporting	
Fault owner	
Other Affected Party	

SECTION II – TECH. FAULT IMPACT

ITEMS	DETAILS
Fault Type (Network / Carrier System)	
Fault Status (SA/NSA) Critical/Major/Minor Link/Route	
Service Affected	
Supplementary details to aid fault identification	

SECTION III – TECH. FAULT RESTORATION

ITEMS	DETAILS
Cause of fault	
Clearance date + time	
Person Clearing	
Person receiving clearance	
Confirmation time	
Person requesting confirmation	
Response time	
Restoration time	
Verification time	

SECTION IV – TECH. FAULT RESTORATION ACTIVITIES

DATE	TIME	ACTION TAKEN
Cont'd...		

Fault type	Classification
Critical Link Failure	100% of total signalling capacity is unavailable
Major Link Failure	50% of total signalling capacity is unavailable
Critical Route Failure	50% or more of total capacity of the route is unavailable to carry traffic.
Major Route Failure	25% to < 50% of total capacity of the route is unavailable to carry traffic
Minor Route Failure	1% to < 25% of total capacity of the route is unavailable to carry traffic

**REFERENCE INTERCONNECT OFFER
GTT ANNEX D – JOINT WORKING MANUAL 3.0**

SECTION V – FAULT ESCALATION (if appropriate)

Dispute Details			
Telco Escalation List			
Date	Name	Position	Response
GTT Escalation List			
Date	Name	Position	Response

Appendix 6 – Fault Restoration Times

Interconnection Faults

Tech. Fault Restoration Times	Max time in which faults are repaired following notification to the other Party
Faults concerning the links for Interconnection (excluding 3 rd party faults)	80% of Faults to be resolved in 8 hours 95% of Faults to be resolved in 33 hours Remaining faults to be resolved by agreement.

Other Service Faults

Tech. Fault Restoration Times	Time in which faults are repaired following notification to the other Party
Faults concerning Service	80% of Faults to be resolved in 8 hours 95% of Faults to be resolved in 33 hours Remaining faults to be resolved by agreement

Appendix 7 – Interconnecting Testing Forms

Section 1 – Summary of Interconnect Tests

<p>SECTION I – PHYSICAL INSPECTION</p> <p>Ensure Joining Box termination points meet agreed standard.</p> <p>Ensure networks of both Parties are prepared to agreed std.</p> <p>Ensure both Parties have interfaces that conform to agreed standards</p> <p>Test electrical wiring & grounding</p>	<p>SECTION IV – TEST CALLS</p> <p>Origination</p> <p>Routing</p> <p>Destination</p> <p>Transmission Quality</p> <p>Billing Verification/ Validation</p> <p>Billing Record Processing</p>
<p>SECTION II – LINK TESTS</p> <p>Link Code Signalling Compatibility</p> <p>Framing Compatibility</p> <p>Bit Error Test (BET): 0 over 24 hrs.</p> <p>Frame Loss: 0 over 24 hrs.</p> <p>DSX-1 Standards Volt Standard</p>	<p>SECTION V – SYSTEM FAILURE & ALARM TESTS</p> <p>Verify all relevant alarm points are wired.</p> <p>Generate system alarm and validate expected notification.</p> <p>Test system failure and recovery alarms.</p> <p>Conduct system back-up & recovery procedures.</p> <p>Perform system security tests.</p>
<p>SECTION III – C.7 SIGNALLING TESTS</p> <p>Link State Control</p> <p>Transmission & Reception Control</p> <p>Signalling Link Management</p> <p>Changeover</p> <p>Changeback</p> <p>Forced Rerouting (where necessary)</p> <p>Controlled Rerouting (where necessary)</p> <p>Signalling Route Management</p> <p>Circuit Supervision</p> <p>Normal Call Set-up Ordinary Calls</p>	<p>SECTION VI – OPERATIONAL FIELD TRIAL</p> <p>Operate system for agreed period.</p> <p>Verify system performance under load conditions.</p> <p>Monitor service quality during high traffic.</p> <p>Modify and re-test as required.</p>

**REFERENCE INTERCONNECT OFFER
GTT ANNEX D – JOINT WORKING MANUAL 3.0**

<p>LINK TESTS Fibre Level testing i.e link budget confirmation Link Code Signalling Compatibility Framing Compatibility Bit Error Test (BET): 0 over 72hrs . Frame Loss: 0 over 24 hrs.</p>	<p>TEST CALLS Origination Routing Destination Transmission Quality Billing Verification/ Validation Billing Record Processing</p>
	<p>SYSTEM FAILURE & ALARM TESTS Verify all relevant alarm points are wired. Generate system alarm and validate expected notification. Test system failure and recovery alarms. Conduct system back-up & recovery procedures. Perform system security tests.</p>
<p>CCS .7 SIGNALLING TESTS Link State Control Transmission & Reception Control Signaling Link Management Changeover Changeback Forced Rerouting Controlled Rerouting Signaling Route Management Circuit Supervision Normal Call Set-up Ordinary Calls</p>	<p>OPERATIONAL FIELD TRIAL Operate system for agreed period. Verify system performance under load conditions. Monitor service quality during high traffic. Modify and re-test as required.</p>

Section 2 – Testing Fault Report Template

Part I (to be completed by one of the test-teams)

Test Case Number:		
Description of test case:		
Expected result:		
Observed result:		
Comments (concerning the configuration, related problems, consequences, hints)		
Name:	Date:	Signature:

Part II (to be completed by test managers)

Required action(s)	Who	Deadline	Fault classification (Note 1)
Test Manager GTT	Date:	Signature:	
Test Manager Telco	Date:	Signature:	

Note 1:-

* = imperfection, ** = minor, *** = major, **** = inadmissible, ***** = fatal

Part III (to be completed by operations & development team)

Action taken to resolve fault:		
Remaining open issues:		Re-test necessary (Y/N)
Name:	Date:	Signature:

Part IV (to be completed by the test team)

Result of the re-test:		
Comment:		
Name:	Date:	Signature:

Section 3- Testing Fault List

Reference Number	Date Logged	Owner	Priority	Status	Date Expired	Description	Action By

Section 4- Physical Connectivity Test Form

Part I- Design Form

This Form sets out the design and testing of physical connectivity as agreed between the Parties. There is to be no change to the design or test specification for the physical connectivity testing, without the express written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Part II- Post-Test Form

This form is to confirm the design and testing of the physical connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for the physical connectivity, without the express written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Section 5 - Transmission Systems Connectivity Test Form

Part I- Design Form

This form is for the design and testing of the Transmission Systems connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Transmission Systems connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Part II – Post-Test Form

This form is to confirm that the design and testing of the transmission systems connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for the transmission systems connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Section 6 – Logical Switch Connectivity Test Form

Part I- Design Form

This form is to confirm that the design and testing of Logical connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for logical connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Part II – Post-Test Form

This form is to confirm that the design and testing of Logical connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for logical connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Section 7 – Signally Connectivity Test Form

Part I- Design Form

This form is to confirm that the design and testing of Signalling (ISUP) connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Signalling (ISUP) connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Part II – Post-Test Form

This form is to confirm that the design and testing of Signalling (ISUP) connectivity between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Signalling (ISUP) connectivity, without the expresses written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Section 8 – Call Routing Test Form

Part I- Design Form

This form is to confirm that the design and testing of Call Routing between the parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Call Routing, without the expresses written signed agreement of both parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Part II – Post-Test Form

This form is to confirm that the design and testing of Call Routing between the parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Call Routing, without the expresses written signed agreement of both parties.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		

Section 9 – Billing and Invoice Test Form

Part I- Design Form

This form is to confirm that the design and testing of Call Billing and Reconciliation between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Call Billing and Invoice Reconciliation, without the express written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CFO sign off		
Name		
Telephone number		
E-mail		
Market CFO sign off		
Name		
Telephone number		
E-mail		

Part II – Post-Test Form

This form is to confirm that the design and testing of Call Billing and Reconciliation between the Parties has been completed successfully. This is to confirm that no change was made to the design or test specification for Call Billing and Invoice Reconciliation, without the express written signed agreement of both Parties.

Signatory details of both companies

	Telco	GTT
GROUP CFO sign off		
Name		
Telephone number		
E-mail		
Market CFO sign off		
Name		
Telephone number		
E-mail		

Section 10 – Commencement of “Live Traffic” Form

The Parties now agree to deliver “live” traffic in accordance in accordance with the design and test specifications.

Signatory details of both companies

	Telco	GTT
GROUP CTO sign off		
Name		
Telephone number		
E-mail		
Group CTO sign off		
Name		
Telephone number		
E-mail		
Market CTO sign off		
Name		
Telephone number		
E-mail		