

**Be Aliv Limited**

**and**

**Other Licensed Operator (OLO)**

**Interconnection Agreement**

# Table of contents

Main Terms and Conditions .....	4
1 Introduction .....	4
2 Contractual documents .....	4
3 Scope of Agreement .....	5
4 Commencement and duration .....	5
5 Network interconnect.....	6
6 Prices .....	6
7 Process and standards .....	6
8 Quality of service.....	6
9 Management of Access and Interconnection Agreement .....	6
10 Measurement of traffic .....	7
11 Network planning, network alterations and data management amendments .....	7
12 Network safety and protection.....	8
13 Numbering.....	8
14 Operations and maintenance.....	8
15 Retail customer relationships.....	8
16 Dispute resolution.....	9
17 Breach and suspension of interconnection services and Access and Interconnection Agreement .....	9
18 Termination of interconnection services and Interconnection Agreement .....	11
19 Force majeure .....	13
20 Review .....	14
21 Provision of information.....	15
22 Confidentiality and information protection .....	15
23 Bank guarantee .....	16
24 Intellectual property rights.....	17
25 Notices.....	17
26 Limitation of liability.....	17
27 Severability.....	18
28 Assignment of rights and obligations .....	18
29 Whole agreement.....	18
30 Variation .....	19
31 Relaxation.....	19
32 Necessary approvals and consents.....	19
33 Governing law .....	19
Annex A – Service Schedules .....	21
A.1 Call Termination Service to Mobile Numbers.....	21
A.2 Termination of Short Message Service (SMS) and Multimedia Message Service (MMS).....	22
A.3 Call Termination Service to Domestic Freephone Numbers .....	23
A.4 SIP Interconnection .....	24
Schedule 1 to Annex A: List of services provided by Aliv to OLO .....	26
Annex B – Ordering Processes .....	27
Requests for interconnection services.....	27

B.1	Service requests .....	27
B.2	Response to service request by access provider .....	27
B.3	Expedition and responsiveness .....	29
B.4	Provisioning processes for traffic services .....	30
B.5	New interconnection services .....	31
	Schedule 1 to Annex B: Template Letter of Application for Interconnection .....	34
	Schedule 2 to Annex B: Application for Interconnection .....	35
	Annex C – Technical Specifications – SIP Interconnection .....	36
C.1	General Interconnection.....	36
C.2	SIP signalling.....	36
C.3	IPSEC configuration.....	36
C.4	End to End DTMF Signalling.....	37
C.5	Numbering.....	37
C.6	Calling Line Identification.....	37
	Schedule 1 to Annex C: SIP Interconnect specifications.....	39
	Schedule 2 to Annex C: Interconnection testing .....	40
	Annex D – Operations and Maintenance.....	41
D.1	Management of interconnection .....	41
D.2	Traffic routing principles .....	42
D.3	Handling congestion and unplanned network outages.....	42
D.4	Mass call events.....	42
D.5	Malicious call tracing .....	43
D.6	Customer fault reporting.....	43
D.7	Fault management and service restoration responsibility .....	43
D.8	Fault handling and rectification procedures.....	45
D.9.	Maintenance procedures .....	46
D.10	Prevention of harm and injury .....	47
D.11	Interference and obstruction .....	47
D.13	Network alterations.....	47
D.14	Decommissioning .....	48
D.15	Software upgrades/modifications.....	49
D.16	Data Management Amendments .....	49
	Schedule 1 to Annex D: Data Management Amendment notice .....	51
	Annex E – Billing.....	52
E.1	Charging principles.....	52
E.2	Usage based services .....	52
E.3	Payment process .....	53
E.4	Verification.....	54
E.5	Billing errors.....	54
E.6	Billing disputes .....	55
E.7	Billing representatives .....	57
	Schedule 1 to Annex E: Billing verification usage report format.....	59
	Schedule 2 to Annex E: Detailed billing verification information .....	60
	Annex F – Dispute Resolution.....	62
F.1	General process.....	62

F.2	Escalation of disputes .....	62
F.3	Resolution of disputes at Chief Executive level .....	63
F.4	Independent arbitration and mediation .....	63
F.5	Reference of disputes to URCA or to the UAT .....	64
Annex G	– Price List .....	66
G.1	Call Termination to Aliv’s Numbers (cents per minute) .....	66
G.2	SMS Termination Service to Aliv’s Mobile Numers (cents per message) .....	66
G.3	MMS Termination Service to Aliv’s Mobile Numbers (cents per message)....	66
G.4	Call Termination to Freephone Numbers.....	66
G.5	Data Management Amendments .....	66
G.6	Cost of Supervision.....	66
Annex H	– Quality of Service Standards.....	68
H.1	Principles .....	68
H.2	Ordering standards.....	68
H.3	Standards for network availability.....	69
H.4	Service restoration .....	69
Annex I	– Definitions .....	71
Schedule 1	- Contact details .....	77

# Main Terms and Conditions

## The Parties

This Agreement is made at Nassau, New Providence, The Commonwealth of The Bahamas, this \_\_\_\_\_ day of \_\_\_\_\_ 20xx (the “Effective Date”) between:

- **AlivBe Aliv Limited** a company incorporated under the laws of the Commonwealth of The Bahamas whose registered office is GTC Corporate Services Limited, Sassoon House, Shirley Street, P.O. Box SS 5383, Nassau, Bahamas (“AlivAliv” or “Access Provider”),

and

- Other Licensed Operator [Company Name], a company incorporated under the Laws of the Commonwealth of The Bahamas whose registered office is situated at [address], Nassau, Bahamas (“XX” or “Access Seeker”)

which are sometimes collectively referred to as “Parties” or “Operators” and individually as “Party” or “Operator” as will be apparent from the context.

## 1 Introduction

1.1 The purpose of this Agreement is to allow Aliv and XX to connect their respective electronic communications networks to one another by means of a Session Initiated Protocol (SIP) Interconnect in the manner described and subject to the terms and conditions of the Interconnection Agreement, in order to convey calls to or from the respective networks.

1.2 XX is licensed under the Communications Act, 2009, to provide electronic communications services in The Bahamas and wishes to receive certain wholesale services from Aliv.

1.3 Except where such terms are not otherwise defined in the Communications Act, the terms used in this document as defined terms or Definitions shall have the meanings set out in Annex I.

## 2 Contractual documents

2.1 The following documents, along with the Schedules attached to them, form an integral part of this Agreement:

- Main Terms and Conditions
- Annex A – The Services Schedules, describing the Interconnection Services to be provided by Aliv and containing any special terms relevant to particular services and identifying, in the Schedules to this Annex, which services Aliv has agreed to supply to XX as of the date of this Agreement and as amended from time to time
- Annex B – Ordering Processes

- Annex C – Technical Specifications
- Annex D – Operations and Maintenance
- Annex E – Billing
- Annex F – Dispute Resolution
- Annex G – Price List
- Annex H – Quality of Service Standards
- Annex I – Definitions
- Schedule 1 – Contact Details

2.2 The terms and conditions of this Agreement are set out in this Agreement, its Annexes and attached Schedules and any other policies, procedures or other documents issued by Aliv as provided for and in accordance with this Agreement.

2.3 In the event of any inconsistency between parts of this Agreement, the language of the part listed higher in the following table shall prevail over that in any lower part:

- Main Body, including the definitions in Annex I and the dispute resolution procedures in Annex F
- Annex E
- Annex A
- Annex G
- Annex C
- Annex B
- Annex D
- Annex H
- Schedule 1.

### **3. Scope of Agreement**

3.1 Aliv agree to provide Interconnection Services to XX on the terms and conditions set out in this Agreement.

3.2 The Services available to XX from the Aliv under this Agreement are in summary:

- Call Termination to Mobile Numbers
- Termination of SMS and MMS
- Call Termination to Domestic Freephone Numbers
- SIP Interconnection
- And any other services that may be agreed between the Parties from time to time and added to Annex A

all of which are defined in more detail in the service descriptions of Annex A, together with specific terms and conditions applicable to them.

### **4 Commencement and duration**

4.1 This Agreement shall take effect on the Effective Date and subject to Clause 18 shall continue in effect for five (5) years, unless otherwise agreed between the Parties.

## **5 Network interconnect**

5.1 Each of the Parties shall connect and keep connected their respective electronic communications networks to one another by means of a SIP Interconnection Gateway, in the manner described in, and subject to the terms and conditions of, this Agreement, in order to convey calls to, from or in transit over their respective networks.

## **6 Prices**

6.1 For the provision of the Interconnection Services, XX agrees to pay the prices set out in Annex G – Price List.

6.2 The Access Provider may amend these prices from time to time, and shall give the Access Seeker at least twenty (20) Working Days' notice of any price changes. If the price is regulated by URCA, any price change approved by URCA shall take place on the date mandated by URCA without the need for the Access Provider to give notice.

6.3 The Parties shall use the processes set out in Annex E – Billing to charge and reimburse each other for the provision of Interconnection Services.

6.4 All prices are expressed exclusive of any VAT or sales tax or other tax imposed by law.

## **7 Process and standards**

7.1 The Parties agree to use the processes set out in Annex B – Ordering Processes for the provisioning of SIP Interconnection Services.

7.2 The Parties agree to comply with the standards, specifications and procedures set out in Annex C – Technical Specifications and Annex D – Operations and Maintenance.

## **8 Quality of service**

8.1 The Access Provider shall supply the same quality of service for a SIP Interconnection Service as it supplies to its own Customers or to its subsidiaries or affiliated companies for the same service or a similar service.

8.2 Aliv shall comply with the Quality of Service standards set out in Annex H – Quality of Service Standards.

## **9 Management of Access and Interconnection Agreement**

9.1 The Parties accept the need for effective interconnection of their Networks in order to provide quality electronic communication services to their respective Customers, and, accordingly, undertake to:

9.1.1 act in good faith and in a professional manner in relation to each other in the provision of seamless SIP Interconnection Services;

9.1.2 exchange information necessary for the fulfilment and continued operation of this Agreement, but without prejudice to obligations to protect Customer privacy and commercial confidentiality;

9.1.3 act at all times, as far as is reasonably possible, so as to facilitate the speedy and effective provision and operation of the SIP Interconnection Services, to the benefit of Customers and to their mutual advantage;

9.1.4 cooperate to achieve feature transparency of supplementary services between Networks so far as is reasonably possible;

9.1.5 provide inter-operability between their Networks so that their Customers can communicate with Customers on the other Party's network; and

9.1.6 use their best efforts to resolve disputes in an efficient and professional manner.

9.2 Each Party shall nominate members of their staff to act as the first point of contact for the other Party for the management and implementation of this Agreement. These names, contact details and responsibilities shall be set out in Schedule 1, as amended from time to time.

## **10 Measurement of traffic**

10.1 The responsibility for traffic measurement shall reside with the Billing Party responsible for that particular Interconnect Service.

10.2 Each Party shall ensure that it records measurements of traffic in sufficient detail to meet its obligations as outlined in the Service Schedules attached hereto as Annex A – Service Schedules.

## **11 Network planning, network alterations and data management amendments**

11.1 Network design and planning of the SIP Interconnection between the Parties shall be as outlined in the traffic forecast to ensure sufficient sessions are available to provide a high grade of service (not more than 0.1% call blocking in Busy Hour). The traffic forecast shall cover the next three planning years.

11.2. The Network Plan shall be reviewed and updated by the Parties as necessary and at least on an annual basis and agreed by both Parties by the end of July of each year.

11.3 Aliv recognises that Network Alterations in the Network of one Party may have an impact on the operations of XX, and agrees to co-ordinate Network Alterations in order to minimise the effect of the operations on XX's Networks generally and to ensure the smooth operation of their interconnection arrangements in accordance with Annex D – Operations and Maintenance, Clauses D.13 and D.14.

11.4 Aliv shall carry out any Data Management Amendments according to the provisions of Clause D.16.



## **12 Network safety and protection**

12.1 Each Party is responsible for the safe operation of its Network and shall take all reasonable and necessary steps in its operation and implementation of this Agreement to ensure that its Network does not:

12.1.1 endanger the safety or health of employees, contractors, agents or customers of the other Party; or

12.1.2 damage, interfere with or cause any deterioration in the operation of the other Party's Network.

12.2 Neither Party shall knowingly connect or permit the connection to its Network of any equipment or apparatus, including any terminal equipment which is not approved by URCA or is not in compliance with any regulatory or other measures issued by URCA.

## **13 Numbering**

13.1 Each Party shall use numbers in accordance with the National Numbering Plan of The Bahamas, as amended from time to time by URCA.

13.2 Where CLI is passed for presentation purposes, the presentation shall comply with all the requirements of the relevant data protection legislation and regulations of The Bahamas and the requirements of individual customers of the Parties.

## **14 Operations and maintenance**

14.1 The procedures for the installation and testing of the SIP Interconnect, as well as for the continued operation and maintenance thereof shall be governed by the provisions of Annex C – Technical Specifications and Annex D - Operations and Maintenance.

14.2 Each Party shall correct faults which occur in its Network which affect the provision of Interconnection Services in accordance with such Party's normal engineering practices. Each Party shall correct faults affecting Interconnection Services to the same standards as those affecting other services provided by the Party. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults.

## **15 Retail customer relationships**

15.1 Each Party shall instruct its staff, contractors, agents and employees to refrain from any public criticism of the other Party or from any criticism of the other Party to a Customer in relation to any matter that has arisen as a result of the operation of this Agreement. Each Party shall instruct its staff, contractors, agents and employees to concentrate their energies on resolving the issue cooperatively with the other Party.

15.2 Neither Party shall represent expressly or by omission or implication that:

15.2.1 it is approved by or an agent of or affiliated with the other Party; or

15.2.2 it has a special relationship with the other Party or is charged preferential prices by the other Party for the provision of Interconnection Services.

15.3 The Access Seeker has no right to withhold any payment due to the Access Provider on account of any non-payment of debts owed to the Access Seeker by its customers.

15.4 The Parties agree to co-operate with each other in order to detect and prevent fraudulent use, theft or misuse of each other's services or equipment. If one Party becomes aware of possible fraudulent use, theft or misuse of the other Party's services or equipment, it shall promptly inform the other Party. A failure to comply with this Clause may constitute a Breach of this Agreement under Clause 17.

## **16 Dispute resolution**

16.1 In the event of a dispute between the Parties over the provision of Interconnection Services or any other matter related to interconnection, the Parties agree to use the procedures set out in Annex F – Dispute Resolution (or, in the case of billing disputes, Clause E.6) in order to resolve the dispute.

## **17 Breach and suspension of interconnection services and Interconnection Agreement**

17.1 Unless otherwise specified, if a Party is in material breach of any of the terms of this Agreement, the other Party may send it a notice (the Breach Notice) specifying the nature of the breach, a reasonable timescale for its remedy, and the consequences of a failure to remedy the breach (including the suspension and termination of this Agreement).

17.2 Provided that URCA has given its prior written consent, a Party may suspend the provision of an Interconnection Service in any of the following circumstances:

17.2.1 Where suspension is warranted by the failure of the other Party to take action to rectify a fault condition that threatens the safety of the first Party's Network.

17.2.2 A failure to correct a material breach of the terms of this Agreement, following the serving of a Breach Notice and the expiry of the term set out in the Breach Notice under the procedure set out in Clause 17.1.

17.2.3 Where the other Party has failed to pay an undisputed invoice for Interconnection Services following the elapse of 90 Calendar Days after the Due Date.

17.2.4 Where the other Party has been declared bankrupt or gone into liquidation.

17.2.5 Where the other Party ceases to be a Licensed Operator.

17.2.6 Where the first Party is formally directed to do so by URCA.

17.2.7 Where the first Party is requested by formal notice in writing to do so by the other Party.

17.3 **Effect of suspension:** If the provision of any Interconnection Service is suspended, then:

17.3.1 the Interconnection Service to which the suspension relates will no longer be provided by the first Party;

17.3.2 the provision of other Interconnection Services, not covered by the suspension, shall continue and not be affected;

17.3.3 the term of this Agreement shall not be affected by the period of suspension; and

17.3.4 unless the suspension is found to be wrongful, the first Party shall not be liable to the other Party for any losses or damage that the other Party may have suffered as a result of the suspension.

17.4 Provided that URCA given its prior written consent, a Party may suspend this Agreement under any of the following circumstances:

17.4.1 Where suspension is warranted by the continuing failure of the other Party to take action to rectify a fault condition that threatens the safety of the first Party's Network in accordance with Clause 8 and the fault condition relates to the provision of all Interconnection Services in this Agreement

17.4.2 A failure to correct a material breach of the terms of this Agreement, following the serving of a Breach Notice and the expiry of the term set out in the Breach Notice under the procedure set out in Clause 17.1

17.4.3 Where the other Party has ceased to operate the business of the provider of electronic communications services to Customers

17.4.4 Where the other Party has failed to provide or renew reasonable financial security for current traffic levels where required and as provided for under the terms of Clause 23.

17.4.5 Where the other Party has been declared bankrupt or gone into liquidation.

17.5 A Party shall suspend this Agreement where it is formally directed to do so by URCA.

17.6 If this Agreement is suspended, then:

17.6.1 all Interconnection Services under this Agreement will no longer be provided by the first Party

17.6.2 the term of this Agreement shall not be affected by the period of suspension; and

17.6.3 unless the suspension is found to be wrongful, the first Party shall not be liable to the other Party for any losses that the other Party may have suffered as a result of the suspension.

## **18 Termination of interconnection services and Interconnection Agreement**

18.1 Subject to the prior written consent of URCA, a Party may terminate the provision of an Interconnection Service under this Agreement in any of the following circumstances:

18.1.1 Where termination is warranted by the continuing failure of the other Party to take action to rectify a fault condition that threatens the safety of the Network of the Party undertaking the termination in accordance with Clause 12

18.1.2 A failure to correct a material breach of the terms of this Agreement, following the serving of a Breach Notice and the expiry of the term set out in the Breach Notice under the procedure set out in Clause 17.1

18.1.3 Where the other Party has ceased to trade either generally or in relation to the provision of electronic communications services to Customers or other services with which the Interconnection Service is associated

18.1.4 Where the other Party has been declared bankrupt by a Court of competent jurisdiction or entered into liquidation or an analogous process in the jurisdiction in which it was incorporated or has appointed, or suffered the appointment of, a Receiver or Administrator or official with similar powers in another jurisdiction

18.1.5 Where a Party fails to pay any amount due under the terms of this Agreement by the due date or fails to pay any amount payable as determined on the basis of the billing dispute resolution procedures under Clause E.7, and fails to remedy such default within fifteen (15) Working Days of written notice to do so

18.1.6 Where the other Party ceases to be a Licensed Operator in respect of any service to be provided to a Customer to which that Interconnection Service relates

18.1.7 Where the first Party is formally directed to do so by URCA

18.1.8 Where the first Party is requested by formal notice in writing to do so by the other Party.

**18.2 Effect of termination of Interconnection Service:** If the provision of an Interconnection Service is terminated, then:

18.2.1 the Interconnection Service to which the termination relates will no longer be provided by the first Party

18.2.2 the provision of other Interconnection Services, not covered by the termination, shall continue and not be affected.

18.2.3 the terms of this Agreement in relation to other Interconnection Services shall not be affected by the termination; and

18.2.4 unless the termination is found to be wrongful, the first Party shall not be liable to the other Party for any losses that the other Party may have suffered as a result of the termination.

**18.3** Subject to the prior written consent of URCA, a Party may terminate this Agreement in any of the following circumstances:

18.3.1 Where the other Party has been declared bankrupt by a Court of competent jurisdiction or entered into liquidation or an analogous process in the jurisdiction in which it was incorporated or has appointed, or suffered the appointment of, a Receiver or Administrator or official with similar powers in another jurisdiction

18.3.2 Where the other Party has ceased to be a Licensed Operator in respect of any service to be provided to a Customer to which the Interconnection Services being provided pursuant to this Agreement relates

18.3.3 A failure to correct a material breach of the terms of this Agreement, following the serving of a Breach Notice and the expiry of the term set out in the Breach Notice under the procedure set out in Clause 17.1.

**18.4 Effect of termination of Interconnection Agreement:** Where this Agreement is terminated under Clause 18.3, then

18.4.1 all Interconnection Services under this Agreement will cease to be provided by the first Party

18.4.2 unless the termination is found to be wrongful, the first Party shall not be liable to the other Party for any losses or damage that the other Party may have suffered as a result of the suspension

18.4.3 each Party shall be responsible for and bear all direct costs incurred in the removal of its equipment and decommissioning the SIP Interconnection.

18.4.4 all outstanding invoices and debts between the Parties (including for any period during which the first Party, as a concession, continued to provide service despite termination of this Agreement) shall become due and payable.

18.5 Except in the case of a clear emergency relating to safety or potential risk of major network failure, the first Party shall obtain the approval of URCA before the implementation of the steps set out in Clause 18.

## **19 Force majeure**

19.1 No Party to this Agreement shall be liable for any failure to fulfil its obligations hereunder where such failure is caused by circumstances outside the reasonable control of such Party, including, without limitation, insurrection or civil disorder, war or military operations, national or local emergency, acts or omissions of Government, labour disputes of any kind (whether or not involving the Party's employees or where it falls outside the Party's sphere of influence), fire, lightning, explosion, earthquake, volcano or any other such cause (each an "event of force majeure").

19.2 The Party initially affected by the event of force majeure shall promptly notify the other Party in writing of the estimated extent and duration of such inability to perform its obligations ("Force Majeure Notice").

19.3 Upon cessation of circumstances leading to the event of force majeure, the Party affected by such event of force majeure shall promptly notify the other of such cessation.

19.4 If as a result of a force majeure, the performance by the Party of its obligations under this Agreement is affected, such Party shall, subject to the provisions of Clause 19.7, perform those of its obligations not affected by a force majeure. In performing those of its obligations not affected by a force majeure, the Party initially affected by a force majeure shall use its reasonable endeavours to deploy its resources such that (when taken together with other obligations to its Customers and third parties) there is no undue discrimination against the other Party.

19.5 If the event of force majeure continues for a period of 6 months or less from the date of any notification thereof in terms of Clause 19.2, any and all obligations outstanding shall be fulfilled by the Party affected by the event of force majeure as soon as possible after cessation of the event of force majeure, save to the extent that such fulfilment is no longer practically possible or is not required by the other Party.

19.6 If the event of force majeure continues for more than 6 months from the date of the Force Majeure Notice and notice of cessation in terms of Clause 19.3 has not been given and such event of force majeure prevents the affected Party from performing its obligations in whole or in part during that period, the unaffected Party shall be entitled (but not obliged) to terminate this Agreement by giving not less than 30 days written notice to the other Party after expiry of such 6 month period to that effect; provided that such notice shall be deemed not to have been given if a notice of cessation given in terms

of Clause 19.3 of the event of force majeure is received by the unaffected Party prior to the expiry of such 30 days.

19.7 If this Agreement is not terminated in terms of the provisions of Clause 19.6, any obligations outstanding shall be fulfilled by the Party affected by the event of force majeure as soon as reasonably practicable after the event of force majeure has ended, save to the extent that such fulfilment is no longer possible or is not required by the unaffected Party.

## **20 Review**

20.1 1 A Party may seek to amend this Agreement by serving on the other Party a Review Notice if:

20.1.1 either Party's licence is materially modified (whether by amendment or replacement);

20.1.2 a material change occurs in the law or regulations governing electronic communications in The Bahamas;

20.1.3 a material change occurs, including enforcement action by any regulatory authority, which affects or reasonably could be expected to affect the commercial or technical basis of this Agreement;

20.1.4 there is a general review pursuant to Clause 20.3;

20.1.5 the Party seeking the amendment has a change in its operational or service needs (whether by way of a need for new services or changed circumstances).

20.2 A Review Notice shall set out in reasonable detail the issues to be discussed between the Parties.

20.3 A Party may initiate a general review of this Agreement by sending a Review Notice to the other Party on the first anniversary of the Commencement Date of this Agreement and every three months thereafter.

20.4 On service of a Review Notice, the Parties shall forthwith negotiate in good faith the matters to be resolved with a view to agreeing the relevant amendments to this Agreement.

20.5 For the avoidance of doubt, the Parties agree that notwithstanding service of a Review Notice this Agreement shall remain in full force and effect as it was before service of the Review Notice until agreement is reached or the matter is determined under Clause 20.7.

20.6 If the Parties fail to reach agreement on the subject matter of a Review Notice, either Party may initiate a dispute procedure as set out in Annex F – Disputes.

20.7 A Party may amend its own contact information in Schedule 1 - Contact Details at any time by informing the other Party of the amendments at least 24 hours before the amendment takes effect.

## **21 Provision of information**

21.1 Each Party shall provide the other with the information required by the terms of this Agreement and shall do so in a timely manner. Each Party shall use reasonable endeavours to provide the other with information that may be reasonably necessary to the operation of this Agreement.

21.2 The Party disclosing information will use reasonable endeavours to ensure that the information disclosed is correct to the best of its knowledge at the time of its provision.

21.3 If a Party disclosing information provides information to the other Party, the other Party may rely on the first Party to have obtained all appropriate Third Party consents.

21.4 Subject to Clause 22, the Party receiving information shall indemnify the disclosing Party and keep it indemnified against all liabilities, claims, demands, damages, costs and expenses arising as a consequence of any failure by the Party receiving information to comply with any conditions or restrictions on use or disclosure of the information supplied in cases where those conditions or restrictions were notified to it in writing prior to the time of disclosure.

## **22 Confidentiality and information protection**

22.1 The Parties shall not divulge to any third party the contents of this Agreement, unless required to do so by law or URCA's regulations or decisions. For the avoidance of doubt, URCA and any person specifically authorised by law is not a third party for the purposes of this Clause.

22.2 The Parties shall treat as confidential within their respective organisations the contents and terms of this Agreement and, accordingly, shall take all reasonable steps to ensure that only those staff, employees, contractors and agents that need to know the contents or terms of any part of this Agreement for the purpose of implementing this Agreement shall have access to the relevant contents and terms and to information provided by the other Party under the terms of this Agreement.

22.3 Information provided by one Party to the other shall only be used for the purpose for which it was provided. For the avoidance of doubt, such information may not be used for the commercial advantage of the recipient Party in its retail business operations or be given to any staff, employee, contractor or agent with retail sales or marketing responsibilities or to any subsidiary or associated company of the Party.



22.4 The Parties shall take all necessary steps to preserve the confidentiality of Customer information relating to any Customer that is passed between them and to protect the privacy of individual Customers. In particular, where instructions from Customers relevant to information confidentiality and privacy have been received by one Party they shall be communicated to, and respected by, the other Party.

22.5 The provisions of Clauses 22.1 to 22.4 inclusive do not apply to information that one Party is required to disclose in order to satisfy legal requirements or the regulations of URCA, to comply with the requirements of any recognised Stock Exchange, or to information that is already in or becomes available in the public domain through the actions of a third party.

### **23 Bank guarantee**

23.1 Aliv has the right to request a form of financial security, including a bank guarantee for an amount representing no more than three months of forward-looking revenues associated with the Interconnection Services covered by this Agreement, after taking into account any revenues payable by Aliv to the other Party under this Agreement. The level of security requested shall be proportional to the risk involved. The level of security shall take account of factors such as the estimated value of services to be provided, the financial standing of the Party, and the projected liability. The financial security may be provided by a means such as bank deposit or guarantee or any other form of security used by standard commercial practice in The Bahamas.

23.2 The financial security will be subject to review by the Parties every six months starting from the Commencement Date of this Agreement, and may be amended if the projected revenues or any of the factors described in Clause 23.1 have changed or are likely to change. Failure to provide a suitable guarantee for payment of sums due for actual levels of service within 30 days (or such longer period as Aliv may reasonably allow) will be sufficient reason for Aliv to suspend this Agreement under Clause 17.4.

23.3 Aliv may also carry out credit vetting of an existing Operator where Aliv has reasonable concerns about the ability of the Operator to cover debts including without limitation where Aliv has evidence of a poor payment history or the Operator's credit rating has been downgraded or threatened to be downgraded. The method to be used will be communicated to the Operator and will be standard to all Operators.

23.4 If a Party is dissatisfied with the implementation of Clauses 23.1, 23.2 and 23.3 above, it may initiate a dispute under Annex F of this Agreement.

23.5 A bank guarantee may be presented to the relevant bank for payment provided that:

23.5.1 the OLO has accumulated debts overdue by 30 Calendar Days or more in relation to Interconnection Services equal to or in excess of the amount of the guarantee; and

23.5.2 the debts are not subject to dispute; and

23.5.3 the Operator concerned has been formally notified of Aliv's intention to present the guarantee.

23.6 Aliv may seek a new bank guarantee once it has presented a bank guarantee for payment.

## **24 Intellectual property rights**

24.1 Nothing contained in this Agreement shall be construed to confer or be deemed to confer on either Party any rights or licences in the intellectual property of the other Party.

24.2 For the purposes of this clause "Intellectual Property" means whatever trademarks, (registered or not) inventions, patents (both registered and unregistered), copyrights, registered and unregistered designs, know-how and other intellectual property vesting in a Party by the operation of law.

## **25 Notices**

25.1 All notices provided for in this Agreement shall be in writing and shall be delivered to the relevant contact persons nominated for various purposes in Schedule 1 - Contact Details from time to time.

25.2 Written notices shall include paper-based writing and electronic means of written communication such as writing communicated by facsimile (fax) and electronic mail (e-mail).

25.3 The Party receiving a notice pursuant to this Agreement shall confirm receipt of the notice within 24 hours of such receipt. The manner of confirmation shall be the same as that used for the notice, whether paper-based or electronic.

25.4 If the Party sending a notice pursuant to this Agreement does not receive an acknowledgement within the timescale set out in Clause 25.3, it shall deliver a copy of the notice by hand to the address of the relevant contact person and obtain a receipt for the notice. This receipt shall be sufficient proof of the delivery of the notice.

## **26 Limitation of liability**

26.1 Neither Party has an obligation of any kind to the other Party beyond an obligation to exercise the reasonable skill and care of a competent electronic communications operator in performing its obligations under this Agreement.

26.2 Subject to Clause 26.3, if a Party is in breach of any of its obligations under this Agreement to the other Party (excluding obligations arising under this Agreement to pay moneys in the ordinary course of business), or otherwise (including liability for negligence or breach of statutory duty) such Party's liability to the other shall be limited to US\$5,000,000 for any one event or series of connected events and US\$10,000,000 for all events (connected or unconnected) in any period of 12 calendar months.

26.3 Neither Party shall be liable to the other in contract, tort (including negligence or breach of statutory duty) or otherwise for loss (whether direct or indirect) of profits, business or anticipated savings or for any indirect or other consequential loss whatsoever arising in connection with the operation of this Agreement, howsoever caused, unless otherwise explicitly provided for in this Agreement.

26.4 Each provision of this Clause 26 is a separate limitation applying and surviving even if one or more such provisions is inapplicable or held unreasonable in any circumstances.

26.5 The provisions of this Clause 26 shall not apply to proven wilful or illegal acts undertaken by a Party, including (but not limited to) misconduct, gross negligence, criminal activity, fraud and deliberate acts of sabotage.

## **27 Severability**

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

## **28 Assignment of rights and obligations**

28.1 Subject to Clause 28.2, no rights, benefits or obligations under this Agreement may be assigned or transferred, in whole or in part, by a Party without the prior written consent of the other Party.

28.2 Subject to Clause 28.3, no consent is required under Clause 28.1 for an assignment of rights, benefits or obligations under this Agreement (in whole or in part) to a successor to all or substantially all of the assigning Party's Network or to an associated company provided that such successor or Associated Company shall have had a licence granted to it to operate the Network of the assigning Party.

28.3 The assigning Party shall promptly give notice to the other Party of any assignment permitted to be made without the other Party's consent. No assignment shall be valid unless the assignee or successor agrees in writing to be bound by the provisions of this Agreement.

## **29 Whole agreement**

29.1 This Agreement constitutes the whole Agreement between the Parties as to the subject matter of this Agreement and, unless otherwise agreed in writing between the Parties, supersedes all previous agreements, understandings, representations or warranties whatsoever, whether oral or written. The Parties acknowledge and agree that in addition to this Agreement both Parties are legally bound by regulatory measures and legislative

enactments governing the electronic communications sector pursuant to the statute laws of the Commonwealth of The Bahamas.

### **30 Variation**

30.1 No addition to or variation, consensual cancellation or novation of this Agreement no waiver of any right arising from this Agreement or its breach or termination shall be of any force or effect unless reduced to writing and signed by both the Parties or their duly authorized representatives.

### **31 Relaxation**

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

### **32 Necessary approvals and consents**

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

32.2 Each Party agrees to indemnify the other Party against any loss, claim, expense, damage or action, suffered or sustained by such other Party pursuant to a breach by such indemnifying Party of its warranty in terms of Clause 32.1, notwithstanding anything to the contrary contained in this Agreement.

### **33 Governing law**

33.1 The law governing this Agreement shall be the laws of the Commonwealth of The Bahamas.

IN WITNESS WHEREOF, the Parties have in the presence of witnesses set their respective hands to this Agreement on the date first written above.

For and on behalf of Aliv

Signed .....

Name .....

Title .....

Witness.....

Print name.....

For and on behalf of XX

Signed .....

Name .....

Title .....

Witness.....

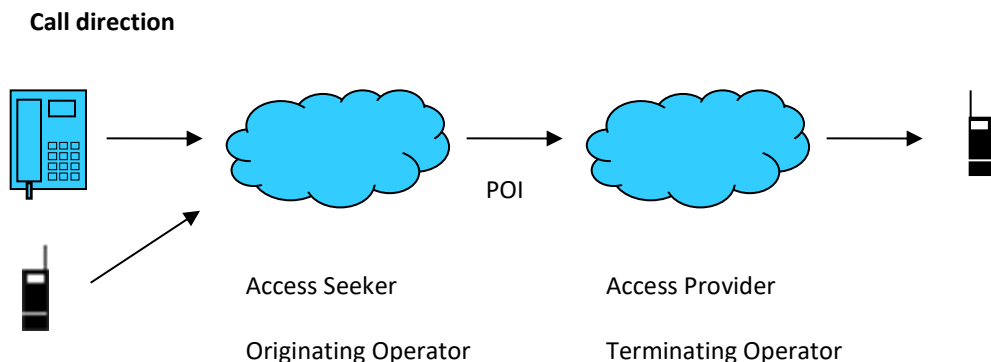
Print name.....

## Annex A – Service Schedules

### A.1. Call Termination Service to Mobile Numbers

A.1.1. **Service definition:** The Call Termination Service to Mobile Numbers comprises the carriage of a voice Call (including facsimile transmission and low speed data transmissions like modems and DTMF keying) originated by a Customer on the Network of the Access Seeker and handed over by the Access Seeker at a Point of Interconnection for termination on a service identified by a Mobile Number on the Network of the Access Provider. The Call Termination Service to Mobile Numbers includes the routing of the call from the MSC (Mobile Switching Centre) to the Mobile Number on the Network of the Access Provider.

Diagram A.1: Call Termination Service to Mobile Numbers



A.1.2. **Call handover:** The Access Seeker will hand over calls for Termination on Mobile Numbers on the mobile Network in accordance with Clauses D.2.3 and D.2.4.

A.1.3. **Supply conditions:** The Access Provider shall not be obliged to provide the Call Termination Service to Mobile Numbers until the SIP Interconnection has been established, commissioned and tested.

A.1.4. **Technical requirements:** The Parties shall agree in advance all necessary technical requirements, including call set-up and clear-down sequences, for the conveyance of Terminating Calls. The technical standards and interfaces for this service shall be as set out in Schedules 1 and 2 to Annex C – Technical Specifications. Data Management Amendments for this service shall be carried out in accordance with Annex D – Operations and Maintenance, Clause D.16.

A.1.5 **Fault rectification and service restoration:** Each Party shall correct faults which occur in its Network which affect the conveyance of Terminating Calls to Mobile Numbers in accordance with such Party's normal engineering practices. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults. The Parties shall resolve any faults occurring in this service in accordance with Annex D – Operations and Maintenance Clauses D.6 – D.8.

A.1.6 **Quality of service:** The service standards set out in Annex H – Quality of Service Clauses H.1, H.2.1, H.2.2, H.4, H.5.3 H.5.4 and H.6 shall apply to this service.

A.1.7. **Calling Line Identification:** Nature of Address and Calling Line Identification for Network and presentation purposes shall be made available for all Terminating Calls delivered to the Access Provider’s Network. Both must be transmitted transparently and without modification.

A.1.8. **Routing principles:** The conveyance of Terminating Calls shall be in accordance with the routing principles specified in Annex D – Operations and Maintenance Clause D.2.

A.1.9. **Charging:** For the conveyance of Terminating Calls to Mobile Numbers by the Access Provider, the Access Seeker shall pay the Access Provider a charge calculated in accordance with the rates as specified in Annex G - Price List. The Access Provider shall bill the Access Seeker for this service in accordance with Annex F – Billing Processes.

## ***A.2 Termination of short message service (SMS) and multimedia message service (MMS)***

A.2.1 **Service definition:** This service comprises the carriage of a SMS or MMS originated by a Customer on the Network of the Access Seeker and handed over by the Access Seeker at a Point of Interconnection for termination on a service identified by a Mobile Number on the Network of the Access Provider. This service includes the routing of the SMS or MMS from the Mobile Switching Centre (MSC) to the Mobile Number on the Network of the Access Provider.

A.2.2 **SMS handover:** SMS and MMS for termination on numbers on the Access Provider’s Network will be handed over at the SMS/MMS service delivery point agreed between the Parties.

A.2.3 **Supply conditions:** The Parties shall not be obliged to provide the SMS and MMS Termination Service until the SIP Interconnection has been established, commissioned and tested.

A.2.4 **Technical requirements:** The Parties shall agree in advance all necessary technical requirements for the conveyance of Terminating SMS and MMS.

A.2.5 **Fault rectification and service restoration:** Each Party shall correct faults which occur in its Network which affect the conveyance of Terminating SMS and MMS in accordance with such Party’s normal engineering practices. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults.

A.2.6 **Calling Line Identification:** Calling Line Identification for Network and presentation purposes shall be made available for all Terminating SMS and MMS delivered to the Access Provider’s Network. CLI must be transmitted transparently and without modification.

A.2.7 **Routing principles:** The conveyance of Terminating SMS and MMS shall be in accordance with the routing principles specified in Annex C. All SMS and MMS covered by this service will be carried on operator billed interconnection circuits.

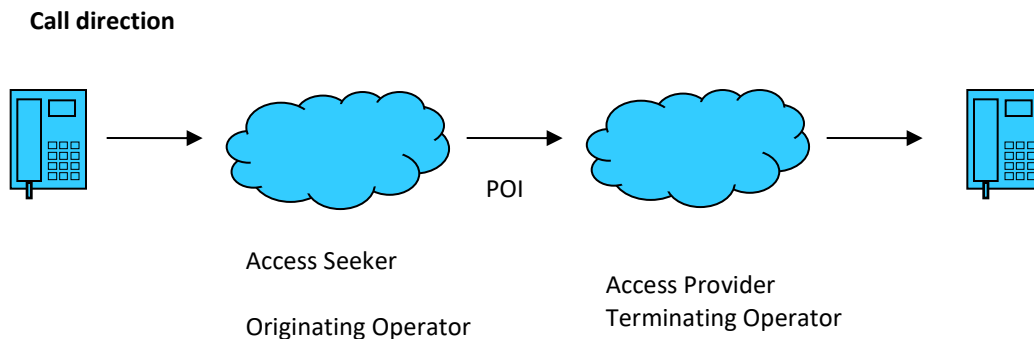
A.2.8 **Charging:** For the conveyance of SMS and MMS Termination traffic by the Access Provider, the Access Seeker shall pay the Access Provider a charge calculated in accordance with the rates as specified in Annex G - Price List. These charges shall be due on all SMS and MMS submitted to the Network of the Access Provider for termination

A.2.9 **Spam:** The Access Seeker shall use its reasonable endeavours to discourage the transmission of unsolicited spam SMS and MMS to recipients on the Access Provider's Network. The Access Provider reserves the right to monitor and block unsolicited spam SMS and MMS including, if necessary, denying access to all SMS and MMS from the switch originating the spam messages.

### **A.3 Call Termination Service to Domestic Freephone Numbers**

A.3.1. **Service definition:** The Call Termination Service to Domestic Freephone Numbers comprises the carriage of a voice Call (including facsimile transmission) originated by an end-user on the Network of the Access Seeker and handed over by the Access Seeker at a Point of Interconnection for termination at a Domestic Freephone Number on the Network of the Access Provider.

Diagram A.2: Call Termination Service to Freephone Numbers



A.3.2. **Call handover:** The Access Provider will hand over calls for Termination on Freephone Numbers on the Terminating Network in accordance with Clauses D.2.3. and D.2.4.

A.3.3. **Supply conditions:** The Access Provider shall not be obliged to provide the Call Termination Service to Freephone Numbers until the interconnection link service has been provisioned, and Points of Interconnection established, commissioned and tested.

A.3.4. **Technical requirements:** The Parties shall agree in advance all necessary technical requirements, including call set-up and clear-down sequences, for the conveyance of Terminating Calls. The technical standards and interfaces for this service shall be as set out in Schedules 1 and 2 to Annex C – Technical Specifications. Data Management Amendments for this service shall be carried out in accordance with Annex D – Operations and Maintenance, Clause D.16.

A.3.5 **Fault rectification and service restoration:** Each Party shall correct faults which occur in its Network which affect the conveyance of Terminating Calls to Domestic Freephone Numbers in accordance with such Party's normal engineering practices. For the



avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults. The Parties shall resolve any faults occurring in this service in accordance with Annex D – Operations and Maintenance Clauses D.6 – D.8.

**A.3.6 Quality of service:** The service standards set out in Annex H – Quality of Service Clauses H1, H2.1, H2.2, H4, H5.4, H5.5 and H6 shall apply to this service.

**A.3.7. Calling Line Identification:** Nature of Address and Calling Line Identification (CLI) for Network and presentation purposes shall be made available for all Terminating Calls delivered to the Access Provider’s Network. Both must be transmitted transparently and without modification.

**A.3.8. Routing principles:** The conveyance of Terminating Calls shall be in accordance with the routing principles specified in Annex D – Operations and Maintenance Clause D.2.

**A.3.9. Charging:** The Access Provider shall not charge the Access Seeker for the conveyance of Call Termination traffic to Freephone Numbers, but it may charge the organisation receiving the Freephone calls. Any arrangements between the Access Provider and the Access Seeker for the recovery of call origination costs for the carriage of a voice Call (including facsimile transmission) originated by an end-user on the Network of the Access Provider and handed over by the Access Provider at a Point of Interconnection for termination at a Domestic Freephone Number on the Network of the Access Seeker shall be negotiated commercially between the Parties.

#### **A.4 SIP Interconnection**

**A.4.1. Service definition:** An all-IP network interconnection between providers Networks, using SIP interconnections and IP transport to reduce the operational and capital costs of trunking off-net traffic between providers. At SIP network borders, a session border controllers (SBCs) are required to mediate the differences between service providers as well as provide security, quality and cost control at the ingress and egress of each provider’s network. Both Parties must ensure that robust security controls, deep interworking and mediation features, policy-based routing and admission control policies are in place.

**A.4.2.** A SIP Interconnection and IP transport layer between providers uses SBC gateways are required to control number of sessions, security, interworking and mediation features as well as policy based routing and admission control polices.

**A.4.3. Responsibilities of the Operators:** The Access Seeker requiring the termination of its traffic on the Network of the Access Provider shall be responsible for providing IP transport and SBC Gateways (redundant) on its network to allow Interconnect services between the Access Provider and Access Seekers Networks.

**A.4.4.** Each Operator is responsible for maintaining the IP transport and SBC Gateways they provide.

**A.4.5.** The Terminating Operator is responsible for providing sufficient switch capacity at its end of the SIP Interconnect.

**A.4.6. Technical requirements:** The Parties shall agree in advance all necessary technical requirements for SIP Interconnect. Unless otherwise agreed between the Parties,

the technical standards and interfaces for this service shall be as set out in Schedules 1 and 2 to Annex C – Technical Specifications and in Clause C.3.

A.4.7. Unless otherwise agreed between the Parties, a minimum of two IP transport Paths and SBC Gateways will be provided for diversity.

A.4.8. **Fault rectification and service restoration:** Each Party shall correct faults which occur in its Network which affect the performance on the SIP Interconnect in accordance with such Party's normal engineering practices. For the avoidance of doubt, neither Party warrants that its Network is, or will be, free from faults. The Parties shall resolve any faults occurring in this service in accordance with Annex D – Operations and Maintenance Clauses D.6 – D.8.

A.4.9. If a fault in the Access Seeker's Network affects service in the Access Provider's Network, the Access Provider shall notify the Access Seeker immediately after it becomes aware of the problem and, if the problem has the potential to severely affect the Access Provider's network, then the Access Provider shall have the right to suspend service across the SIP Interconnect carrying the affected traffic until the fault has been repaired.

A.4.10. **Provisioning:** SIP Interconnect sessions shall be ordered and provided in accordance with Annex B – Ordering Processes.

A.4.12. **Quality of service:** The provisioning, repair and management of SIP Interconnection shall meet the quality of service standards set out in Annex H – Quality of Service Standards, Clauses H.1, H.2.3, H.3, H.5.1, H.5.2, and H.6.

A.4.13. **Planned maintenance:** The Parties shall provide each other with notice of 10 Working Days before any planned maintenance work which will cause an outage is due to take place on a SIP Interconnect.

A.4.14. **Decommissioning:** The Access Seeker may at any time give notice that it requires the Access Provider to cease providing the SIP Interconnect. Decommissioning shall be carried as set out in Annex D – Operations and Maintenance Clause D.14.

**Schedule 1 to Annex A: List of services provided by Aliv to OLO**

	<b>Service</b>	<b>Included (tick box)</b>
<b>A1</b>	Call Termination Service to Mobile Numbers	
<b>A2</b>	Termination of SMS and MMS	
<b>A3</b>	Call Termination Service to Domestic Freephone Numbers	
<b>A4</b>	SIP Interconnect Service	

## **Annex B – Ordering Processes**

### ***B.1 Requests for interconnection services***

B.1.1. This Annex sets out the general procedure that will apply for handling requests from the Access Seeker for new Interconnection Services and additional Interconnection Services.

### ***B.2 Service requests***

B.2.1. If a specific format for the application for any Interconnection Service has not been agreed by the Parties, a Service Request may be in the format of a business letter (see Schedules 1 and 2 to this Annex for proposed templates). The Service Request should be sent to the person nominated in Schedule 1 - Contact Details.

### ***B.3 Response to service request by access provider***

B.3.1. On receipt of a Service Request for an Interconnection Service the Access Provider shall confirm receipt of the Service Request within one (1) Working Day and shall examine the request and provide both a Preliminary Response and a Considered Response to the Access Seeker.

B.3.2. **Preliminary Response:** The Access Provider shall provide a Preliminary Response within 5 Working Days containing at least the following information:

- Acknowledgment of receipt of the Service Request.
- The names of the personnel who will represent the Access Provider in the negotiations or other dealings to obtain the Interconnection Service.
- An indication of whether the Service Request may be met or not, and if met, whether in full or in part, or whether additional time is required to assess the Service Request.
- Additional information, if any, that is required by the Access Provider in order to finalise its assessment of the Service Request. The Access Provider shall justify why this additional information is required.

B.3.3. **Additional information:** Where the Access Provider has requested additional information that it requires to complete the assessment of the Service Request, the Access Seeker shall take all reasonable steps to provide that information.

B.3.4. **Considered Response:** Within 15 Working Days of the receipt of the Service Request or of the date on which a reply was received to a request for additional information, whichever is the later, the Access Provider shall give the Access Seeker the Considered Response. The Considered Response shall advise whether the Service Request:

- will be met in all its terms. (This constitutes full acceptance of the Service Request.)
- will not be met at all. (This constitutes full rejection of the Service Request.)
- will be met in part in terms of volume, location and/or timescale. (This constitutes part acceptance of the Service Request.)
- requires additional time for assessment. (This constitutes a statement that additional time is required to assess the Service Request by the Access Provider.)
- cannot be assessed for lack of information. (This constitutes a conditional rejection of the Service Request.)

B.3.5. Where there is full acceptance of the Service Request, the Parties shall institute the appropriate provisioning processes set out below.

B.3.6. Where there is full rejection of the Service Request:

- (a) the Access Provider shall provide a statement of reasons for the rejection at the same time as the Service Request is rejected.
- (b) after receipt of the statement of reasons referred to in paragraph (a) above, or, in any case, within 10 Working Days from:
  - (i) the date of the Considered Response, or
  - (ii) the due date of the Considered Response in case of late reply,

the Access Seeker may initiate the dispute resolution procedures in Annex F – Dispute Procedure.

B.3.7. Where there is part acceptance of the Service Request, the Parties will jointly consider how to progress the matter, and clarify whether the Access Seeker wishes to proceed with the provisioning of the Interconnection Services that the Access Provider accepts can be provided. After such joint consideration, and, in any case, within 15 Working Days from:

- (i) the date of the Considered Response, or
- (ii) the due date of the Considered Response in case of late reply,

the Access Seeker may initiate the relevant dispute resolution procedures in Annex F – Dispute Procedure.

B.3.8. Where the Access Provider indicates that more time is required to assess the Service Request:

- (a) the Access Provider shall at the same time as it indicates that more time is required, advise in writing the additional time required and reasons why it is required. Unless agreed otherwise with the Access Seeker, the additional time required shall not exceed 10 Working Days.
- (b) after receipt of the advice referred to in paragraph (a) above, or, in any case, within 10 Working Days of:
  - (i) the date of the Considered Response, or

(ii) the due date of the Considered Response in case of late reply, or a longer period as agreed between the Parties under Clause B.3.8 (a), the Access Seeker may initiate the relevant dispute resolution procedures in Annex F – Dispute Resolution.

#### ***B.4 Expedition and responsiveness***

B.4.1. In following the general application and response procedures outlined in this Annex the Parties shall act with all reasonable expedition and not take the full time permitted for each part of the process unless the action occupies all of that time.

B.4.2. The Parties shall do all things reasonably necessary to ensure that, to the maximum practical extent, applications for Interconnection Services are fully accepted. Without limiting the meaning of this requirement, it may include informal meetings between staff and employees of the Parties to clarify and otherwise facilitate the Service Request and its consideration. The Parties shall not limit themselves to formal communications where informal and other processes appear to either Party to be sensible and useful.

B.4.3. The Parties shall use best endeavours to conclude a contract providing for the purchasing, delivery and installation of links or joining circuits forthwith but in any event within one (1) month following receipt or the making of a valid request to negotiate an interconnection agreement, unless the Parties mutually agree to a shorter or longer timeframe or an extension of time is granted by URCA.

B.4.4. The Parties shall effect operational interconnection by the completion, acquisition and installation of physical interconnection links or joining circuits, inclusive of testing within three (3) months of signing the contract to deliver or obtain interconnection.

B.4.5. The Parties are allowed a further two (2) months for the conclusion of an executed full Interconnection Agreement on terms consistent with any other URCA mandated terms and conditions, as well as other access and interconnection services.

B.4.6. The Parties shall use best endeavours to conclude any amendments or changes to an executed interconnection agreement on terms consistent with any other URCA mandated terms and conditions.

B.4.7. The Access Provider shall implement any additional capacity, additional circuits or other technical changes to existing interconnection services within three (3) months of receiving a valid request from an interconnecting Access Seeker. A valid request shall be one which is compliant in all material respect with the requirements of the Interconnection Agreement between the Parties.

B.4.8. URCA may, in its sole discretion, extend any of the timeframes in this Agreement for any period that URCA deems necessary or appropriate on application by one of the Parties. The application shall be submitted in writing and submitted at least seven (7) days before the expiry of the relevant timeframe, In determining any application for an extension URCA shall also consider representations made by any other Party to the proposed interconnection. The Parties to this Interconnection Agreement may also mutually agree to a variation of the timeframes in this Agreement and are free to follow such mutually agreed

varied timeframe, In the event that the Parties fail to agree on the length of a variation of the timeframes, either Party may apply to URCA or URCA may of its own volition intervene to set timeframes that are binding on the Parties.

B.4.9. A Party may not interrupt, block, discontinue or otherwise impair any interconnection or access service it provides to any other Party unless with the prior written consent of URCA and in accordance with the terms and conditions of the Interconnection Agreement between the Parties.

## ***B.5 Provisioning processes for traffic services***

B.5.1. **Scope:** This section sets out the forecasting, ordering, provisioning and implementation processes for traffic services required from the Access Provider. It covers the following services as set out in Annex A – Service Schedules:

- A.1 Call Termination Service to Mobile Numbers
- A.2 Termination of SMS and MMS
- A.3 Call Termination Service to Domestic Freephone Numbers
- A.4 SIP Interconnection Service

B 5.2 **Service Request:** The Access Seeker requiring the services listed above from the Access Provider for the first time must apply in accordance with the procedure outlined in Clause B.2 above.

B.5.3. **Planning and forecasting:** The Parties will regularly exchange information and co-ordinate the planning of the interconnected Networks so that services can be provided efficiently and operational problems avoided. The Parties shall prepare a Network Plan to guide the provision of Interconnection and other Services between the Parties. During the negotiations over this Agreement, both Operators' engineers will meet and exchange their network plans. These plans will show the layout and capacity of the SIP Interconnect and IP transport, along with any proposed changes during the next 3 years. This information will be classified as confidential between the Operators. During these meetings the Operators will discuss and agree the initial requirements for interconnection.

B.5.4 These meetings will be repeated at least every 12 months and revised network plans should be updated by the end of July of each year (in accordance with Clause 11.2). The Operators will also discuss their likely capacity requirements over the next 12 months, and will exchange forecasts. This information will show the number of sessions required at the SIP Interconnect in each six-month period over the coming 18 months.

This information will be used for budgeting purposes, and does not represent a commitment on the part of the Operators to purchase or to supply.

## **B.6 New interconnection services**

B.6.1. This Section sets out the general procedure that shall apply for handling requests from Access Seekers for New Interconnection Services falling within the scope of the services required to be offered under the Interconnection Offer.

B.6.2. Such New Interconnection Services shall be incorporated as additional Schedules to this Interconnection Agreement once specific arrangements dealing with specifications, prices and other terms have been agreed.

**B.6.3. Form and Content of a New Interconnection Service Request:** The Parties may agree on a suitable template for the application for a new Interconnection Service. In the absence of such an agreement a business letter will suffice (see attachment A and B for a template of a business letter).

**B.6.4. Preliminary Response:** On receipt of a Request for a New Interconnection Service, the Access Provider shall examine the request, set up a feasibility study and provide both a Preliminary Response and a Considered Response to the Access Seeker.

B.6.5. The Access Provider shall provide a Preliminary Response to the Access Seeker within ten (10) Working Days containing at least the following information:

- a) acknowledgment of receipt of the New Interconnection Service Request;
- b) the names of the personnel who shall represent the Access Provider in the negotiations or other dealings to obtain the New Interconnection Service;
- c) an indication of whether the New Interconnection Service Request can be met or not, and if met, whether in full or in part, or what further additional time is required to assess the New Interconnection Service Request;
- d) additional information, if any, that is required by the Access Provider in order to finalise its assessment of the New Interconnection Service Request.

**B.6.6. Additional information:** Where the Access Provider has requested additional information that it requires in the Preliminary Response to complete the assessment of the New Interconnection Service Request, the Access Seeker shall take all reasonable steps to provide that information. The Parties shall produce an agreed New Interconnection



Service Request based upon the initial requirements and any additional information requested under this Clause.

**B.6.7. The New Interconnection Service Request:** shall be agreed within ten (10) Working Days of initial receipt or within ten (10) Working Days after receiving the additional information whichever is the later. The Access Provider may suspend consideration of the New Interconnection Service Request until it receives a response from the Access Seeker. The time elapsed between seeking the additional information and receiving such information shall be excluded from the timescales outlined in this Clause.

**B.6.8. Considered Response:** Within thirty (30) Working Days of the receipt of the New Interconnection Service Request or of the date on which a reply is received to a request for additional information, whichever is the later, the Access Provider shall give the Access Seeker the Considered Response. The Considered Response shall advise whether the New Interconnection Service Request:

- will be met in all its terms. (This constitutes full acceptance of the New Interconnection Service Request.)
- will not be met at all. (This constitutes full rejection of the New Interconnection Service Request)
- will be met in part in terms of volume, location and/or timescale. (This constitutes part acceptance of the New Interconnection Service Request.)
- requires additional time for assessment. (This constitutes a statement that additional time is required to assess the New Interconnection Service Request by the Access Provider.)
- cannot be assessed for lack of information. (This constitutes a conditional rejection of the New Interconnection Service Request.)

**B.6.9. Full rejection:** Where there is full rejection of the New Interconnection Service Request, the Access Provider shall provide a statement of reasons for the rejection within ten (10) Working Days from the date of the Considered Response. Within twenty (20) Working Days from the date of the Considered Response, the Access Seeker may initiate the dispute resolution procedures in Annex F – Dispute Resolution in this Agreement.

**B.6.10. Unable to meet time scales:** Where the Access Provider is unable to meet the time scales required by the Access Seeker the Parties shall jointly consider the matter and clarify whether the Access Seeker wishes to proceed with the provisioning of the Interconnection Service. Within twenty (20) Working Days from the date of the Considered Response the Access Seeker may initiate the relevant dispute resolution procedures in Annex F – Dispute Resolution in this Agreement.

**B.6.11. Part acceptance:** Where there is part acceptance of the New Interconnection Service Request, the Parties shall jointly consider how to progress the matter, and clarify whether the Access Seeker wishes to proceed with the provisioning of the New Interconnection Service that the Access Provider accepts can be provided. After such

joint consideration and in any case within thirty (30) Working Days from the date of the Considered Response the Access Seeker may initiate the relevant dispute resolution procedures in Annex F –Dispute Resolution in this Agreement.

**B.6.12. More time required:** Where the Access Provider indicates that more time is required to assess the New Interconnect Service Request, the Access Provider shall, within ten (10) Working Days of the Considered Response, advise the Access Seeker in writing of the additional time required and the reasons why it is required. Without limiting the reasons why additional time may be required for assessment, the Access Provider may have to undertake additional survey, measurement and testing activities to complete the assessment of the New Interconnection Service Request. Within twenty (20) Working Days of the date of the considered response, the Access Seeker may initiate the relevant dispute resolution procedures in Annex F – Dispute Resolution in this Agreement.

# Schedule 1 to Annex B: Template Letter of Application for Interconnection

[Company Letterhead]

[Insert Access Provider Contact Details]

Dear Sir,

## **Application for Interconnection**

I am writing to apply to interconnect with the Aliv Network, under the terms of the Aliv Interconnection Offer dated [Insert Date of Interconnection Agreement].

My application is attached.

Yours sincerely

[Insert Name]

[Insert Title]

[Insert Company Name]

[Insert Business Address and Registered Company Address]

cc URCA

# Schedule 2 to Annex B: Application for Interconnection

## Form of Interconnection Agreement

Is acceptance of the Interconnection Agreement pending negotiation of an individualised Interconnection agreement? Yes / No

## Company Details

Company name

Registered company address

Designated contact person:

Name

Business Address

*(if different from registered company address)*

Contact telephone number

Fax number

## Licence Details

Type of licence

Date of licence

Type of electronic communications Network and/or electronic communications service that may be

Provided

## Interconnection Services Requested

List the interconnection services requested (based on the service specifications in the Interconnection Agreement) or define the new interconnection services requested.

## The date at which the services are required

List relevant provisioning dates requested.

## SIP Interconnection, IP transport and session Requirements

List the forecast capacity requirements across the SIP Interconnection.

## Other relevant details

For example for initial interconnection this may include details on:

Switch software used by Access Seeker and its interoperability with other software types.

Location of the Access Seeker's switch

Relevant number ranges within the National Numbering Plan Etc.

# Annex C – Technical Specifications – SIP Interconnection

## **C.1 General**

C.1.1 Aliv will entertain an IP Interconnection on a case by case basis. Detailed specifications will be determined through a joint Network Planning Committee.

C.1.2 Initial guidelines regarding the IP interconnection are provided in the sections below.

## **C.2 SIP signalling**

C.2.1 SIP signalling will be used for IP interconnection. Other signalling (H.323, etc.) are not supported.

C.2.2 The following signalling specificities are supported:

- T.38 fax and G.711 fax are supported
- RFC2833 is supported, but not the INFO message type
- “To:” fields support prefixes, but only one global numeric prefix per IP address (non- numeric chars, e.g., # sign are unsupported)
- The CLI feature is provided through the P-Asserted- Identity header (RFC 3325) and calling number needs to be in E.164 format (e.g. preceded by a ‘+’ sign). CLI in “From:” field is not supported and will be dropped.
- Full and compact headers are supported

C.2.3 SIP Media IP ranges and SIP signalling IP addresses will be provided by Aliv.

## **C.3 IPSEC configuration**

C.3.1 IP interconnect will require the use of IPsec, SRTP or TLS for the security of underlying layers

C.3.2 The following guidelines are to be followed for IPsec implementation:

- Tunnel mode only is supported for IPsec. Transparent mode is not supported.
- 4 types of transform sets are supported: ‘esp-3des-md5’, ‘esp-3des-sha1’, ‘esp-aes128-md5’, ‘esp-aes128-sha1’. ‘esp-3des-md5’ is the preferred transform set.
- ‘Main Mode’ is the only method supported for IKE negotiation. ‘Aggressive Mode’ is not supported.
- Perfect Forward Secrecy (PFS) shall be used in ‘group 2’.

C.3.3 Only SIP signalling packets will be encrypted. RTP media may flow outside the tunnel.

C.3.4 SRG IPsec devices have policy-based routing enabled.

## **C.4 End to End DTMF Signalling**

C.4.1 Aliv requires the passing of end point to end point DTMF signalling information transmitted ‘out of band’ to avoid the potential corruption of ‘in band’ DTMF tones due to codec and packet transport mechanisms. RFC 4733 provides an ‘out of band’ DTMF transmission process, however, some CPE associated with voice mail and IVR applications have been known to be susceptible to “leakage” caused inherently by VoIP Gateways.

## **C.5 Numbering**

C.5.1 Each Party shall ensure that each Call handed over to it by the other Party at a SIP Interconnection shall be routed to the number of the National Numbering Plan which is associated with the Call and which indicates the destination of the Call.

C.5.2 Each Party shall give the other at least four weeks notice of any new numbering ranges that it proposes to implement or of any changes in its numbering structure that will necessitate modifications in the other Party’s Network. Each Party shall then implement and test the modifications before the end of the four week notice period.

C.5.3 If URCA decides to modify the National Numbering Plan, each Party shall cooperate in the early implementation of the changes and bear the costs associated with any changes to its own network required as a result of such a decision. The Party subject to such modifications will inform the other Party in writing as soon as it becomes aware of such a decision of URCA so that the other Party can carry out the necessary changes to its network.

C.5.4 **Calls between the Networks:** The SIP Interconnect will forward the numbers in the formats specified in the National Numbering Plan. All digits will be passed across the interface.

## **C.6 Calling Line Identification**

C.6.1 The Access Seeker undertakes to provide the Nature of Address in respect of all of its Calls, and the Calling Line Identification Presentation (CLIP) for all its Calls where this is technically feasible. If required by the Access Provider, the Access Seeker shall demonstrate why it is not technically feasible to provide the CLIP and Nature of Address.

C.6.2 For the avoidance of doubt, if a CLI and Nature of Address is provided to the Access Seeker by a third party or a Caller on the network of the Access Seeker, the CLI and Nature of Address shall in all circumstances be provided to the Access Provider by the Access Seeker. In cases where no CLI and/or Nature of Address can be made available it is the responsibility of the Access Seeker to correctly identify the type of traffic presented at the SIP Interconnect and communicate this to the Access Provider in order to ensure accurate billing as per Annex E – Billing Processes and Annex G – Price List. A failure to do so will constitute a breach of this Agreement under Clause 18.1.

C.6.3. Each Party undertakes to ensure that, except for calls to the Emergency Services, the Calling Line Identification Restriction (CLIR) marking of Calls is respected at all times and that the numbers marked with CLIR shall not be presented to the called end-user or a third party where this is required by a Customer or by law.

C.6.4 Neither Party shall amend the CLIP, if presented to it, of any Call originating from a domestic or international Caller and passing over a Joining Circuit.

C.6.5 The Nature of Address shall conform to and use the following digits:

- 1 Local call
- 2 National toll call or
- 3 National toll call
- 4 International call

C.6.6 If a Party can demonstrate that the other Party is intentionally removing the CLI or Nature of Address from any Call originating from a domestic or international Caller and passing over a SIP Interconnect, it may, after allowing the other Party an opportunity to respond to its evidence, within three (3) Working Days of submitting evidence of the removal of the CLI or Nature of Address to both the other Party and URCA, block all Calls without a CLI being sent to it by the other Party.

# Schedule 1 to Annex C: SIP Interconnect specifications

The Parties' systems should comply with the following documents:

## Basic Call Establishment

- Session establishment
  - MUST support RFC 4566 "Session Description Protocol"
  - MUST support RFC 3264 "Offer/Answer Model with SDP"
  - Placing media on hold: "a=inactive" or "a=sendonly"
- Ringback Tone vs. Early Media
  - 180 w/o SDP means apply local ringback tone
  - 183 with SDP means render RTP received from remote media endpoint described in SDP
- Caller ID with Privacy (RFC 3323 & 3325)
  - Calling name & number delivered in P-Asserted-Identity
  - Privacy requested using Privacy

## Call Forwarding

- Procedures to remain in signaling path of forwarded call
- Call-forwarding loop detection procedures
- Call Transfer using REFER/Replaces
  - MUST support RFC3515 "The SIP Refer Method"
  - MUST support RFC3891 "SIP Replaces Header"
  - MUST support RFC3265 "SIP-Specific Event Notification"
- Call Transfer using 3PCC (INVITE/reINVITE)
  - RECOMMEND support of RFC 3725 "Best Current Practices for 3PCC"

## Auto Recall/Callback

- MUST support RFC 4235 "An INVITE-Initiated Dialog Event Package for SIP"
- Used to detect when target user becomes available
  - INVITE to target user MUST include Call-Info header field with "purpose=answer\_if\_not\_busy "
- Used to resolve feature interactions  
e.g., call-forward-busy



## **Schedule 2 to Annex C: Interconnection testing**

### ***C-2 Call Completion tests***

C-2.1.1 **Call Routing:** The correct call routing configuration of all digital Switches will be checked by performing relevant test calls, as described below:

- Calls originated by the Access Seeker and terminating on the Access Provider's Network for all Call Services provided by one Party to the other through the respective Interconnected Switches.
- Calls from one Party to the other Party in order to check the validity of the calling number at the terminating point according to the National Numbering Plan.

C-2.1.2 **Charging Tests:** In order to ensure accurate charging of the Call Services provided, according to this Agreement the following tests will be performed, except where additional capacity is being added to an existing route:

- For all Interconnection call types required at the particular Point of Interconnection the transmission and reception of the charging parameters will be checked bilaterally.
- The error-free charging registration in files (Volume of Calls and total duration in minutes) per Call Service for all applicable charging periods
- The comparison of charging files between both Parties in order to ensure the matching of records
- The accuracy of the information provided by each Party regarding the total volume of interconnection traffic.

C-2.1.3 **Confidence Testing:** The confidence tests will start after the common technical test for Interconnection has been completed. During one month starting with the moment the Interconnection becomes operational, the Parties will monitor the call completion levels.

## **Annex D – Operations and Maintenance**

### ***D.1 Management of interconnection***

D.1.1 The Parties will nominate an Interconnection Manager as the main point of contact within their organisations for each other. The prime purpose of the Interconnection Manager will be to ensure that communications between the Parties is effective. An Interconnection Manager may request a meeting with the other Interconnection Manager to discuss any issue, and the Interconnection Managers will meet within five (5) Working Days of the request being made.

D.1.2 The Parties will establish a Joint Working Group to discuss and agree on technical, operational, planning and service aspects of the Interconnection. The Joint Working Group will consist of equal numbers of representatives from each Party.

A Party shall nominate no more than four representatives. The names of each representative will be listed in Schedule 1 – Contact details, and may be amended in accordance with Clause 21.9. Each Party will nominate one of its representatives as an alternate chairman.

D.1.3 The Joint Working Group may consider the following matters:

- the Network Plan, plans for Network Alterations or new developments in the Network of either Party
- requirements for new for the SIP Interconnect and potential timing of delivery
- traffic levels and congestion problems
- service quality
- future capacity requirements;
- faults and outages during the period since the previous meeting;
- billing processes and issues;
- planned maintenance
- special events, Mass Call Events and other high traffic generators
- any other matters raised by either Party

D.1.4 The Joint Working Group will receive and consider statistical reports on the performance of SIP Interconnect and the repair of any faults reported by the Parties. The format of these reports will be as shown in the samples in Schedule 2 to this Annex D, unless otherwise agreed between the Parties.

D.1.5 The Joint Working Group shall meet whenever requested by either Party, and in any case it will meet no less than every six months, unless the Parties agree otherwise.

D.1.6 The chairmanship of the Joint Working Group will alternate between the Parties, with the first meeting being called by Aliv. The chairman of the meeting will be responsible for setting a date and location for the meeting, and for circulating an agenda five Working Days in advance of the meeting.

## **D.2 Traffic routing principles**

D.2.1 As a general principle, each Party shall be responsible for routing traffic in the most practical and efficient manner, having regard to the Network configuration and current Network conditions such as congestion and known faults.

D.2.2 Each Party will make reasonable effort to ensure that all calls to the Network of the other Party are successfully routed, using overflows to alternative routing if necessary and possible.

## **D.3 Handling congestion and unplanned network outages**

D.3.1 In the event of congestion occurring on the interconnection link, the originator of the traffic may take appropriate action as required to re-route the traffic in order to reduce the effect of the congestion.

D.3.2 If either Party is aware of congestion occurring, they shall notify the other Party of:

- a) the existence of the congestion;
- b) the actions being taken by the Notifying Operator to reduce the impact of the congestion; and
- c) the outcome of those actions.

D.3.3 Both Parties agree to work together in good faith to resolve congestion issues by planning as necessary further interconnection capacity or amendments to traffic routing plans in an expedient manner.

D.3.4 For the avoidance of doubt, the Access Seeker is responsible for the ordering of any additional services required in order to ensure that sufficient capacity is available to minimise on-going congestion problems on the SIP Interconnection.

D.3.5 In the event of an unplanned Network outage in the Access Provider's Network, it is the responsibility of the Access Provider to use its reasonable endeavours to re-route the traffic or otherwise mitigate the impact of the outage on the Access Seeker. The Access Provider shall notify the other Party of

- a) the existence of the Network outage;
- b) the action being taken by the Access Provider to reduce the impact of the Network outage; and
- c) the outcome of those actions.

## **D.4 Mass call events**

D.4.1 A Mass Call Event is defined as the planned occurrence of an unusually high volume of calls to a specific destination (number or group of numbers). A typical

example of a Mass Call Event would be a media Customer soliciting calls in bulk from its mass audience.

D.4.2 Both Parties will work together with each other and with URCA to have a special access code or number range that may be made available to Customers for the use of Mass Call Events. These codes or number ranges shall be compliant with the National Numbering Plan.

D.4.3 Either Party with knowledge of a user planning a Mass Call Event will provide the other Party with reasonable advance notice, not less than 5 Working Days, and sufficient information for the other Party to take appropriate action prior to the event.

D.4.4 Either Party may take appropriate action to manage the Mass Call Event traffic or other periods of unusually high traffic loads within their Network to manage the impact this has on other traffic within the Network.

### ***D.5 Malicious call tracing***

D.5.1 Any malicious call tracing must be initiated by Royal Bahamas Police Force or an authority empowered to do so by the laws of the Commonwealth of The Bahamas, and tracing that uses the networks of both Parties must be approved by the appropriate person within each Party. Once these approvals have been obtained, a Party shall co-ordinate the call tracing with the NOC of the other Party. The other Party shall give priority to the request.

### ***D.6 Customer fault reporting***

D.6.1 Each Party shall be responsible for examining the operations of its own Networks before reporting the existence of faults to the other Party.

D.6.2 **Fault reporting systems:** Each Party shall establish and maintain a fault reporting service that allows Customers who are directly connected to the Network of that Party and to whom that Party supplies services to report faults relating to any Network or service.

D.6.3 **Customer notification:** Each Party will advise all of its directly connected Customers to report all faults to its fault reporting service, as described in Clause D.6.2.

D.6.4 **Non-discriminatory fault reporting and identification:** Each Party shall perform fault reporting and identification on a non-discriminatory basis.

### ***D.7 Fault management and service restoration responsibility***

D.7.1 **Network fault responsibility:** The Party in whose Network the fault occurs is responsible for responding to the fault report, attending the fault (if appropriate), rectifying the fault and restoring services.

**D.7.2 IP transport service faults:** The Party that supplies IP transport services is responsible for maintaining and repairing that service, notwithstanding that the service may be used in the other Party's Network.

**D.7.3 Major inter-working faults:** If a major fault occurs affecting a communication that crosses or is to cross both Parties' Networks, initial responsibility for identifying the fault rests with the Party which first becomes aware of the fault.

**D.7.4 Faults affecting other Networks or Equipment:** If a Party identifies a fault occurring in its Network or with its Network facilities which may have an adverse effect on the other Party's Network, Network facilities, Network services or Equipment, the first Party shall promptly inform the other Party of:

- a) the existence of the fault;
- b) the actions being taken by the first-mentioned Party to restore service and to further identify and rectify the fault; and
- c) the outcome of those actions.

**D.7.5** Each Party is responsible for establishing and maintaining a fault reporting service at its own cost irrespective of the location of the fault.

**D.7.6** The Access Provider will, at its sole discretion, classify the fault as either Service Affecting fault or Service Interrupting fault, and will use its best endeavours to repair the fault in line with the timescales set out in Annex H – Quality of Service.

**D.7.7 Fault priority:** Each Party shall give priority to faults that:

- a) involve a critical alarm in an exchange
- b) have the highest service loss impact in terms of the number of Customers affected
- c) have been reported on previous occasions and have recurred.

**D.7.8 Non-discrimination:** Each Party shall rectify faults on a non-discriminatory basis.

**D.7.9** Each Party will use its best endeavours to meet the timescales set out in Tables H.4 and H.6 of Annex H – Quality of Service Standards for fault notification and fault repairs.

**D.7.10 Registration and numbering:** All faults affecting the provision of Interconnection Services shall be registered and given a unique identification number to assist the Parties in monitoring fault response and rectification. The registration numbers used by each Party shall be available to the other Party to minimise confusion in the fault response and fault recognition.

**D 7.11** If a Party notifies the other Party of a fault in the other Party's Network (including the SIP Interconnect for which it is responsible), and the fault notice is subsequently found to be erroneous, the first Party shall be liable for any costs incurred by the other Party as a result of the erroneous information. This Clause shall not apply if the first

Party can demonstrate to the satisfaction of the other Party that the erroneous fault notice was reasonably justified at the time it was issued. In the event of a disagreement over the reasonableness or otherwise of the erroneous fault notice, either Party may invoke the dispute procedure set out in Annex F.

## ***D.8 Fault handling and rectification procedures***

**D.8.1 Network Operations Centre (NOC):** Each Party shall establish one NOC each to which all factors relevant to the proper functioning of the Interconnection (generally of a technical nature) are to be reported. The NOC should be staffed on a 24-hour basis and equipped with necessary infrastructure to facilitate efficient communication. Each Party will be responsible for processing reported faults using its own procedures. Any inter-service assistance required shall be requested through the NOC. Each NOC is obliged to offer its full assistance for rectification of Interconnection faults. Each NOC will be the traffic-controlling Party for the circuit on which it loads outgoing traffic. NOC contact telephone numbers are included in Schedule 1 – Contact details, which will be updated by the NOC s as and when changes occur.

**D.8.2 Unplanned outages:** Upon detection of an unplanned outage, relevant NOCs must be notified. At the time of notification, the outage could have ceased to exist or could still be persisting. In cases where the outage has ceased to exist, the NOCs will note the occurrence, duration and details of the failure. Immediate action must be taken to localise the fault causing the failure (and consequently identify which Party is responsible for clearing the fault where this is unclear at first) in cases where the outage persists. Relevant NOCs must be informed every hour for Service Affecting Faults and every three hours for other faults, or at mutually agreed upon intervals, thereafter by the responsible Party of the progress of the repair until restoration of full service whereupon the NOC will note the outage duration and details of the failure and inform the other Party of the rectification of the fault.

**D.8.3 Planned outages:** Planned outages must be kept to an absolute minimum and should not be carried out during busy traffic times. The Parties shall endeavour to limit such planned outages to the hours between 11.00 pm to 6.00am. The Party planning such an outage must inform the other affected NOC(s) 10 Working Days in advance (by mutual agreement this timescale can be reduced). If the planned outage does not directly affect the other Party, its NOC should be informed of the planned time of the outage. During the planned outage, the responsible Party must keep the other NOCs informed at regular intervals with the progress until full restoration of service whereupon the NOCs will note the outage duration. If the items are not restored to full service within the expected duration, the outage will be regarded as an unplanned outage occasioned by a planned outage and the procedure in Clause D.8.2 above for dealing with unplanned outages will be followed.

**D.8.4 Fault history:** Each Party shall maintain records, preferably electronic, containing details of all faults and the corresponding restoration times which were handled between it and the other NOCs for a running twelve month period. These records should be used to assess the fault performance of the Interconnection.

D.8.5 **Escalation process:** The Parties will follow the escalation process set out in Table D.1 for faults that are not cleared within the timescales given in Annex H - Quality of Service, so that the problem can be drawn to the attention of more senior management.

**Table D.1: Fault escalation process**

<b>Severity level</b>	<b>Definition</b>	<b>Escalation listing</b>
SL1 (Critical alarm)	Major portion of network or application is down NOC is unable to resolve in timescale provided No workaround available	<ol style="list-style-type: none"> <li>1. 15 (fifteen) minutes from fault detection, escalation to NOC Manager</li> <li>2. After 30 (thirty) minutes of no response or resolution, to the NOC Senior Manager</li> <li>3. After 60 (sixty) minutes of no response or resolution, to the VP Network Services</li> </ol>
SL2 (Major alarm)	Majority of network is down NOC is unable to resolve in timescale provided Has critical impact, but not to extent of SL1	<ol style="list-style-type: none"> <li>1. 30 (thirty) minutes from fault detection, escalation to NOC Manager</li> <li>2. After 60 (sixty) minutes of no response or resolution, to the NOC Senior Manager</li> <li>3. After 3 (three) hours of no response or resolution, to the VP Network Services</li> </ol>
SL3 (Minor alarm)	Minor portion (1 - 29%) of network is down NOC personnel is unable to resolve in the timescale provided	<ol style="list-style-type: none"> <li>1. After 1 (one) hour from fault detection, escalation to NOC manager</li> <li>2. Update reports every 2 (two) hours</li> <li>3. After 4 (four) hours of no response or resolution should be upgraded to a SL2 fault</li> </ol>

*Note: Appropriate contacts are listed in Schedule 1 – Contact points*

## **D.9. Maintenance procedures**

D.9.1 It is accepted that certain scheduled (preventive) and unscheduled maintenance actions will be carried out by the Parties on the items comprising the Interconnection. Where such actions could affect the proper functioning of the Interconnection, e.g., working on critical, centralised equipment, NOCs should be informed accordingly as early as possible in advance. In the case of scheduled maintenance, the schedule of critical activities must be made available to NOCs at least five (5) Working Days in advance. It is not necessary to inform the NOCs of completion of such activities. If, however, the maintenance action results in a Cataleptic Failure or a Partial Outage, the procedure in Clause D.8.2 above should be followed.

D.9.2 **Routine Testing:** All Parties shall supply each other test numbers to be used for test calls for routine testing of the Interconnection circuits. The Parties agree to use artificial traffic generators in such a way so as not to unduly load the Interconnection.

D.9.3 **System and circuit identification:** Generic system and circuit identification shall be exchanged between the Parties for mapping to its own generic system and circuit identification scheme.

D.9.4 **SIP Interconnect utilisation details:** The Parties may, where required, exchange records of utilisation and Call connection performance over the interface to ensure that service over the interface is maintained at satisfactory levels. Information regarding

planned dates for route augmentation shall also be exchanged between the Parties whenever necessary.

### ***D.10 Prevention of harm and injury***

D.10.1 Each Party must take reasonable measures to ensure its staff, employees, contractors and agents do not cause physical harm or injury to the other Party's Network or personnel.

### ***D.11 Interference and obstruction***

D.11.1 Neither Party must do anything by act or omission, or knowingly permit any third person to do anything, in relation to Network facilities, Network services or equipment which:

- a) causes interference; or
- b) materially obstructs, interrupts or impedes the continuous use or operation of, the Network facilities, Network services or equipment of the other Party.

D.11.2 **Notice of interference and rectification:** If one Party (Notifying Operator) notifies the other Party that the other Party's Network facilities, Network services or equipment is causing interference to the Notifying Operator's Network facilities, Network services or equipment:

- a) the other Party shall rectify the situation so that no interference is caused within 24 hours of receiving notice from the Notifying Operator; or
- b) if the other Party is not able to locate the source of the interference within 24 hours the other Party shall promptly notify the Notifying Operator, and both Parties shall meet within 24 hours of such notice and jointly examine each other's Network facilities, Network services or equipment to locate the source of the interference.

### ***D.12 Network alterations***

D.12.1 Network Alterations may be required by one Party that affect the other Party. This includes changes to the Network structure or operation as well as:

- closing, replacing or relocating a switch in respect of which an interconnection link is connected,
- decommissioning an interconnection link or a link with wholesale leased circuits
- de-activating interconnection services.

D.12.2 Network Alterations may be:

- a) required by the Access Provider as part of Network development, or
- b) requested by the Access Seeker.

D.12.3 Where the Network Alteration is requested by the Access Seeker for the provision of new Interconnection Services, this shall be handled as part of the provisioning processes set out in Annex B – Ordering Processes.



D.12.4 Where the Network Alteration is requested by the Access Seeker for the decommissioning of services supplied by the Access Provider, this shall be handled under the Decommissioning process in Clause D.14 below

D.12.5 The Requesting Party shall provide notice to the other Party for each Network Alteration that will impact on the other Party's Network according to the minimum periods set out in Table D.2 below. The Requested Party shall respond within four (4) weeks with an estimate of the reasonable costs (if any) involved in responding to the Alterations within its own Network.

***Table D.2: Minimum notice periods for Network Alterations***

<b>Type of Network Alteration</b>	<b>Minimum notice period (months)</b>
Software changes	2
Hardware changes	4
Facility location changes	8

D.12.6 The Requesting Party shall pay the reasonable costs of the Requested Party for the impact the Network Alteration has on the Requested Party's Network.

D.12.7 If the Requested Party believes that it is not in a position to proceed with the requested Network Alteration, either within the timescales requested or in any circumstances, the Requested Party shall advise the Requesting Party within two weeks of receipt of the request. In these circumstances both Parties shall make all reasonable endeavours to resolve the situation, including recourse to the dispute resolution process if required.

D.12.8 With the exception of decommissioning, closing or relocation of SIP Interconnection (see Clause D.13), the Access Provider is required to give the Access Seeker one Calendar Month notice of Network changes that impact the services provided to the Access Seeker or require the Access Seeker to make changes in their Network

### ***D.13 Decommissioning***

D.13.1 If decommissioning is to occur where physical SIP Interconnection has been established, the Access Provider will, if requested by the Access Seeker within twenty five (25) Working Days after receiving a notice under Clause D.13.3, offer alternative interconnection solutions to the Access Seeker. The alternative interconnection solutions must, to the extent feasible, be comparable in terms of cost and functionality and, if accepted by the Access Seeker within fifty (50) Working Days from the date of the offer, must permit the full implementation of the alternative interconnection solutions. Nothing in this Clause prevents the decommissioning from occurring on the expiry of the decommissioning period provided that the Access Provider has complied with this Clause.

D.13.2 If decommissioning is to occur where customer sited SIP Interconnection has been established then the Access Provider will arrange for the connection to the alternative or relocated switch prior to the decommissioning.

D.13.3 Either Party may, for whatever reason upon giving no less than six Calendar Months (decommissioning period) prior written notice to the other Party:

- close, replace or relocate a switch in respect of network interconnection decommission an interconnection link or a link with wholesale leased circuits.

D.13.4 The Access Provider shall bear its own costs associated with the decommissioning together with the direct costs incurred by the Access Seeker in respect of the decommissioning and establishment of alternative arrangements necessary to support the provision of interconnection services provided at the time of the decommissioning.

### ***D.14 Software upgrades/modifications***

D.14.1 Software version enhancements must be initially introduced and tested between the Parties at test exchanges to ensure that there are no interworking problems before introduction into an active exchange. The Party making the software enhancement must give the other Party a minimum of two weeks written notice before testing can commence.

D.14.2 Unless otherwise agreed in writing between the Parties, a 30 Calendar Day lapse between a software upgrade in any switching unit and the general release into the rest of the network is required.

D.14.3 A controllable number of software patches should be activated in any 24 hour period on the same switching unit. The testing of such patches will be by mutual agreement in writing. All applications and tests must be completed in low traffic periods i.e., between 22:00 and 05:00 or at other times by mutual agreement in writing.

### ***D.15 Data Management Amendments***

D.15.1 In order to ensure the timely implementation of Data Management Amendments, notice of Data Management Amendments shall be provided by the Requesting Party to the Requested Party at least four weeks in advance of the requested implementation date. The format of the notice is shown in Schedule 3 to Annex D, unless otherwise agreed between the Parties.

D.15.2 If a Requested Party believes that it is not in a position to proceed with the requested Data Management Amendment, either within the time-scales requested or in any circumstances, the Requesting Party shall be advised within two weeks of receipt of the request. In these circumstances the Parties shall make all reasonable efforts to resolve the situation, including recourse to the dispute resolution process as set out in Annex F – Dispute Resolution.

D.15.3 Data Management Amendments required to activate new geographic Customer number ranges allocated or amended by URCA shall be carried out on a free of charge basis.

D.15.4 In relation to all other Data Management Amendment requests, where it is jointly agreed as being of mutual benefit to both Parties or where there is a financial benefit accruing to the Requested Party, it shall be carried out on a free of charge basis. In all other cases, the fees for Data Management Amendment requests carried out by the Requested Party shall be the hourly rate as set out in Annex G – Price List multiplied by the time taken to complete the task.

# Schedule 1 to Annex D: Data Management Amendment notice

Name of Operator			Date of order			
Intercon nection service	Amend/New /Cease	POI where change required	Ready for test date	Implementation date required	Test required?	Test number
<b>Please provide detailed specific information on the data amendment being requested</b>						
<b>For [Operator]</b> Signature Name Position Date			<b>For Aliv</b> Signature Name Position Date			

## **Annex E – Billing**

### ***E.1 Charging principles***

E.1.1. Delivered services and related installation and usage charges will be invoiced according to the principles and procedures defined in this Annex. The value of charges will be calculated using the prices as defined in Annex G - Price List or as notified to the Access Seeker.

E.1.2 Each Party shall be responsible for billing its own Customers and for the collection of debts from its own Customers.

### ***E.2 Usage based services***

E.2.1. The usage based Interconnection Services are:

- A.1. Call Termination Service to Mobile Numbers
- A.2. Termination of SMS and MMS
- A.3 Call Termination to Domestic Freephone Numbers

E.2.2. Both Parties shall collect a CDR for each individual call subject to usage based charging and shall retain a copy for the CDR for a minimum of one year in order to assist with any billing disputes. The call details contained on the CDRs in respect of Calls made shall include but not be limited to:

- Calling number (Compulsory) (text format);
- Called number (Compulsory) (text format);
- Start date of Call (date=yyyy-mm-dd format);
- Start time of Call (time=hh:mm:ss AM/PM format);
- Duration of Call (Integer format);
- Serving Switch (text format);
- Onward terminating network.

E.2.3. The CDRs collected by the Invoicing Party will be the source of the data used by the Invoicing Party to invoice for the terminating voice call service. The Invoicing Party for Call Transit services shall be the Access Provider.

E.2.4. The calculation of charges for the usage based Interconnection Services will be based on the number of calls and their duration recorded on the basis of the number of applicable Billing Units and in accordance with the applicable rates specified for the Interconnection Service in Annex G - Price List.

E.2.5. Calls shall be charged based on the initiation of use and for the duration of the call. Charging for voice calls shall commence upon the receipt of an Answer Message

and cease upon the receipt of a Release Message at the point of recording by the Party recording the relevant Call Detail Record. All Successful Calls are chargeable.

E.2.6. If the duration of a call extends over two or more charge rate periods, the call shall be apportioned over the periods according to the time spent in each period.

E.2.7. Calls that cross over into the next billing period shall be allocated to the billing period in which the call started.

E.2.8. All successful SMS and MMS, which are defined as all those submitted to the SMSC of Aliv for termination, are chargeable. Both Parties shall collect records for each SMS or MMS subject to usage based charging and shall retain a copy of the record for a minimum of one year in order to assist with any billing disputes. The records in respect of SMS and MMS made shall include but not be limited to:

- A number (Compulsory) (text format);
- B number (Compulsory) (text format);
- Start date of when SMS is sent to the Customer (date=yyyy-mm-dd format);
- Start time of when SMS is sent to the Customer (time=hh:mm:ss AM/PM format);
- Indication of Serving Switch (text format);
- Indication of successful or failed delivery.

E.2.9. The Access Provider will invoice the Access Seeker for usage based services in arrears for each billing period for the usage incurred up to the end of the billing period for which the invoice is raised.

E.2.10. The Access Provider shall not bill for any services provided more than 12 Calendar Months prior to the date of the invoice. The Access Provider shall not bill for services outside the billing period unless there are good reasons for doing so.

E.2.11. The Invoicing Party shall send invoices by way of electronic exchange or, if agreed between the Parties, by facsimile transmission on the date of issue of the invoice followed by a paper copy via post.

### ***E.3 Payment process***

E.3.1. Subject to Clause E.4, the Invoiced Party shall pay the amount of the invoice no later than twenty (20) Working Days from the date of receipt of the relevant invoice (due date). For the avoidance of doubt, the Invoiced Party shall pay this amount to the Invoicing Party regardless of whether the Invoiced Party has received payment from its customers.

E.3.2. In addition to exercising any rights, the Invoicing Party has at law or under the agreement, where an undisputed amount is outstanding and remains unpaid for more than thirty (30) calendar days after it is due for payment, the Invoicing Party reserves the right to take action, upon notice to the Invoiced Party, to recover any such amount as a debt due to the Invoicing Party. The Invoicing Party will notify the Invoiced Party of its intent to take action at least 5 Working Days before doing so.

E.3.3. Payments are deemed to be received on the date the payment is received by the

Invoicing Party, unless the payment is subsequently dishonoured, in which case, payment is deemed not to have been received until cleared funds are received by the Invoicing Party, together with all dishonoured fees and charges.

E.3.4. If the Invoiced Party does not pay a sum payable by the due date, the Invoicing Party may charge interest on the amount from time to time outstanding in respect of that overdue sum for the period beginning on its due date and ending on the date of the receipt of the overdue sum by the Invoicing Party (both before and after judgement) in accordance with this clause. The Invoiced Party agrees to pay the interest on demand.

E.3.5. The interest shall be calculated as 1.5 per cent of the overdue sum for each month or part month that the sum is overdue. Where interest in respect of any due and unpaid amount is due to the Invoicing Party, the Invoicing Party may add the amount of such interest to its next invoice.

E.3.6. Either Party may request a joint investigation of invoice discrepancies after one Party has conducted a comprehensive internal investigation. The joint investigation may include the generation of test calls to the other Party's Network. The Party requesting the investigation will be liable for the cost of any test calls.

E.3.7. Each Party may set off amounts owed to it by the other Party against amounts invoiced to it.

#### ***E.4 Verification***

E.4.1. The Access Provider shall use its reasonable endeavours to provide billing verification of interconnection usage reports for the usage based services for incoming and outgoing traffic with the format set out in Schedule 1 to Annex E – Billing Verification Usage Reports Format within thirty Calendar Days from the end of each billing period together with the invoice for the usage based services.

E.4.2. In addition to the obligation in Clause E.4.1, when there is a dispute in relation to invoices issued, the Parties shall exchange the detailed billing verification information as specified in Schedule 2 to Annex E – Detailed Billing Verification Information.

E.4.3. In the event that the Access Provider cannot record billing verification information for one or more of the usage based services due to a system error or other faults, upon the request of the Access Provider, the Access Seeker shall provide billing verification information to the Access Provider for billing purposes.

E.4.4. A Party shall arrange audits of billing records and processes as often as it deems it necessary to ensure accurate billing.

#### ***E.5 Billing errors***

E.5.1. The Parties agree on a maximum of two per cent (2%) margin of error in invoices and all invoices falling within such margin shall be deemed to be payable. With regard to any amount exceeding such two per cent (2%) margin, the Party receiving the invoice shall have the right to withhold payment of the disputed amount until resolution of the billing dispute in accordance with Clause E.6 below, but must make payment of the undisputed amount. The right to withhold payment of the disputed amount shall lapse in case of failure to initiate such billing dispute procedures within the time frames specified

in Clause E.6.

E.5.2. If the Invoiced Party discovers an error that is greater than the margin set out in Clause E.5.1 in an invoice given by the Invoicing Party, or the Invoiced Party discovers a smaller but persistent error, it shall notify the Invoicing Party as soon as practicable. The Invoicing Party shall make the adjustment necessary to correct that error in its next invoice, if it is able to verify the error.

E.5.3. If the Invoicing Party has omitted or miscalculated charges from an invoice, the Invoicing Party may include or amend (respectively) those charges in a later invoice, as long as the Invoicing Party is able to substantiate these charges to the Invoiced Party and the inclusion or amendment is made within six months of the issuing of the invoice.

E.5.4. If the Invoiced Party makes an overpayment in error, it shall notify the Invoicing Party accordingly within thirty calendar days of the date on which the overpayment was made with sufficient details for the Invoicing Party to be able to identify the overpayment. If the Invoicing Party verifies the overpayment, the Invoicing Party shall return the amount overpaid to the Invoiced Party within ten (10) Working Days of the notice of overpayment.

E.5.5. Notwithstanding any other provision in this Annex, interest shall not accrue or become payable in respect of sums added to an invoice in error.

E.5.6 The Parties acknowledge that invoices cannot be warranted as being free from errors.

## **E.6 Billing disputes**

E.6.1. Where a Party (the “Disputing Party”) disputes the invoice of the Invoicing Party, the Disputing Party shall send a written “notice of dispute” within ten (10) Working Days of the date of receipt of the disputed invoice to the Invoicing Party. Failure to submit a notice of dispute within the ten (10) Working Day period shall be deemed to be indisputable confirmation of the correctness of the invoice. For the avoidance of doubt, a Disputing Party can dispute an invoice where the error exceeds the margin stipulated in Clause E 5.1 or where the error is smaller but persistent over a period of time.

E.6.2. The notice of dispute must:

- clearly identify aspects of the invoice being disputed;
- state the specific reason(s) with reference to the information required
- provide a daily report specifying the calls, durations and values for the relevant SIP Interconnect.

E.6.3. If Invoicing Party determines that the information is insufficient to identify the disputed amount, the Disputing Party must immediately supply the relevant portion of the Disputing Party’s CDRs and indicate the discrepancy in the Invoicing Party’s invoice.

E.6.4. The Disputing Party’s unavailability of records shall not constitute an acceptable basis for disputing an invoice under this Agreement and any notice of dispute issued on that basis shall not be valid.

E.6.5. The Invoicing Party shall, within five (5) Working Days of receipt of a notice of



dispute, deliver to the Disputing Party CDRs supporting the invoice in question. The CDRs, once provided satisfactorily (*i.e.*, in the manner/form indicated in sub-clause E.1.2) shall be prima facie proof of the correctness of the relevant portion of the invoice in question and the onus of proving the incorrectness thereof shall rest with the Disputing Party.

E.6.6. The Parties shall endeavour to settle amicably any such billing dispute and shall use reasonable efforts to agree upon an escalation procedure. If the Parties fail to resolve their billing dispute for any reason, including but not limited to a Party disputing the authenticity or completeness of the other Party's CDRs, within five (5) Working Days of the Disputed Party's receipt of the Invoicing Party's CDRs or within ten (10) Working Days of the Invoicing Party's receipt of the notice of dispute, whichever shall first occur, the Disputing Party shall issue a "Notice of Failure of Dispute Resolution" within five (5) Working Days. The Notice of Failure of Dispute Resolution shall be accompanied by relevant CDRs from the Disputing Party's records.

E.6.7. In the Notice of Failure of Dispute Resolution, the Disputing Party shall be required to state a date and venue for its Chief Executive and the Chief Executive of the Invoicing Party or appointed delegates to meet. The date of such meeting shall be not more than five (5) Working Days after the date the Notice of Failure of Disputed Resolution is issued. If the dispute is not resolved with ten (10) Working Days of such meeting, the Chief Executives or delegates shall refer such dispute for investigation and determination by a firm of independent auditors, chosen by the Parties, with expertise in billing matters in the electronic communications industry. Such independent auditors shall not be the auditors of either of the Parties.

E.6.8. In the event that the Parties cannot agree on a firm of independent auditors within five (5) Working Days, the Parties shall, on the expiration of the five (5) Working Days, appoint a firm of independent auditors nominated by the President for the time being of the Bahamas Institute of Chartered Accountants. Such entity shall be recognised and commissioned by both Parties as the "Third Party Expert" within ten (10) Working Days of such recommendation, during which time the final terms of reference and fees shall be agreed. The auditors shall, in their determination of the dispute, act as experts and not as arbitrators and their decision shall be final and binding on the Parties.

E.6.9. The Chief Executives of the Parties or their appointed delegates shall separately provide the Third Party Expert with all written correspondence and CDRs exchanged with the other Party, together with all relevant information requested by the Third Party Expert within five (5) Working Days of commissioning.

E.6.10. Failure of the Disputing Party or the Invoicing Party to meet obligations within the duration provided in relevant Clauses, or an inability to produce records or refusal to agree to the fees quoted by the Third Party Expert, shall not prevent the commissioning of the Third Party Expert.

E.6.11. The Third Party Expert shall produce and deliver to the Chief Executives of the Parties a report on its findings not later than thirty (30) Working Days after receiving all written correspondence, CDRs and other requested relevant information. Such a report

shall be delivered by courier and facsimile to the Disputing Parties. Failure of either of the Parties to supply information requested will not prevent the Third Party Expert from carrying out his/her duties.

E.6.12. Both Parties shall be entitled to comment on the findings of the Third Party Expert within five (5) Working Days after the report on the findings has been delivered by the Third Party Expert.

E.6.13. The Third Party Expert shall consider the comments, after which a final decision shall be made.

E.6.14. The final decision of the Third Party Expert shall be binding on both Parties and may be made by an order of court pursuant to the laws of The Bahamas. The Invoicing Party shall have the right to raise a demand notice immediately and the Invoiced Party shall make payment within ten (10) Working Days of the demand notice. The Invoicing Party shall have the right to invoke Clause 18 of the Main Terms and Conditions should the breach continue for another fifteen (15) Working Days.

E.6.15. Both Parties shall contribute equally to pay any initial down payment required by the Third Party Expert prior to commencement of work.

E.6.16. The Third Party Expert shall allocate the cost of his or her fees between the Invoiced Party and the Invoicing Party, including the initial fees, on a fair and reasonable basis having regard to the nature of the dispute. If, as a result, one Party owes the other Party some or all of the initial fees of the Third Party Expert paid under Clause E.6.15, it shall refund the amount owed within twenty (20) Working Days of the Third Party Expert's decision on the allocation of costs.

E.6.17. The provisions of Clause E.6 constitute an irrevocable consent by the Parties to any proceedings described by this clause and neither Party shall be entitled to withdraw therefrom or claim that it is not bound by such provisions.

E.6.18. The Parties agree to keep the subject matter of their billing dispute and the evidence submitted during any resolution by a Third Party Expert confidential and agree not to disclose such subject matter or evidence to anyone except in the event that the decision is made by an order of court pursuant to the laws of The Bahamas, in which case such subject matter or evidence may be disclosed to the relevant court.

E.6.19. Notwithstanding the above, if the billing dispute is resolved without reference to a Third Party Expert and a payment amount has been agreed, the Invoiced Party shall have the right to raise a demand notice immediately and the Invoicing Party shall make payment within five (5) Working Days of the demand notice.

## ***E.7 Billing representatives***

E.7.1. Enquiries relating to billing, collecting and settlement arrangements or in relation to Network and operation billing issues must be directed to the nominated billing

representative of the other Party as identified in Schedule 1 – Contact Details. Billing dispute notices must be sent to these representatives.

E.7.2. Either Party may at any time nominate another billing representative, provided that ten (10) Working Days' prior notification of such appointment is given.

## Schedule 1 to Annex E: Billing verification usage report format

This schedule will show the reports agreed between the Parties in order to record information for the purposes of verifying bills as required by Clause E.5.1. Samples are shown below. If verification is required for SMS or MMS, these samples should be adapted appropriately.

**Table E-1.1: Billing verification report for traffic**

Call Type			
Service type	Total number of calls	Total duration	Total revenue
	N	M	R
Total	$\Sigma N$	$\Sigma M$	$\Sigma R$

or such other form of Billing Verification Report as the Parties may from time to time reasonably agree.

Where: N = the total number of Calls

Where M = the total Chargeable Call Duration

Where R = the total Revenue Charge which will comprise of:

M x Rate per minute; or

N x Rate per call; or

M x Rate per minute plus N x Rate per call

**Table E-1.2: Billing verification for joining circuits**

Circuit reference number	A-end address	B-end address	Circuit type	Connection fee	Rental
1					
2					
Etc					
Total					

or such other form of Billing Verification Usage Report as the Parties may from time to time reasonably agree.

## Schedule 2 to Annex E: Detailed billing verification information

This schedule will show the call data records to be exchanged between the Parties in the event that there is a dispute about the billing of interconnection traffic, as required by Clause E.4.2. Samples are shown below. If the dispute concerns SMS or MMS, these samples should be adapted appropriately.

**Table E-2.1: Dispute information form**

Date					
Switch					
Invoice reference number		Calls	Duration	Charge	Comments
	Total on Access Provider's invoice				
	Total on Access Seeker's records				
	Discrepancy				
	Total on Access Provider's invoice				
	Total on Access Seeker's records				
	Discrepancy				

or such other form of Dispute Information as the Parties may from time to time reasonably agree.

If the discrepancy cannot be resolved as a result of the information on this form, the form in Table E-2.2 may be used in order to investigate the problem in more detail.

**Table E-2.2: Detailed dispute information form**

Invoice reference number						
Point of Interconnection						
Route						
Date						
	Calls			Minutes		
	Peak	Off peak	Total	Peak	Off peak	Total
Day 1 month 1						
Day 2 month 1						
Day 3 month 1						
Etc						

or such other form of Detailed Dispute Information as the Parties may from time to time reasonably agree.

If it is necessary to compare call data records in order to investigate the dispute, the form below can be used:

***Table E-2.3: Sample detailed call data record***

<b>Calling party number</b>	<b>Called party number</b>	<b>Date of start of charge</b>	<b>Time of start of charge</b>	<b>Chargeable duration</b>	<b>Interconnection node</b>	<b>Interconnection route</b>

or such other form of Detailed Call Data Records as the Parties may from time to time agree.

## **Annex F – Dispute Resolution**

### ***F.1 General process***

F.1.1 The Parties will encourage their staff and employees to resolve disputes that arise in the provision of Interconnection Services at the lowest practical levels in their respective organisations.

F.1.2 Notwithstanding Clause F.1.1, the Parties will instruct their staff and employees to escalate disputes that are not expeditiously resolved at lower working levels.

F.1.3 Billing disputes should be resolved according to the provisions of Clause E.6.

F.1.4 Nothing in this Annex shall reduce the Parties' rights to redress under the laws of the Commonwealth of The Bahamas.

F.1.5 The Parties shall continue to be bound by the obligations in this Agreement while any dispute between them is being resolved by the processes set out in this Annex F – Dispute Resolution.

F.1.6 Notwithstanding any provision of this Annex either Party may at its sole discretion at any time refer any dispute directly to URCA for determination without following the escalation procedure set out in this Annex.

### ***F.2 Escalation of disputes***

F.2.1 Either Party may escalate a dispute to a higher level in the dispute resolution hierarchy outlined in the table below. Although it is expected that disputes that cannot be resolved at one level in the dispute resolution hierarchy should be escalated to the next higher level, a Party may decide to escalate the dispute more rapidly if in its consideration the severity and potential impact of the dispute on the provision of Interconnection Services and on Customers warrants such accelerated escalation.

**Table F.1: Dispute resolution process**

<b>Level in Dispute Resolution Hierarchy</b>	<b>Description</b>	<b>Disputes that are typically expected to be resolved at this level</b>
1. (Lowest)	Operational level - involving the operational staff of each Party up to Field Supervisor level	Operational disputes associated with the interpretation and implementation of detailed operating processes and practices
2.	Management level - involving the managers in charge of operational units	Operational disputes escalated from the Operational level
3.	Senior management level	All disputes associated with the implementation of this Agreement, including disputes arising in the course of negotiations to change or amend this Agreement
4.	Chief Executive level - involving the CEOs of each Party	All disputes associated with the implementation of this Agreement, including disputes arising in the course of negotiations to change or amend this Agreement.
5.	Independent third party including URCA or UAT	Disputes that the Parties cannot resolve requiring, in the view of one or both of them, the involvement of an independent Arbitrator, Mediator, URCA or UAT.

### **F.3 Resolution of disputes at Chief Executive level**

F.3.1 Either Party may escalate a dispute to the Chief Executive level if it appears that there is little likelihood of middle and senior management (stages 2 and 3) resolving the matter and where the gravity and potential impact of the dispute on the timely provision of Interconnection Services warrants such an escalation.

F.3.2 The Chief Executives shall adopt whatever process for examining and, if possible, resolving the dispute as appears to them to be appropriate having regard to the nature and complexity of the issues associated with the dispute and its possible means of resolution.

### **F.4 Independent arbitration and mediation**

F.4.1 Should the Chief Executives of the Parties fail to reach unanimous agreement in the determination of any dispute referred to them as in Clause F.3, the Parties undertake to meet promptly and consider whether or not the dispute should be referred to arbitration, mediation, to URCA or the UAT. If the Parties agree in writing that the dispute should be referred to arbitration or mediation, such dispute will be determined by



arbitration or mediation in accordance with the remaining provisions of this Clause F.4, and either Party may then file a request for arbitration or mediation.

F.4.2 If, within a period of two (2) Working Days of meeting pursuant to Clause F.4.1, the Parties fail to reach agreement in writing to refer the dispute to arbitration or mediation, or if the Chief Executives fail to arrange a meeting within two (2) Working Days of an escalation of the dispute under Clause F.3.1, or if the Parties so agree, either Party will be entitled to commence litigation proceedings against the other Party or to refer the dispute to URCA or to the UAT under Clause F.5.

F.4.3 Notwithstanding anything to the contrary contained in this Clause F.4, neither Party shall be precluded from obtaining interim relief from a court of competent jurisdiction (including URCA or the UAT) pending the decision of an Arbitrator or Mediator appointed pursuant to this Clause F.4. In the event of a reference to the arbitration panel or to a Mediator, both Parties shall compile a detailed dispute report which shall include origin, nature, extent, issues and any proposals for resolution and make their respective reports available to the Arbitrators or Mediator and each other within ten (10) Working Days of the referral.

F.4.4 The arbitration panel shall consist of two (2) members, both of whom shall be appointed in accordance with the provisions of the Arbitration Act, Chapter 180. The arbitration panel shall, in accordance with the Arbitration Act, decide upon and give directives as to all matters of procedure to be followed by the Parties in resolving the dispute and who shall bear the costs of the arbitration. The decision of the Arbitrators shall be final and binding and may be made an order of court.

F.4.5 As an alternative to arbitration, both Parties may agree to appoint a Mediator whose task will be to broker an agreement between the Parties. The Mediator will be chosen as set out in Clauses F.4.3 – F4.4, and the Parties will be bound by any agreement made by the Parties resulting from the mediation. The Parties may request URCA to act as the Mediator.

F.4.6 The Parties agree to keep the arbitration or mediation, including the subject matter of the arbitration or mediation and the evidence heard and/or submitted during the arbitration or mediation, confidential and not to disclose the arbitration or mediation, its subject matter and the evidence heard and/or submitted to anyone except in the event that the decision is made by an order of court or of URCA or the UAT, in which case the arbitration or mediation, its subject matter and the evidence heard may be revealed to the relevant court or to URCA or the UAT.

## ***F.5 Reference of disputes to URCA or to the UAT***

F.5.1 If the Chief Executives agree that a dispute should be referred to URCA or the UAT under Clause F.4.1 above, both Parties shall refer the dispute to URCA or the UAT. If the Chief Executives fail to resolve the dispute after completing the process adopted under Clause F.3.2, either Party may refer the dispute to URCA or to the UAT. Each Party will bear its own costs of the reference of any dispute to URCA or to the UAT. The

Parties shall follow the processes and timescales set out by URCA or the UAT in any regulations relevant to dispute resolution.

## Annex G – Price List

### **G.1 Call Termination to Aliv’s Mobile Numbers (cents per minute)**

	All hours
Origination from domestic fixed numbers	2.48
Origination from domestic mobile numbers	2.48
Origination from international numbers	4.61

*Calls are charged on a per second basis  
Prices exclude any sales or value added tax*

### **G.2 SMS Termination Service to Aliv’s Mobile Numbers (cents per message)**

	All hours
SMS Termination Service to Aliv’s Mobile Numbers	1.40

### **G.3 MMS Termination Service to Aliv’s Mobile Numbers (cents per message)**

	All hours
MMS Termination Service to Aliv’s Mobile Numbers	1.75

### **G.4 Call Termination to Freephone Numbers (cents per minute)**

	All hours
Call Termination to Freephone Numbers	No Charge

*Calls are charged on a per second basis  
Prices exclude any sales or value added tax*

### **G.5 Data Management Amendments**

The hourly rate for Data Management Amendments is \$50.00 per hour. The actual charge shall be based on the amount of time taken to implement the amendment. The hourly charges exclude any sales or value added tax.

### **G.6 Cost of supervision**

The hourly rate for the supervision of access to co-located facilities is \$50.00 per hour. The actual charge shall be based on the amount of time taken to supervise the visit, plus any travelling and preparation time required for the visit, multiplied by the factor shown below for supervision outside of normal working hours. The hourly charges exclude any sales or value added tax.

<b>Day</b>	<b>Hours</b>	<b>Multiple</b>
Normal working day	8.30 am - 4.30 pm	1.0
	4.30 pm - midnight	1.5
	Midnight - 6.30 am	2.0
	6.30 - 8.30 am	1.5
Weekends	All	2.0
Christmas Day, New Year's Day, Good Friday and Labour Day	All	2.5
All other public holidays	All	2.0

# Annex H – Quality of Service Standards

## H.1 Principles

H.1.1 The Access Provider will provide the Interconnection Services to the Access Seeker at the same level of Quality of Service as for its own customers or those of its subsidiaries or companies.

H.1.2 Both Parties shall be responsible for regularly measuring and monitoring the traffic and Quality of Service on the interconnection circuits between their Networks.

H.1.3 Both Parties will comply with the quality of service standards set out in this Annex. Both Parties agree that a consistent failure to achieve these targets is a ground for a Dispute under Annex F – Dispute Resolution.

## H.2 Ordering standards

H.2.1 The Parties will conform to the following timescales for Service Requests, as set out in Annex B – Ordering Processes Clause B.3. Any delay caused by the Access Seeker shall be added to the figures below.

**Table H.1: Quality of service standards for Service Requests (Working Days)**

Service Request submitted	R
Preliminary Response sent	R + 5
Considered Response sent	R + 15
If Service Request rejected, statement of reasons sent	R + 25

*R = Date of submission of Service Request*

H.2.2 The Parties will conform to the following timescales for the negotiation of New Interconnection Services, as set out in Annex B – Ordering Processes Clause B.8.

**Table H.2: Quality of service standards for requests for New Interconnection Services (Working Days)**

Service Request	R
Preliminary Response sent	R + 10
Feasibility Study and Considered Response to Service Request	R + 30
If Service Request rejected, statement of reasons sent	R + 40

*R = Date of submission of Service Request*

Any delay caused by the Access Seeker shall be added to the figures above.

### ***H.3 Standards for network availability***

H.3.1 The standard of service for network availability is the percentage of time that the network is available, as defined by ANSI.

H.3.2 The Parties will ensure that the ratio of Unsuccessful Calls to total calls should not exceed 50%, measured over a period of three months.

H.3.3 The Parties shall measure the total number of calls, and the number of unsuccessful calls sent to each other's network over a period of three months. Each Party shall exchange this data one month after the end of the three month period, using an agreed form (a sample of which is set out in Schedule 2 to Annex D).

H.3.4 If the Access Seeker believes that the Access Provider is discriminating against it by providing an inferior service compared to that provided to its own retail customers, the Access Seeker shall have the right to institute a dispute as described under Annex F – Dispute Resolution.

### ***H.4 Service restoration***

#### **Other network faults**

H.4.1 **Target times:** Each Party shall use its best endeavors to respond to and rectify faults of a type listed in the following table in accordance with the relevant response and restoration timeframes shown in the table below:

**Table H.3: Service restoration times**

Priority Level	Fault Types (Key examples)	Response Time *	Restoration Time
Level 1	Major switch outage Transmission bearer total outage Route blocking in excess of 50% of utilised capacity Major signalling faults Major routing issues Fraudulent calls	Every 1 hour	4 hours
Level 2	Minor switch outage Minor routing faults Minor signalling problems Route blocking of 10% to 50% of utilised capacity Crossed lines and silent calls	Every 4 hours	24 hours
Level 3	Faults affecting single or a small number of Customers Route blocking of less than 10% of utilised capacity	Every 24 hours	72 hours
Level 4	Remote Congestion External Technical Irregularities Other performance related issues	Every 48 hours	14 days

*\* Indicates the frequency of response until the fault is cleared*

Any Customer Delays shall be added to the above table.

H.4.2 The Access Provider shall provide repair cover on a 24x7x365 basis.

## Annex I – Definitions

In this Agreement, the following terms shall have the meanings set out below next to those terms:

**Access Provider** means a Licensed Operator of a public electronic network or public electronic services that provides an Interconnection Service to another such Licensed Operator

**Access Seeker** means a Licensed Operator of a public electronic network or public electronic services that requests or is provided with an Interconnection Service by another such Licensed Operator

**Agreement** or **Interconnection Agreement** means the legal contract between Aliv and another Licensed Operator for the provision of access and interconnection services

**ANSI** means the American National Standards Institute

**Arbitrator** means a person appointed under Annex F - Dispute Resolution Clause F.4 to decide how a dispute between the Parties should be resolved

**Breach Notice** means a notice sent by one Party to the other Party specifying a breach of the terms of this Agreement by the other Party, a period of time for its remedy and the consequences of a failure to remedy the breach, as set out in Clause 17.1

**Calendar Day** means a period of 24 hours ending at midnight including weekends and public holidays.

**Call** means the set-up, holding and ending of any transmission path through the Network of any Party into the Network of the other Party for the conveyance of messages, and where the context requires shall mean a Call of a particular type, such as a voice Call, or a mobile Call, or a transit Call, and “calling” and “called” shall have corresponding meanings

**Called Party** means with respect to a Call, the person receiving that Call

**Caller or Calling Party** means with respect to a Call, the person initiating or making that Call

**Cataleptic Failure** means a sudden failure, persisting for longer than 10 seconds, which is characterised by complete inability to perform all required functions of any item in the Interconnection.

**CDR** means Call Data Record



**CLI** means Calling Line Identification

**Considered Response** means a response provided by an Access Provider to a Service Request, as set out in Annex B – Ordering Processes Clause B.3.4.

**Conveyance** means the establishment by a Party of a transmission path through that Party's Network and the conveyance of Messages over that transmission path in accordance with the terms of this Agreement

**Customer** means a party which has subscribed to a Licensed Operator for the provision of an electronic communications service, but which is not, for the purposes of this Agreement, a Licensed Operator

**Customer Delay** means any delay in meeting the standards set out in Annex H- Quality of Service, for ordering, provisioning, delivery and fault repairs which is due wholly or partly to the Operator or to Customers of the Operator for whom the service is being performed

**Data Management Amendment** means the data reconfiguration of the Network of one Party in order to route or to charge for calls

**Disputing Party** means a Party disputing an invoice raised by the Invoicing Party under Clause E.6.1

**Effective Date** means the date on which the Interconnection Agreement becomes effective, as identified in the preamble to main terms of this Agreement

**Emergency Services** means the Royal Bahamas Police Force, the Royal Bahamas Defence Force, and the providers of fire brigade, ambulance, coast guard and other emergency services as may be specified by the laws of The Bahamas or by URCA

**Fault** means a condition that causes a Network to operate other than intended or to cease operating altogether

**Fault Rectification** means the correction of a Fault

**Fault Response** means the action of responding to a Fault, and includes responding remotely using electronic monitoring systems, and physical response at the location where the Fault is situated

**Freephone Number** means a service number defined by ITU-T E.164, and is a number allocated within the National Numbering Plan for calls which are charged to the called party excluding Collect Calls

**Force majeure** has the meaning ascribed to it in the Main Terms and Conditions Clause 19.1

**Force Majeure Notice** has the meaning ascribed to it in Main Terms and Conditions

Clause 19.2

**Geographic Number** means a service number as defined by ITU-T E.164, and is a number allocated within a national numbering plan for use in a nominated geographic area(s) with a specific area code

**ISUP** means Integrated Services Digital Network User Part

**Interconnection** means the physical or logical linking of networks to allow the users of one network to communicate with users of another network or to access carriage services provided by another licensee

**Interconnection Link** means a physical link over which circuits for the conveyance of electronic communications traffic may be provided and which connects the Network of one Party with another

**Interconnection Outage** means the duration of cataleptic or partial failures of any of the components included in the Interconnection

**Interconnection Service** means a service defined as an interconnection service in Annex A

**Interconnection Traffic Route** means the group of 64 kb/sec channels over which a given type of interconnection traffic is directed

**Invoiced Party** means the Party which receives an invoice from the other Party

**Invoicing Party** means the Party which issues an invoice to the other Party

**Licensed Operator** means an organisation licensed by URCA to provide an electronic communications service

**Mbps** means megabits per second

**Mediator** means a person appointed under Annex F - Dispute Resolution Clause F.4 to assist the Parties in resolving a dispute between the Parties

**MMS** means multi-media message service

**Mobile number** means a service number defined by ITU-T E.164, and is a number allocated within the National Numbering Plan for use by mobile customers

**MSC** means mobile switching centre

**National Numbering Plan (NNP)** means the National Numbering Plan for The Bahamas as approved and published by URCA

**Nature of Address (NoA)** means the information sent in association with a Call to indicate the nature of the address (e.g., "international number", "national (significant) number" or "subscriber number") as specified in the ISDN User Part (ISUP) messages of SS7

**Network** means a network established for the conveyance of electronic communications traffic to and from Customers

**Network Alteration** a physical change in the network, including changes in network configuration and interfaces and the events set out in Clause D.12.1, of one Party necessary to permit the continued efficient operation of Interconnection Services as a result of a change made in the network operated by the other Party

**Network Operations Centre (NOC)** means a facility established by a Party under Clause D.8.1 to handle outages, faults and other matters concerning interconnection traffic between the Networks of the Parties

**Network Plan** means a diagram of the layout and structure of the Networks of the Parties, including the Points of Interconnection and Joining Circuits. It shall also show major changes proposed by a Party for its Network over the next three years

**Network Termination Point** means the boundary of a Network, and, in context, usually refers to the specific case of the boundary between a Network and Customer equipment and wiring attached to a Network

**Notice of Failure of Dispute Resolution** means a notice issued under Clause E.6.5

**Notifying Operator** means the Party that notifies the other Party of congestion under Clause D.11.2

**Operator**, as will be apparent from the context, means one of the signatories to this Agreement

**Originating Operator** means the Licensed Operator who is responsible for conveying a call from the Network Termination Point of the Calling Party to the Point of Interconnection

**Partial Outage** means any failure (other than a cataleptic failure) which affects more than 15% of the total number of ports in a POI.

**Party or Parties** means one or both of the signatories to this Agreement

**Preliminary Response** means a response provided by an Access Provider to a Service Request, as set out in Annex B – Ordering Processes Clause B.3.2

**Requested Party** means the Party that receives a request to make a Network Alteration or a Data Management Amendment under Clauses D.13 or D.16, or to repair a fault under Clause H.5.

**Requesting Party** means the Party that makes a request to make a Network Alteration or a Data Management Amendment under Clauses D. 12 or D.15.

**Review Notice** means a notice served under Main Terms and Conditions Clause 20 by one Party to the other requesting a review of this Agreement

**Service Affecting Fault** means a fault which results in a total and continuous loss of the ability to use the Interconnection Service which is subject to the fault

**Service Interrupting Fault** means a fault which results in the degradation of the level, quality, functionality or operation of the Interconnection Service, but which does not result in a Service Affecting Fault

**Service Request** means a request for an Interconnection Service as set out in Annex B – Ordering Processes Clause B.2

**Service restoration** means the restoring of a service and may occur whether or not the fault that gave rise to the fault affecting service has been rectified or not

**SMS** means short message service

**SMSC** means Short Message Service Centre

**Terminating Operator** means the Licensed Operator who is responsible for conveying a call from the Point of Interconnection to the Network Termination Point of the Called Party

**Third Party Expert** means an independent expert appointed under Clause E.6.8 to resolve a billing dispute

**UAT** means the Utilities Appeal Tribunal, as established by the Utilities Appeal Tribunal Act 2009, or any successor body

**Unsuccessful Call** means a Call for which an answer signal has not been received because of congestion.

**URCA** means the Utilities Regulation and Competition Authority as established by the Utilities Regulation and Competition Authority Act 2009, or any successor body,

**Working Day** means a period of 24 hours ending at midnight excluding weekends and public holidays. A weekend is defined as Saturday and Sunday.

## **Schedule 1 - Contact details**

This schedule sets out the key contact people for the administration of this Agreement for both the Parties, with the following details:

### **Aliv**

#### **Notices pursuant to Clause 25.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

#### **Service Request Manager pursuant to Clause B.2.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

#### **Interconnection Manager pursuant to Clause D.1.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

#### **Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

#### **Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Network Operations Centre Contact Person pursuant to Clause D.8.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Billing Representative pursuant to Clause E.7.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**XX [Company Name]**

**Notices pursuant to Clause 25.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Service Request Manager pursuant to Clause B.2.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Interconnection Manager pursuant to Clause D.1.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Member of Joint Working Party pursuant to Clause D.1.2**

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Name and mobile phone number of deputy (for cases of holidays etc)



**Member of Joint Working Party pursuant to Clause D.1.2**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Network Operations Centre Contact Person pursuant to Clause D.8.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Network Operations Centre Manager pursuant to Clause D.8.5**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Network Operations Centre Senior Manager pursuant to Clause D.8.5**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**VP Network Services pursuant to Clause D.8.5**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)

**Billing Representative pursuant to Clause E.7.1**

Name

Title

Address

Email address

Telephone numbers (work fixed, mobile and after hours)

Name and mobile phone number of deputy (for cases of holidays etc)