

1 **Addendum to Roaming Agreement (Reference Document#44)**  
2 **Operation Level Agreement**

3 **This addendum (the "Addendum") dated \_\_\_\_\_, 2007 is the addendum to the CDMA**  
4 **International Roaming Agreement (the "Roaming Agreement") dated \_\_\_\_\_, 2007 is by and**  
5 **between:**

6 **Carrier 1,**  
7 **having its registered address at \_\_\_\_\_**  
8 **(hereinafter referred to as "Carrier 1")**

9 and

10 **Carrier 2,**  
11 **having its registered address at \_\_\_\_\_**  
12 **(hereinafter referred to as "Carrier 2")**

13 **Recital:**

14 WHEREAS, both Carrier 1 and Carrier 2 are willing to improve the quality of International  
15 Roaming Service ("IR Service") and wish to have the Addendum to the Roaming Agreement.  
16

17 **NOW, THEREFORE,** in consideration of covenants and agreements herein contained, the Parties  
18 hereto agree as follows:

19 **1. Definitions**  
20

- 21 A. "MEID", or Mobile Equipment Identifier, will be used in new wireless equipment in place  
22 of ESN. The only difference is that the MEID will consist of 14 characters instead of  
23 today's 11-digit ESN. MEID and ESN are used interchangeably in the Agreement.
- 24 B. "Roaming Service Provider" or "RSP" means a third party vendor being utilized by both  
25 Parties to enable Services including SS7 Signaling transfer services and detailed  
26 reporting of Services.
- 27 C. "Service" means telecommunications service for the transmission and reception of voice  
28 and voice-related features provided by means of radio. "Service" which applies to the  
29 Addendum is call origination, call termination, Short Message Service (SMS) origination  
30 and SMS termination.

31 **2. Network**

- 32 A. Serving Carrier shall strive to ensure that its SS7 connectivity to Home Carrier through  
33 RSP is properly secured.
- 34 B. In the event that Serving Carrier fails to add or delete Home Carrier's IRMs or MBI/MINs  
35 in twenty (20) days as set forth in the Roaming Agreement, Serving Carrier shall add or  
36 delete such Home Carrier's IRMs or MBI/MINs within one (1) business day, if possible,  
37 but no later than three (3) business days from the time when Serving Carrier is given

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

2007/11/08

1 written notice by Home Carrier regarding the failure in addition or deletion of Home  
2 Carrier's IRMs or MBI/MINs.

3 C. Either Party ("Changing Party" in this section) shall make a commercially reasonable  
4 effort to provide the other Party ("Changed Party" in this section) with at least ninety (90)  
5 day advance written notice in case of RSP change, or forty-five (45) day advance written  
6 notice in case of any technical specification change, including but not limited to, network  
7 migration of Changing Party, deployment of new switch vendors by Changing Party and  
8 migration of connections between Changing Party and RSP. The Changing Party shall  
9 conduct and complete testing with the Changed Party by the time when such the change  
10 becomes effective upon request from the Changed Party. In the event that it is  
11 reasonably considered that change by the Changing Party gives material negative impact  
12 to the Changed Party, Changed Party may, upon prior notice to the Changing Party, deny  
13 Service with the Changing Party until such time the Changing Party and the Changed  
14 Party agree to a mutually acceptable condition.

15  
16 **3. Billing**

17 A. In the event that Serving Carrier fails to provide or correct the billing information, it will  
18 make reasonable efforts to remedy, at its expenses, such failure as soon as practicable  
19 and no later than the mutually agreed deadline between Serving Carrier and Home  
20 Carrier upon Home Carrier's request, regardless of the period of time set forth in the  
21 Roaming Agreement.

22 B. In the event that Home Carrier needs to contact Serving Carrier regarding the billing  
23 issues, the procedure below will be followed:

24 **<Voice roaming>**

25 **When Carrier 1 is the Serving Carrier:**

- 26 I. Carrier 2 shall notify Carrier 1 with the full description of the issue via E-mail (E-  
27 mail address:XXXX@Carrier1.com).
- 28 II. Carrier 1 shall respond to Carrier 2 via E-mail (E-mail address:  
29 XXXX@Carrier2.com).
- 30 III. Carrier 2 shall cooperate with Carrier 1 when Carrier 1 needs assistance  
31 regarding the issue.
- 32 IV. If Carrier 2 does not receive any response from Carrier 1 within three(3) business  
33 days, Carrier 2 may escalate by sending an e-mail to the escalation point  
34 (Mr/Ms.XXXX, E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.).  
35 Escalation contact shall respond to Carrier 2 within two (2) business days.

36 Operation hour: Serving Carrier's business hour (eg: 9:00AM-17:30PM from Monday to  
37 Friday (GMT+9:00))

38 **When Carrier 2 is the Serving Carrier:**

- 39 I. Carrier 1 shall notify Carrier 2 with the full description of the issue via E-mail (E-  
40 mail address:XXXX@Carrier2.com).
- 41 II. Carrier 2 shall respond to Carrier 1 via E-mail (E-mail address:  
42 XXXX@Carrier1.com).
- 43 III. Carrier 1 shall cooperate with Carrier 2 when Carrier 1 needs assistance  
44 regarding the issue.

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

1 IV. If Carrier 1 does not receive any response from Carrier 2 within three(3) business  
2 days, Carrier 1 may escalate by sending an e-mail to the escalation point  
3 (Mr/Ms.XXXX, E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.).  
4 Escalation contact shall respond to Carrier 2 within two (2) business days.

5 Operation hour: Serving Carrier's business hour (eg: 9:00AM-17:30PM from Monday to  
6 Friday (GMT-5:00))

7 **<SMS roaming>**

8 **When Carrier 1 is the Serving Carrier:**

9 I. Carrier 2 shall notify Carrier 1 with the full description of the issue via E-mail (E-  
10 mail address:XXXX@Carrier1.com).

11 II. Carrier 1 shall respond to Carrier 2 via E-mail (E-mail address:  
12 XXXX@Carrier2.com).

13 III. Carrier 2 shall cooperate with Carrier 1 when Carrier 1 needs assistance  
14 regarding the issue.

15 IV. If Carrier 2 does not receive any response from Carrier 1 within three(3) business  
16 days, Carrier 2 may escalate by sending an e-mail to the escalation point  
17 (Mr/Ms.XXXX, E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.).  
18 Escalation contact shall respond to Carrier 2 within two (2) business days.

19 Operation hour: Serving Carrier's business hour (eg: 9:00AM-17:30PM from Monday to  
20 Friday (GMT+9:00))

21 **When Carrier 2 is the Serving Carrier:**

22 I. Carrier 1 shall notify Carrier 2 with the full description of the issue via E-mail (E-  
23 mail address:XXXX@Carrier2.com).

24 II. Carrier 2 shall respond to Carrier 1 via E-mail (E-mail address:  
25 XXXX@Carrier1.com).

26 III. Carrier 1 shall cooperate with Carrier 2 when Carrier 1 needs assistance  
27 regarding the issue.

28 IV. If Carrier 1 does not receive any response from Carrier 2 within three(3) business  
29 days, Carrier 1 may escalate by sending an e-mail to the escalation point  
30 (Mr/Ms.XXXX, E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.).  
31 Escalation contact shall respond to Carrier 2 within two (2) business days.

32 Operation hour: Serving Carrier's business hour (eg: 9:00AM-17:30PM from Monday to  
33 Friday (GMT-5:00))

34 **[Editor's note: If Carrier has same contact point for Voice and SMS roaming, it is**  
35 **recommended to merge the above two sections into one.]**

36

37 C. Either Party shall notify the other Party promptly when the contact points as set forth in  
38 Section B hereof change. The contact points are to be updated in the Billing Settlement  
39 Section in "Contact" tab of the Technical Data Sheet (TDS).

40 **[Editor's note: Carriers are requested to specify what documents to refer when the**  
41 **contact points change. TDS is recommended.]**

42

Date \_\_. \_\_. \_\_.  
Approved by:

Date \_\_. \_\_. \_\_.  
Approved by:

1 D. Either Party shall make a commercially reasonable effort to provide the other Party with  
2 at least ninety (90) day written notice of Clearinghouse change.

3

4 **4. Trouble Shooting**

5 A. The contact point for Home Carrier's subscribers experiencing problems on the Serving  
6 Carrier's network shall be the appropriate customer support center of the Home Carrier.  
7 In the event that Home Carrier needs to contact Serving Carrier regarding the problem,  
8 the procedure below will be followed:

9 **<Voice roaming>**

10 **When Carrier 1 is the Serving Carrier:**

- 11 I. Carrier 2 shall notify Carrier 1 with the full description of the problem via E-mail  
12 (or dedicated application) (E-mail address:XXXX@Carrier1.com, website for  
13 dedicated application).
- 14 II. Carrier 1 shall notify Carrier 2 of trouble ticket number via E-mail (E-mail  
15 address: XXXX@Carrier2.com).
- 16 III. Carrier 1 shall notify Carrier2 of the trouble resolution details when Carrier 1  
17 resolves the problem.
- 18 IV. Carrier 2 shall cooperate with Carrier 1 when Carrier 1 needs assistance in  
19 trouble shooting or isolating the causes.
- 20 V. If Carrier 2 does not receive trouble ticket number notification or any other type of  
21 response from Carrier 1 within twenty four(24) hours of notification of problem,  
22 Carrier 2 may escalate by sending an e-mail to the escalation point(Mr/Ms.XXXX,  
23 E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.). Escalation contact shall  
24 respond to Carrier 2 within one (1) business day.

25 Operation hour: 24 hours a day, 7 days a week is recommended.

26 **When Carrier 2 is the Serving Carrier:**

- 27 I. Carrier 1 shall notify Carrier 2 with the full description of the problem via E-mail  
28 (or dedicated application) (E-mail address:XXXX@Carrier2.com, website for  
29 dedicated application).
- 30 II. Carrier 2 shall notify Carrier 1 of trouble ticket number via E-mail (E-mail  
31 address: XXXX@Carrier1.com).
- 32 III. Carrier 2 shall notify Carrier 1 of the trouble resolution details when Carrier 2  
33 resolves the problem.
- 34 IV. Carrier 1 shall cooperate with Carrier 2 when Carrier 2 needs assistance in  
35 trouble shooting or isolating the causes.
- 36 V. If Carrier 1 does not receive trouble ticket number notification or any other type of  
37 response from Carrier 2 within twenty four(24) hours of notification of problem,  
38 Carrier 1 may escalate by sending an e-mail to the escalation point(Mr/Ms.XXXX,  
39 E-mail:XXXX@Carrier2.com, tel:+1-XXX-XXXX-XXXX.). Escalation contact shall  
40 respond to Carrier 1 within one (1) business day.

41 Operation hour: 24 hours a day, 7 days a week is recommended.

42 **<SMS roaming>**

Date \_\_. \_\_. \_\_.  
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Date \_\_. \_\_. \_\_.  
Approved by:

1 **When Carrier 1 is the Serving Carrier:**

- 2 I. Carrier 2 shall notify Carrier 1 with the full description of the problem via E-mail  
3 (or dedicated application) (E-mail address:XXXX@Carrier1.com, website for  
4 dedicated application).
- 5 II. Carrier 1 shall notify Carrier 2 of trouble ticket number via E-mail (E-mail  
6 address: XXXX@Carrier2.com).
- 7 III. Carrier 1 shall notify Carrier2 of the trouble resolution details when Carrier 1  
8 resolves the problem.
- 9 IV. Carrier 2 shall cooperate with Carrier 1 when Carrier 1 needs assistance in  
10 trouble shooting or isolating the causes.
- 11 V. If Carrier 2 does not receive trouble ticket number notification or any other type of  
12 response from Carrier 1 within twenty four(24) hours of notification of problem,  
13 Carrier 2 may escalate by sending an e-mail to the escalation point(Mr/Ms.XXXX,  
14 E-mail:XXXX@Carrier1.com, tel:+1-XXX-XXXX-XXXX.). Escalation contact shall  
15 respond to Carrier 2 within one (1) business day.

16 Operation hour: 24 hours a day, 7 days a week is recommended.

17 **When Carrier 2 is the Serving Carrier:**

- 18 I. Carrier 1 shall notify Carrier 2 with the full description of the problem via E-mail  
19 (or dedicated application) (E-mail address:XXXX@Carrier2.com, website for  
20 dedicated application).
- 21 II. Carrier 2 shall notify Carrier 1 of trouble ticket number via E-mail (E-mail  
22 address: XXXX@Carrier1.com).
- 23 III. Carrier 2 shall notify Carrier 1 of the trouble resolution details when Carrier 2  
24 resolves the problem.
- 25 IV. Carrier 1 shall cooperate with Carrier 2 when Carrier 2 needs assistance in  
26 trouble shooting or isolating the causes.
- 27 V. If Carrier 1 does not receive trouble ticket number notification or any other type of  
28 response from Carrier 2 within twenty four(24) hours of notification of problem,  
29 Carrier 1 may escalate by sending an e-mail to the escalation point(Mr/Ms.XXXX,  
30 E-mail:XXXX@Carrier2.com, tel:+1-XXX-XXXX-XXXX.). Escalation contact shall  
31 respond to Carrier 1 within one (1) business day.

32 Operation hour: 24 hours a day, 7 days a week is recommended.

33 **[Editor's note: If Carrier has same contact point for Voice and SMS roaming, it is**  
34 **recommended to merge the above two sections into one.]**

- 35
- 36 B. In order to prevent manual fault, Serving Carrier is recommended to send trouble ticket to  
37 the Home Carrier as response to the notification by Home Carrier.
- 38
- 39 C. Both Parties shall make commercially reasonable efforts to resolve eighty (80) percent  
40 (%) of the problems within twenty four (24) hours from the time when the problem is  
41 reported to Serving Carrier.

42

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

**Date** \_\_. \_\_. \_\_.  
**Approved by:**

1 D. Either Party shall notify the other Party promptly when the contact points as set forth in  
 2 Section A hereof change. The contact points are to be updated in the Trouble Shooting  
 3 Section in "Contact" tab of TDS.

4 **[Editor's note: Carriers are requested to specify what documents to refer when the**  
 5 **contact points change. TDS is recommended.]**

6  
 7  
 8 **(Optional clauses)**

9 **[Editor's note: The following guideline is the optional clause to Section 2 Network.]**

10 D. It is recommended that the Serving Carrier notify the Home Carrier in the event of any  
 11 outages or unplanned maintenance according to the following guidelines.

Severity	Notification Guidelines
Crucial Level: All Service unavailable in all of the Serving Carriers' markets for thirty (30) minutes or longer eg. Link down between the Serving Carrier and RSP, System or network down in all the Serving Carriers' markets	Notify the Home Carrier within one (1) hour from the time when the Serving Carrier acknowledges Service unavailability  Use its best efforts to resolve the problem within two (2) hours from the time when the Serving Carrier acknowledges Service unavailability
Major Level: All Service unavailable in more than 10 markets (MSCID based) for thirty (30) minutes or longer eg. MSC down in particular markets	Notify the Home Carrier within two (2) hours from time when the Serving Carrier acknowledges Service unavailability  Use its best efforts to resolve the problem within four (4) hours from the time when the Serving Carrier acknowledges Service unavailability
Major Level: One of Service(call origination, call termination, SMS origination or SMS termination) unavailable in all of the Serving Carriers' markets(MSCID based) for thirty (30) minutes or longer eg. IDD Carrier's outages	Notify the Home Carrier within two (2) hours from the time when the Serving Carrier acknowledges Service unavailability  Use its best efforts to resolve the problem within four (4) hours from the time when the Serving Carrier acknowledges Service unavailability
Minor Level: One of Service(call origination, call termination, SMS origination or SMS termination) unavailable in more than 10	Notify the Home Carrier within four (4) hours from the time when the Serving Carrier acknowledges

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markets(MSCID based) for thirty (30) minutes or longer	Service unavailability  Use its best efforts to resolve the problem within one (1) day from the time when the Serving Carrier acknowledges Service unavailability
Minor Level: All Service unavailable in more than one market(MSCID based) for twenty four (24) hours or longer	Notify the Home Carrier within twenty-four (24) hours from the time when the Serving Carrier acknowledges Service unavailability  Use its best efforts to resolve the problem within two (2) days from the time when the Serving Carrier acknowledges Service unavailability

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**[Editor's note: The following clause is the optional clause to Section 3 Billing.]**

E. In the event that Authorized Roamer billing information provided by Serving Carrier is not in accordance with CIBER Record, Home Carrier may return the defective record to Serving Carrier as determined in CIBER Record. Returning the defective record will be in accordance with procedures established in CIBER Record. Serving Carrier shall correct the defective record and return it to Home Carrier as long as Serving Carrier holds the original records in its switches or in its billing system in case that Home Carrier requests.

IN WITNESS WHEREOF, Carrier 1 and Carrier 2 execute this Attachment to be effective as of the dates stated herein.

**Carrier 1**

**Carrier 2**

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date:

Date:

Date \_\_. \_\_. \_\_.  
Approved by:

Date \_\_. \_\_. \_\_.  
Approved by: