

COMMUNICATIONS COMMISSION OF KENYA

DISPUTE BETWEEN ESSAR TELECOM KENYA LIMITED AND AIR TOUCH CONNECTIONS LIMITED

INTERCONNECTION DETERMINATION NO.1 OF 2010

1. INTRODUCTION

This Determination is made under the Kenya Communications Act, 1998 and as amended (hereinafter referred to as the Act) and the Kenya Communications Regulations, 2001 (hereinafter referred to as the Regulations).

This Determination shall be known as the Determination No.1 of 2010 on the Disconnection of E1 link number 0751362050 allocated to Airtouch Connections Limited by Essar Telecom Kenya Limited.

2. BACKGROUND INFORMATION

- 2.1. Essar Telecom Kenya Limited (ETKL) is licensed by the Commission as a Network Service Provider (NFP), Applications Service Provider (ASP) and Content Service Provider (CSP).
- 2.2. Airtouch Connections Limited (ACL) is licensed by the Commission as an Internet Service Provider (ISP).
- 2.3. ETKL and ACL entered into an Agreement on 15th October 2009 that allowed ACL to exchange traffic with ETKL. The business model would allow customers registered with ACL to make international calls using an E1 link provided by ETKL. The value proposition in the model was that it would generate an additional subscriber base and traffic for ETKL while generating some cash flows to ACL.

2.4. ETKL therefore established an E1 link and provided a pilot number 0751362050 to ACL to facilitate the transaction. In addition, ACL paid a total Ksh.650,000 for 1000 SIM cards from ETKL which were supplied.

3. DISCONNECTION OF THE E1 LINK

3.1. ACL lodged a formal complaint against ETKL vide a letter dated 12th November 2009 to the Commission and copied to ETKL regarding suspension of their E1 link number 0751362050 on 4th November 2009 without prior notice thereby paralyzing their operations.

3.2. On 13th November 2009, the Commission received a copy of a letter from ETKL addressed to ACL ostensibly advising ACL that ETKL had proceeded to disconnect the link issued to ACL in line with the agreement dated 15th October 2009 and that ETKL had no intention of re-establishing or providing an alternative link at that time or at all.

3.3. On 18th November 2009, the Commission wrote to ETKL seeking clarifications on the circumstances surrounding the disconnection of the E1 link.

3.4. On 19th November 2009, ETKL responded to the Commission's letter dated 18th November 2009 and indicated that between 1st and 4th November 2009 they realized that the line provided under the link had been misused by generating virtual IMSIS which did not exist in their system. ETKL alleged that ACL had used the E1 link for fraudulent/criminal activities as a result of which ETKL had suspended the link on 4th November 2009 pending further investigations. ETKL further alleged that after suspension of the link, generation of the virtual IMSIS ceased immediately.

3.5. Upon further review of the matter brought before it by the parties, the Commission noted that while the dispute emanated from an agreement whose scope was of an interconnect nature, the agreement had not been filed with the Commission for approval in accordance with Clause 48(1) of the Regulations. Consequently, on 11th December 2009, the Commission wrote to ETKL and ACL directing them to immediately file their interconnection agreement with the Commission for the necessary approval.

- 3.6. On 15th December 2009, ETKL submitted to the Commission a copy a duly executed agreement dated 15th October 2009 entered into between ETKL and ACL for the provision of E1 services.
- 3.7. Upon review of the agreement sent to it by ETKL, the Commission was of the opinion that the parties had indeed entered into an interconnection agreement. In this regard, the Commission therefore noted that the disconnection of the E1 link by ETKL was unilateral contrary to Clause 45(2) of the Regulations. Consequently, on 17th December 2009, the Commission wrote to the parties, firstly directing ETKL to re-establish the E1 link to ACL with immediate effect, and secondly, requesting the parties to submit their records of transmissions made between 1st and 4th of November 2009 to support or deny the allegations made by ETKL that the E1 link was used for fraudulent/criminal activities by ACL during this period.
- 3.8. In response, ETKL, vide a letter dated 21st December 2009 referred the Commission to Clause 42(8) of the Regulations that obligates the Commission to carry out investigations where there is allegation of contravention or failure to comply with the provisions of the Act or Regulations; Clause 42(6)(e) on the discretion of the Commission to exempt a licensee from the obligation to enter into an interconnect agreement; and Clause 37(6) on the lawful use of a service acquired as part of interconnection. The letter was silent on whether ETKL had complied with the directive to re-establish the E1 link with ACL.
- 3.9. The Commission reviewed the issues raised by ETKL and wrote to ETKL on 23rd December 2009 reiterating that a party wishing to terminate an interconnection agreement can only do so in the manner prescribed by Clause 45(2) of the Regulations, and further advised ETKL to comply with the directive of the Commission to re-establish the E1 link with ACL with immediate effect.

4. WRITTEN SUBMISSIONS

WRITTEN SUBMISSIONS FROM ETKL

- 4.1. On 22nd December 2009, ETKL made written submissions to the Commission in support of their allegation that the E1 link had been used fraudulently between 1st and 4th November 2009. The submission included data from AREDU, the ETKL designated roaming partner in Dubai. The submission indicated that roaming call records had been created although ETKL had not yet unlocked their out-roaming services to their subscribers, which they considered a fraudulent activity attributable to the E1 link allocated to ACL. ETKL indicated that they resolved the problem by disconnecting the E1 link on 4th November 2009 and no further call records were created after the disconnection. ETKL also indicated in the submission that their roaming partner had established records and generated charges amounting to Ksh.753,844.66 payable to AREDU, which it attributed to fraudulent activity.
- 4.2. On 28th December 2009, ETKL made further written submissions to the Commission indicating that ETKL lines identified as having made calls on the AREDU network in Dubai were locked into the ETKL network in Kenya and were barred from roaming. In addition, ETKL indicated that since the alleged numbers were seen in the local Visitor Location Register (VLR), the only way the roaming calls could have been made was through by-passing the ETKL systems. In addition, ETKL requested the Commission to clarify whether agreements for provision of E1 links where a mobile service provider offers a link (access) to an ISP to route traffic are classified as interconnection agreements.
- 4.3. On 6th January 2010, ETKL submitted additional documents to the Commission which included copies of their roaming agreement and a GSM invoice for roaming traffic from AREDU.

WRITTEN SUBMISSIONS FROM ACL

4.4. On 22nd December 2009, ACL made written submissions to the Commission stating that the E1 link MSISDN 0751362050 was not used for any fraudulent/criminal activities for the whole period that it was in use. In addition, ACL submitted a printout of the downloaded Call Data Records (CDR) file for all calls that passed through their PABX for the whole period that the E1 link was ON which had been shared with ETKL for comparison with their own CDR. ACL complained that despite several requests to ETKL to share with them similar data concerning the alleged fraud, ETKL had neglected to do so. ACL further indicated that they had no capability to generate ETKL IMSIS insisting that such an exercise could only have been executed by ETKL personnel at their switches/servers. ACL further stated that the physical E1 link was unstable for the period between 1st and 4th November 2009 within which time the fraud is alleged to have taken place. As a result, the transmission of calls across and within their telecommunication systems was not seamless as provided for in Regulation 37(3) nor was there maintenance of end-to-end quality of service as provided in Regulation 36(c).

4.5. On 5th January 2010, ACL submitted to the Commission further correspondence exchanged with ETKL prior to the conclusion of the interconnection agreement and during the existence of the E1 link.

5. HEARING

The hearing by the Commission was held on 4th and 5th January 2010 and the parties made their submissions as follows:

ETKL SUBMISSIONS:

- a) ETKL and ACL entered into an agreement to interconnect their systems over a bidirectional E1 connection based on SS7 signaling protocol for provision of VoIP services;
- b) ETKL has provided a range of numbers to ACL one of which is 0751362050 designated as a pilot number. The numbers are to be accessed through the E1 link to reach ACL systems. All calls between the two companies are to pass through the E1 link;

- c) Immediately the E1 link was established, ETKL received TAP files from their roaming partners in Dubai claiming Kshs 753,844.66 for roaming calls between 1st and 3rd November 2009;
- d) That the number that originated the roaming call in Dubai was seen in the VLR in Kenya 2 hours before it allegedly made the call in Dubai as a roaming number. Therefore the number could not have physically roamed into a Dubai network which is at least 4 hours flight away;
- e) That the numbers are ordinary ETKL's subscriber numbers not attributable to ACL;
- f) That the details of the roaming calls were not seen in any part of ETKL's systems or their international carriers including the E1 link between them and ACL;
- g) That pre-paid ETKL subscribers are barred from roaming and therefore no roaming bills were expected from roaming partners in this regard. That for this to have occurred, there was fraudulent activity being carried out in their network;
- h) That once the fraudulent activity was noticed, ACL was identified as the newest entrant in ETKL's network and that they could have been the source of the fraud. A decision was then taken to disconnect the E1 link after which the alleged fraudulent activity stopped;
- i) That ACL used the link for the fraudulent activities that cost ETKL a loss of Kshs753,844.66 in three days;
- j) The suspected practice of call back scenario given through ETKL's written Submissions of 6th January 2009 was articulated as follows:
 - i. B party calls access number +254 751362050;
 - ii. ACL Initiates call-back through internet to an ISP provider in Dubai;
 - iii. The call is dropped but Dubai gets all call details & calls back through DU GSM Network (local call);
 - iv. This call generates a TAP file payable by ETKL;
 - v. Through the internet, the call gets terminated in ACL Kenya; and
 - vi. ACL Kenya delivers the call to ETKL through E1 connection.

ACL SUBMISSIONS

- a) ACL submitted that they had been provided with an E1 connection by ETKL to facilitate VOIP services through a range of ETKL numbers. Under the terms of their agreement, they were to use the E1 connection in a unidirectional set up to allow incoming calls from ETKL's network into their network. There was no termination of international calls (origination of calls from ACL into ETKL's network) in the opposite direction;
- b) That all calls from ETKL's subscribers using ACL service would have to pass through ETKL's network and would be billed by ETKL;
- c) That it would not be possible for ACL to handle calls destined to or from ETKL without the systems of ETKL capturing the information that is traceable in respect of the call;
- d) That an ETKL customer cannot roam and make a roaming call without being authenticated by both the Dubai based network and ETKL network to ensure that the subscriber is allowed by his/her home network to roam;
- e) That ETKL's systems are more superior to ACL's systems and therefore more capable to detect any malpractice in the network;
- f) That whenever an ETKL subscriber wants to use ACL service, he/she would call ACL on 0751362050 to reach ACL systems. ACL systems would then direct the call to a server in Canada which would prompt the subscriber to call the international destination number. The international leg of the call would then be completed by the server in Canada;
- g) That the subscriber's call would therefore be registered in ETKL's network as having called 0751362050 and would be charged a local call charge by ETKL. On the other hand, ACL would deduct the subscriber's credit based on the charge for the called international destination; and
- h) That the local charge to the subscriber would be deducted by ETKL from the airtime loaded on the subscriber's phone, while the international leg would be deducted from the account held by the subscriber at the Canadian server.

6. COMMISSION FINDINGS

The Commission in arriving at its findings has scrutinized the following key documents which have a bearing on this dispute:

- a) Agreement for the provision of E1 services dated 15th October 2009;

- b) International Roaming Agreement between Emirates Integrated Telecommunications Company (AREDU)-ETKL signed on 28th July and 8th August 2009 respectively;
- c) Call Duration Records (CDR) from ACL;
- d) List of TAP files from AREDU submitted by ETKL; and
- e) Various correspondence exchanged between the parties.

Upon review of the above documents and the submissions made by the parties, the Commission's findings are as follows:

- a) The provision of E1 link services fall within the purview of interconnection agreements regulated under Part VII of the Regulations. Consequently, the disconnection of the E1 link by ETKL was in breach of Regulation 45(2) of the said Regulations;
- b) The parties did not file the interconnection agreement with the Commission in breach of Regulation 48(1) of the Regulations. The first time the Commission had sight of the interconnection agreement was when it compelled the parties to file the same for approval;
- c) Upon scrutiny of the agreement alongside the interconnection regulatory framework, it has been noted that the agreement is fraught with fundamental inconsistencies which need to be rectified;
- d) In view of the four (4) hour air travel time between Kenya and Dubai, it is not practically possible for a subscriber number to be in Dubai making a roaming call 2 hours after it had been cited within the Kenyan network;
- e) That ordinarily, a number that does not have a roaming profile in its local network cannot make a roaming call in a foreign network;
- f) That before a roaming number makes a call; the roaming partner's systems must authenticate and determine the subscriber's eligibility to make a roaming call. It is therefore not expected that a TAP file from a roaming partner is generated when the subscribers are not allowed to roam as the necessary authentication processes between the roaming partners' systems would not have permitted this. Indeed, Clause 8.8.1.2 of the International Roaming Agreement attests to this;
- g) Given that a roaming bill has been generated by AREDU, the presumption is that authentication pursuant to Clause 8.8.1.2 of the International

Roaming Agreement had been effected, a situation which is denied by ETKL. In the circumstance, it is surprising that ETKL has not taken the reasonable step of querying the genesis of the bill with AREDU;

- h) That if indeed there was a valid roaming bill to ETKL in respect of unauthorized roaming calls, this points to high level fraudulent activity;
- i) The suspected practice of call-back scenario as presented by ETKL is not technically feasible and raises more questions than answers. The Commission has carefully analyzed the suspected scenario and finds it necessary to bring out its interrogation of this aspect as shown in italics here below :
 - a) B party (*Say 0751xxxxxxx*) calls access number +254 751362050 (*ACL number issued by ETKL in Kenya*)
 - b) ACL Initiates call-back through internet to an ISP provider in Dubai – *A Call back means the calling number (B-party-0751xxxxxxx) is called back from Dubai and the number to call back will be a Dubai number (not ETKL number to generate a roaming TAP file)*
 - c) The call is dropped but Dubai gets all call details & calls back through DU GSM Network (local call) *When the call is dropped, the B number details will be known to the Dubai ISP for call back and a call back will be initiated to B party (0751xxxxxxx) by a Dubai number. How then will the same B-party (0751xxxxxxx) appear to be calling from Dubai when it is supposed to be called back in Kenya?*
 - d) This call generates a TAP file payable by ETKL. *(How can a number being called back in Kenya generate a TAP (roaming) file, when it is supposed to be called back while in Kenya? How possible is it that a Kenyan number will call a GSM network through an SS7 link of an ISP in Dubai?*
 - e) Through the internet, the call gets terminated in ACL Kenya
 - f) ACL Kenya delivers the call to ETKL through E1 connection *(If this is the case, did ETKL bill ACL for any calls delivered through the E1 link? The Commission was informed that ACL does not get any bill from ETKL as per the current arrangement. The link provided is bidirectional but ACL only uses one direction of calls coming from ETKL to ACL through the E1 link.*

Based on the above interrogation, it is apparent that the suspected scenario is not technically feasible. The possible by-pass of ETKL network by the alleged fraudulent calls is not technically feasible considering that all calls made would first land in the ETKL switches where they would be authenticated, authorized and then accounted for. It is inconceivable that the system allowed the alleged fraudulent calls to be made without the knowledge of ETKL; and

- j) The Commission asked ETKL to submit Call Detail Records (CDR) to it and this was not honoured. Instead ETKL re-submitted TAP files from AREDU on 6th January 2010 which do not provide an opportunity for comparison with the CDR presented by ACL. ETKL confirmed during the hearings that the numbers used to make the alleged fraudulent calls were not the numbers allocated to ACL by ETKL.
- k) In concluding its findings, the Commission has noted with concern that despite issuing a directive to ETKL on 17th December, 2009, ETKL disregarded it. This directive was reiterated on 23rd December, 2009 and regrettably, ETKL did not comply. The Commission takes great exception to this and will not condone such practice in the industry.

7. RULING

Based on the above findings, it is apparent that ETKL failed to illustrate how the fraudulent activity was facilitated in its network. In addition, and more importantly, it failed to attribute the fraudulent activity (if any) directly to ACL or to a particular system or individual entity except for indirect inference that once the E1 link to ACL was disconnected, the fraud ceased. The Commission finds no direct incontrovertible evidence that the alleged fraud was committed by ACL.

In addition, the Commission finds that ETKL failed to prove on a balance of probability any culpability on the part of ACL on the alleged fraud.

The Commission hereby rules as follows:

- 1) That ETKL re-establishes the E1 link with ACL with immediate effect and inform the Commission of the said re-establishment;
- 2) That the parties renegotiate the interconnection agreement to re-align it comprehensively with the existing interconnection regulatory framework within fourteen (14) days;

- 3) That ETKL pays to the Commission Ksh.500,000 within fifteen (15) days for failing to comply with the Commission's directive to re-connect the E1 link to ACL; and
- 4) In view of the blatant disregard and non-compliance with the Commission's directive issued on 17th December, 2009 and reiterated on 23rd December, 2009, the Commission hereby enters a formal caution on ETKL's compliance record for Year 2009.

In conclusion, the Commission takes allegations of this nature very seriously and has already initiated independent investigations. In the event that any of the parties is found to have willfully perpetrated any fraudulent activity, the Commission will take appropriate action against the offending party.

DATED this.....day of2010

DIRECTOR GENERAL