

Implementation of Collect Calling in Lebanon

Purpose

The purpose of the document is to address, at a high level, the technical and operational issues related to the introduction and implementation of the collect call (reverse charge call) service nationally within Lebanon among the different operators.

Definitions

A **Collect call** (or Reverse Charged call) is a call in which the receiving party (Called Party) pays for the call. Collect calls can be completed through an operator assistance or through an mechanized system. In either case, the called is routed to and completed through an Operator Services Position System (OSPS).

The collect call feature is usually offered as part of other OSPS features including, person-to-person calls, Credit Card/3rd party billed calls, and directory assistance (DA).

As a network capability, the **OSPS** involves the addition of specialized switching modules to a class 4 or class 5 switch capable of redirecting incoming calls to the operator positions/stations (usually over a PRI trunk) and then routing the call to destination after the conclusion of the interaction with the operator.

How It Works

Mechanized operator assistance automatically processes incoming calls without personal operator attention. Calls are billed on calling cards, to third numbers or as collect calls. Called numbers and credit card numbers are verified as valid before connecting the call to destination.

Operator handled calls provide live support for customers who make collect, station-to-station, person-to-person calls.

Charging

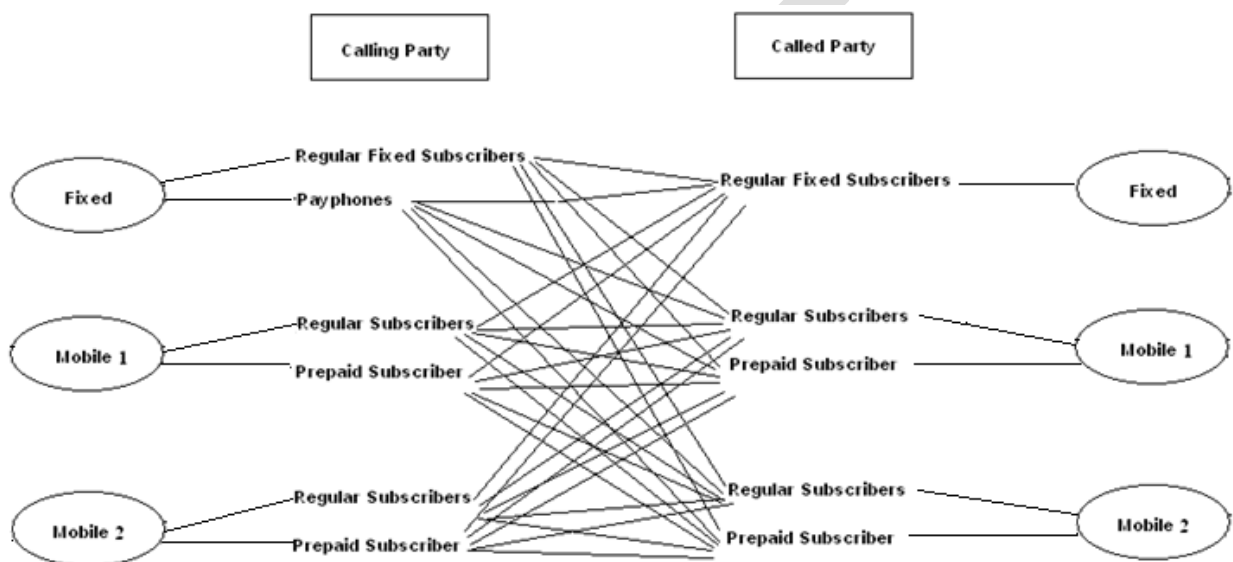
Call charges consists of the call charges for a similar call that does not require operator assistance plus an operator surcharge. The latter is usually less for mechanized-assisted calls than for a live operator-assisted call.

Whether collect calls are fully automated or operator assisted, the calling party should dial a special code or number free of charge and the called party should acknowledge and agree to pay the cost of the call before end-to-end connection is established.

In case the called party does not accept the collect call, no charges are assessed for the call attempt whatsoever. **This implies that interconnection charges, if any, that may apply should be nullified upon settlement.**

Implementation Options

In Lebanon, the different calling options are as shown in the tables below:



The following implementation options of the collect calling are being proposed in **increased order of implementation complexity.**

1- Allow collect calling within the fixed network only

The calling and called party are within the fixed network (assuming one fixed operator for the time being.) There is no need for interconnection arrangement to provide the service. However, the fixed line operator will have to implement a new OSPS center or use an existing one (the international operator 100 and expand it if needed).

Since the called party paying for the call is also a subscriber of the fixed network, billing records generated by the OSPS can be easily parsed into the existing billing system to produce the subscriber invoice.

2- Add mobile to fixed collect calling

The called party is still a subscriber of the fixed network. It is possible to use the same OSPS implemented by the fixed operator. However, there is a need for interconnection

arrangement and settlement of accounts between fixed and mobile operators. In order to further simplify implementation of this option and interconnection settlement, the Mobile operator may collocate its trunk facilities at the OSPS central office to be used for routing collect calls to the OSPS. Needless to say, the OSPS capacity should be engineered to handle the additional Mobile-originating collect traffic.

From a regulatory standpoint, collocation of trunk facilities is part of the central office unbundling. Therefore, there will be a need for such regulation that allows Mobile operator to purchase dedicated trunk ports at the designated fixed operator OSPS switch.

3- Add collect calling to regular mobile numbers

The called party can be a regular mobile number from any network. This can still be implemented through the fixed OSPS but the requirement to collocate the Mobile operator trunks at the fixed OSPS switch becomes a must. This is especially true when it comes to handling collect calls originating and terminating on the same Mobile Network - because it won't make sense to incur interconnection charges on both originating and termination call legs. Again, this also **requires the central office unbundling regulation**.

Alternatively, a Mobile operator can implement its own OSPS at this stage. In this case, the Mobile OSPS will handle all Mobile originating collect calls including those mentioned under (2) above.

In either case, the (fixed or mobile) OSPS implemented to handle Mobile terminating collect calls will need to be continuously updated with the mobile regular number database in order to check whether the collect call is allowed or not.

As always the case, billing records generated by all applicable OSPSs should be used to bill end users for collect calls and to settle such charges together with interconnection charges between the all operators (Fixed, MIC1 and MIC2.)

4- Allow calls to prepaid mobile numbers

In this case, the called party can be a prepaid mobile subscriber. Implementation of this option requires the availability of an IN based system to hairpin and monitor the call for its duration thus insuring the availability of pre-paid credit to cover the call charges. Due to the added complexity and customer disputes arising from this option, most operators refrain from implanting it. Anyway, it's premature to address the introduction of this option in Lebanon.

Charging principles for collect calls

- a- The chargeable amount on the called party should be according to the following formula:

Collect call tariff = origination call tariff within operator network + Interconnection charges + Collect call assistance service

For option 1: the calling and called party are within the fixed operator network. No settlement is required; the whole amount is collected and kept by the fixed operator.

For option 2: the calling party may be also a mobile. The assistance and collection are within the fixed operator. The fixed operator shall pay to the mobile operator his share which represents the origination call tariff within the mobile network.

For option 3: the called party may be a regular mobile number. The assistance is done by either fixed or mobile operator and the collection is done by the mobile. The mobile operator shall pay the fixed operator his share which represents call tariff within the fixed network. The assistance charge is paid to the operator of the OSPs.

- b- In case the call is not completed, the calling or called party should not pay any charge.

Recommendation

As a quick solution, we suggest to recommend that MoT starts the collect call service within the fixed network (Option 1) through the international call center (100-dialling) and gradually expands the service to reach Option 4 as stated above.