



# High Quality Voice and Video IP Service IMS Solution for MNOs

This Halys Service with its IP Multimedia Subsystem (IMS) provides to mobile subscribers **high quality audio and visio communications with easy access and simple use, over mobile data network** (with optional Internet/Wifi access) **and with GSM mobility support**. It includes instant messaging service and interoperation with legacy Voice and SMS services as well as with foreign Voice over IP networks or foreign IMS.



## ***Universal Worldwide VoIP Service***

*Join the coming Gsm standard based universal VoIP service by installing the Halys IMS Platform for MNOs.*

Many services (Skype, Viber, ...) can be accessed by the subscribers over internet and with mobile applications. None of them can provide the simplicity of the standard voice service with the IMS that uses the standard worldwide mobile numbers to call, avoids any complexity for registration or contacts validation, uses the existing mobile subscriber credit account for charging the services when needed.

The subscriber dials simply the mobile number of the called party. The visio call is established over its GPRS/3G/4G connection with a high quality level. If the called party is not IMS connected, the network attempts to establish a standard voice call.

The delivery of the service to their subscribers by the Mobile Operator is easy as it requires only the installation in the subscriber mobile phone of a free client application (in fact any modern SIP client can be used) including a global provisioning (no need for individual remote configuration of the phone).

The Halys IMS is easily integrated as a web service platform to the core infrastructure of the Mobile Operator and is fully customized to the marketing and technical requirements of the Operator. Mobile profile and accounts are used that avoids any additional IT complexity.

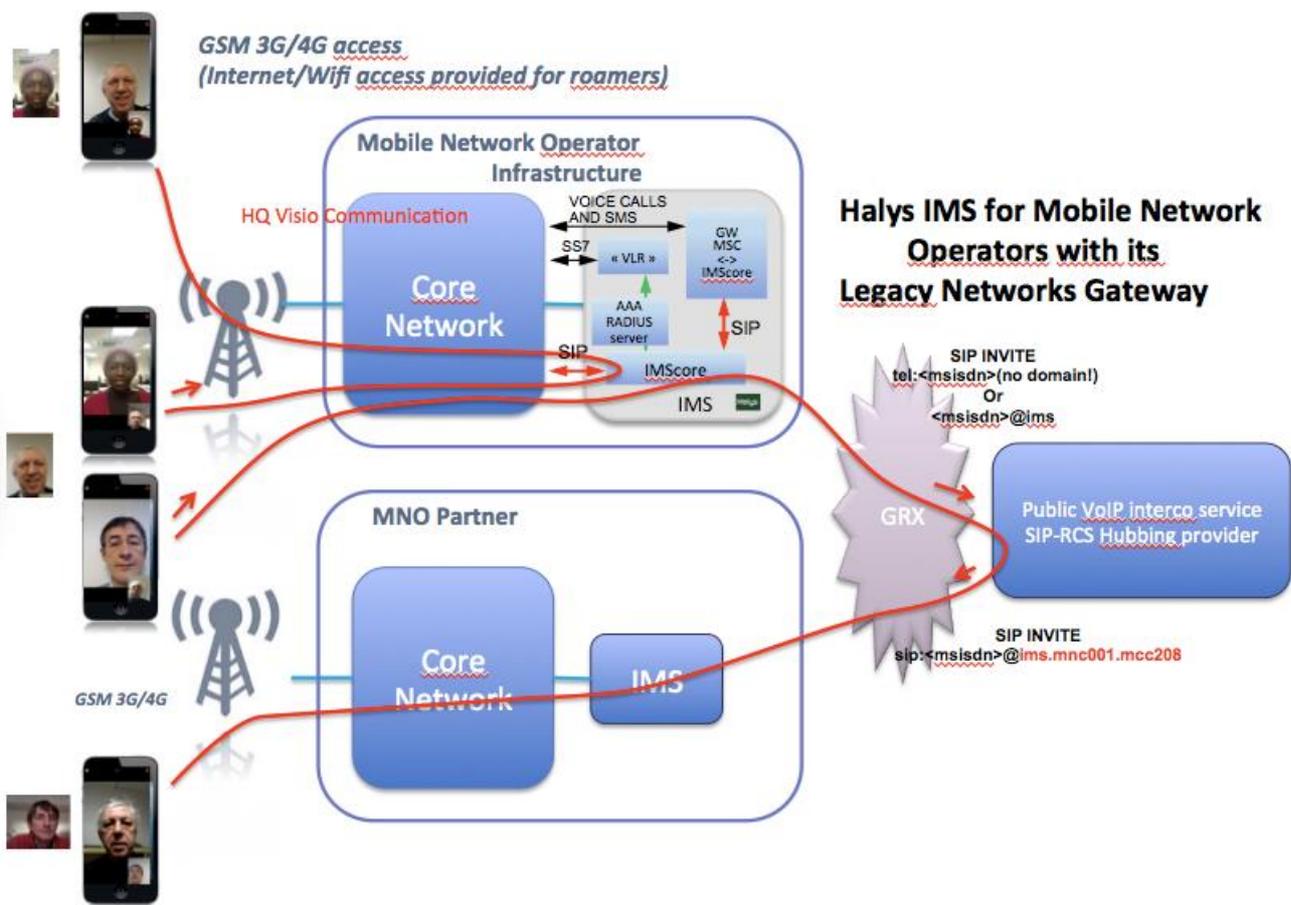


Fig1 - Install the IMS in a MNO/MVNO network

The Halys MSC to IMScore Gateway and VLR allow the interworking with the 2G core network through SS7/Map and ISUP (or Voip gateways already in place). The subscribers are relocated in the Halys IMS. It allows the reception of their calls and SMS from any calling party.

The subscribers will also be able to access the IMS services when connected over Internet/wifi with the use of an individual password (of particular interest for roamers to call or be called to/from Home at the local rate)

The services provided to the IMS subscribers will be the following (with charging done out of their mobile account prepaid or postpaid):

- audio/visio HQ calls and instant messages between IMS connected users (on Home or Interconnected foreign networks)
- audio standard calls to/from subscribers that are on legacy networks
- SMS to/from subscribers that are on legacy networks

Note that your IMS must be configured so that the "options" parameters in the SIP "invite" should present routable addresses for the SIP customers (Border Gateway function of the IMS)

Technical Data:

Linux OS on Intel Servers or Virtual Machines

Media gateway included: SMS from/to SS7 SMS MO/MT (with integrated MSC/VLR)

Media gateway included: PSTN calls from/to with law A to SIP codecs included

SS7 connection: Sigtran

PSTN connection: ISUP/E1

Licensing: Pay-as-you-grow capacity license based on the number of SIP/sec.

row capacity license based on the number of connected operators.