

# Interoperability Report

Ascom i62

Ericsson-LG Enterprise  
iPECS UCP

iPECS UCP, Software Version R3.1.4

Ascom i62, Software Version 6.1.0

Ericsson-LG Enterprise, Seoul, Korea

July 2018

iPECS is an Ericsson-LG Brand



ascom

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## Introduction

This interoperability report describes test results and optimal configuration of Ascom i62 towards the Ericsson-LG Enterprise iPECS UCP. The document should be used in conjunction with configuration guide(s) from Ericsson-LG Enterprise and Ascom.

## About Ascom

Ascom ([www.ascom.com](http://www.ascom.com)) is a global solutions provider focused on healthcare ICT and mobile workflow solutions. The vision of Ascom is to close digital information gaps allowing for the best possible decisions - anytime and anywhere. Ascom's mission is to provide mission-critical, real-time solutions for highly mobile, ad hoc, and time-sensitive environments. Ascom uses its unique product and solutions portfolio and software architecture capabilities to devise integration and mobilization solutions that provide truly smooth, complete and efficient workflows for healthcare as well as for industry and retail sectors.

Ascom is headquartered in Baar (Switzerland), has operating businesses in 18 countries and employs around 1,300 people worldwide. Ascom registered shares (ASCN) are listed on the SIX Swiss Exchange in Zurich.

## About Ericsson-LG Enterprise

" We create innovation in business communications."

Ericsson-LG Enterprise is a leading provider of business communications solution with over 40 years of experience in the global market. Bringing its premium brand 'iPECS' in the market, Ericsson-LG Enterprise delivers a complete product lineup for Cloud and Unified Communications and Collaboration solutions from small to large-sized businesses, and establishes its strong position through advanced technology and diverse reference sites. Continuing our efforts, we aim to build the iPECS brand as the world's top-most enterprise communication solution provider.

Website: <http://www.ericssonlg-enterprise.com>

# Site Information

## Verification site

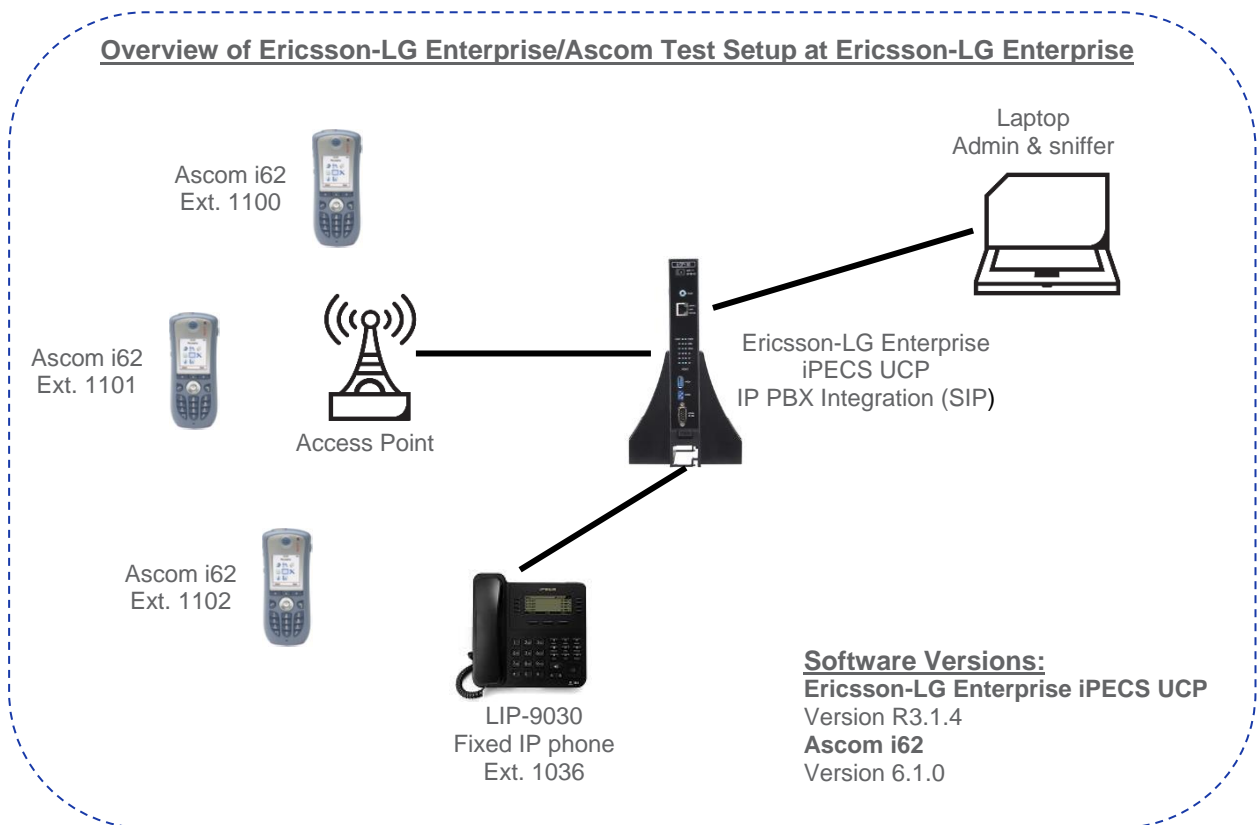
Ericsson-LG Enterprise

Seoul, Korea

## Participants

Hangsuk Cho (Ericsson-LG Enterprise, KR)

## Test Topology



# Summary

## General conclusions

Ascom interoperability verification produced good results towards Ericsson-LG Enterprise iPECS UCP version R3.1.4 with a few exceptions, refer to the "Known Limitations" section on page 6.

Due to issues related to TCP as transport protocols it is necessary to use only UDP at this point.

Ascom i62 handsets were configured to register at iPECS UCP using endpoint numbers. The codec of choice for these tests was G.711A/20ms, while DTMF signaling was transmitted according RFC 2833 or INFO message. Parameter settings are elaborated upon in the "Test results" on page 6 for each platform respectively.

## Compatibility information

### Ericsson-LG Enterprise iPECS UCP/eMG Integration – Ascom i62

- Ericsson-LG Enterprise iPECS UCP/eMG version R3.1.4
- Ascom i62, 6.1.0

Signaling Protocol:

- SIP

Ericsson-LG Enterprise iPECS UCP100 (results also valid for UCP600, UCP2400, vUCP and eMG80/800):

- Settings are based on "Ascom VoIP Gateway: Installation and Operation Manual" (TD 92326GB), pp. 62-100

Ascom i62:

- "Endpoint ID" and "Endpoint Number" corresponds to name and number in the user object
- Default SIP settings

# Test Results

## Test overview

Test cases in nearly all areas with regard to Ascom i62 and Ericsson-LG Enterprise iPECS UCP passed successfully. Overall, the conclusion is that the SIP integration of Ascom i62 with UCP is very good.

Queries about licensing should be directed to Ericsson-LG Enterprise.

Please also see “APPENDIX A: TEST CONFIGURATIONS” for further details

High Level Functionality	Result R3.1.4
Basic Call	OK
DTMF	OK
Hold, Retrieve, Enquiry and Brokering	OK
Attended Transfer	OK
Blind-transfer	OK
Call Forward Unconditional	OK
Call Forward No Reply	OK*
Call Forward Busy	OK*
Call Waiting	OK*
Message Waiting Indication	OK
Do Not Disturb	OK
Calling Line/Name Identification	OK
Connected Line/Name Identification	OK

\*) Local Call Forwarding

## Known limitations

- Since i62 sends REGISTER message without any display name but INVITE message includes From & Contact display name with Endpoint ID, “Do Not Overwrite Station Name” in SIP Phone Attributes(211) menu should be set to ON or OFF(INV).
- i62 rejects a SIP call over TCP with “404 Not Found” when listening port of i62 is not set to the source TCP port of i62, since iPECS sends SIP message with URI of the connected source port but i62 expects URI in Contact header which i62 includes in REGISTER message. Due to this issue – UDP has to be selected as the transport protocol.
- i62 sends DTMF only after 200 OK received. Therefore, “Pre Audio Connection For DTMF” in SIP Phone Attributes(211) menu should be set to 200 OK for voicemail access with DTMF.
- Since held i62 cannot hold a call, held i62 cannot make a new call before hanging up a held call. This is a PBX issue and per design.
- Since i62 is SIP phone, i62 cannot activate Call Completion Busy Subscriber(CCBS). This is a PBX issue and per design.

For additional information regarding the known limitations please contact [interop@ascom.com](mailto:interop@ascom.com) or [support@ascom.com](mailto:support@ascom.com).

For detailed verification results, refer to Appendix B: Detailed Verification Records.

## Support

Product and sales support for Ascom and Ericsson-LG products is obtained through respective companies local supplier.

Technical support for the Ascom i62 wireless handsets can be obtained through the local Ascom supplier or Ascom global technical support:

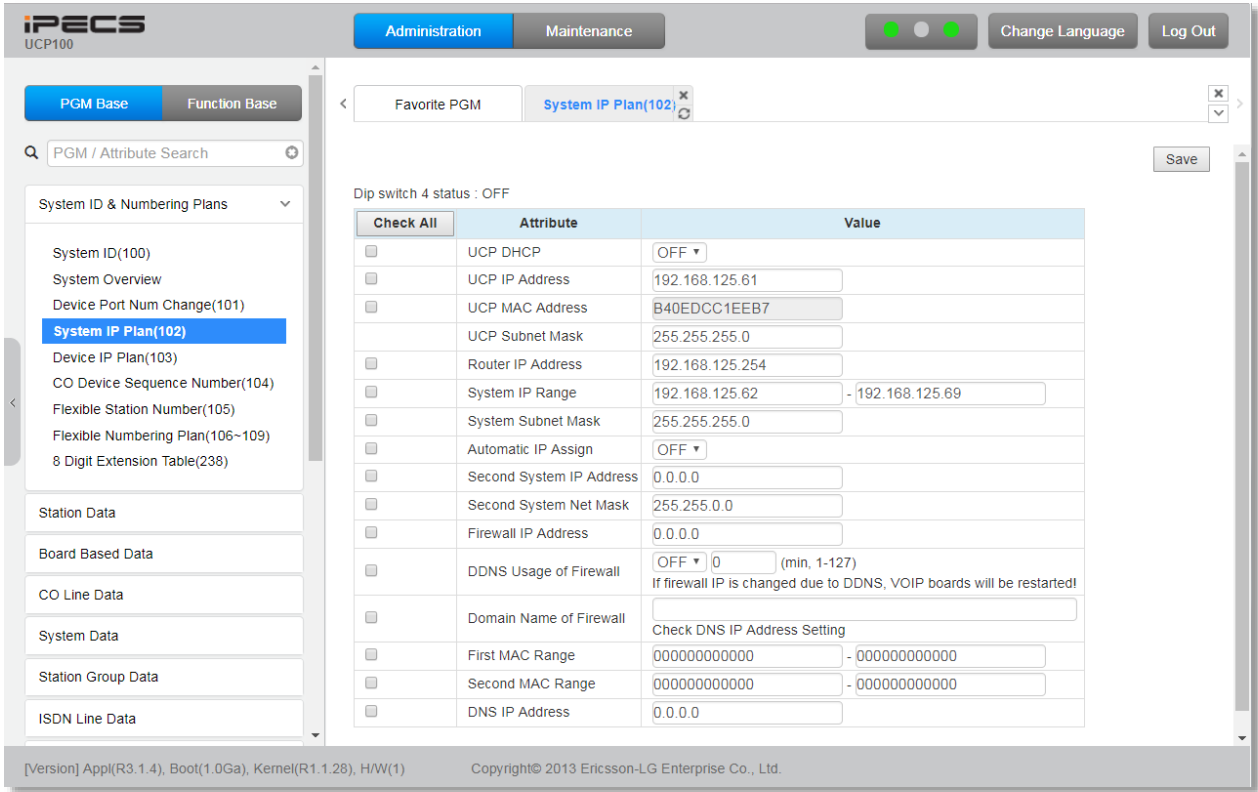
- Email: [support@ascom.com](mailto:support@ascom.com)
- Help desk: +46 31 559450

# Appendix A: Test Configurations

## Ericsson-LG Enterprise iPECS UCP configuration

Please find the screen shots reflecting the management interface and some aspects of setting up the PBX application on iPECS UCP.

System ID & Numbering Plans > System IP Plan(102)





Device Login > Station User Login(443)

Station User Login(443)

Enter Index Range (1 - 2400) : Default : 1-100 [Load] [Save]

Index Range 9-11

ID / Desired Number Save

Enter Index Range : [ ] - [ ]

Start Station Number : [ ]

Save Password (same with ID value) :

[ID Save]

Index	Registered Number	Device Type	ID	Password	Zone	Desired Number	Nation Code	Language	Linked	Version	Remark
9	1100	3rd SIP	Ascom1100	*****	1	1100	Korea	English	M	6.10	
10	1101	3rd SIP	Ascom1101	*****	1	1101	Korea	English	M	6.10	
11	1102	3rd SIP	Ascom1102	*****	2	1102	Korea	English	M	6.10	

System ID & Numbering Plans > Device IP Plan(103)

Order	Seq	Zone	SVC	Logical Num	Type	DEV ID	MAC Address	IP Address	Mode	ARP	Register	Version	CPU	Remark
<b>A</b>														
<b>CO Gateway</b>														
1	2401	1	<input type="checkbox"/>	1 - 4	VOIU	97	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	
2	2402	1	<input type="checkbox"/>	5 - 20	VOIU(SW)	104	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	..	MSC2K	
3	2403	1	<input type="checkbox"/>	21 - 24	LGCU4	114	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	
<b>B</b>														
<b>STA</b>														
1	5	1	<input type="checkbox"/>	1011 1012	SLTU2	119	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	
3	29	1	<input type="checkbox"/>	1101	3rd SIP	138	ffefeeaff5	192.168.125.26	LO	ON	Unicast	6.10	...	
4	30	1	<input type="checkbox"/>	1100	3rd SIP	138	ffefeeaff6	192.168.125.28	LO	ON	Unicast	6.10	...	
5	31	2	<input type="checkbox"/>	1102	3rd SIP	138	ffefeeaff4	192.168.125.29	LO	ON	Unicast	6.10	...	
6	32	1	<input type="checkbox"/>	1036	LIP-9030	245	b40edcb8d9a9	192.168.125.234	L	OFF	Multicast	1.1Ea	SC14452	
<b>C</b>														
<b>MISC Gateway</b>														
1	3101	1	<input type="checkbox"/>	1 - 4	MISU	9	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	
<b>D</b>														
<b>VSF Gateway</b>														
1	3001	1	<input type="checkbox"/>	1 - 8	UVMU	11	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	
<b>E</b>														
<b>MCIM Gateway</b>														
1	3201	1	<input type="checkbox"/>	1 - 6	MCIU	116	b40edcc1eeb7	192.168.125.61	L	OFF	Multicast	R3.1.4	MSC2K	

Station Group Data > Station Group Assignment(190)

The screenshot shows the iPECS UCP100 Administration interface. The left sidebar contains a tree view with 'Station Group Assignment(190)' selected. The main area has a breadcrumb 'Station Group Assig...' and a search bar. Below the search bar, there are fields for 'Enter Group Number' (with a 'Load' button), 'Group Number \*625', 'Group Type' (set to 'VSF-VM'), and 'Pick-up Attribute' (set to 'OFF'). There are buttons for 'Save Group Type' and 'Go to Attributes'. A section titled 'Add/Delete Group Member' contains a 'Station Range' field with 'Add' and 'Del' radio buttons and a 'Save' button. Below this is an 'Add Station Number' field with a '+' button and a 'Save' button. A table with the header 'Station Number' is shown with an 'Unselect All' button and a 'Save / Delete' button.

Station Data > Station Name Display

The screenshot shows the iPECS UCP100 Administration interface. The left sidebar contains a tree view with 'Station Name Display' selected. The main area has a breadcrumb 'Station Name Display' and a search bar. Below the search bar, there is an 'Enter Station Range' field with a 'Load' button and a 'Save' button. The 'Station Range' is set to '1100-1102'. A table is displayed with the following data:

Station Number	Station Name	Input Name	Company Directory - First Name	Company Directory - Last Name
<input type="checkbox"/> 1101	Ascom1101	Ascom1101		
<input type="checkbox"/> 1100	Ascom1100	Ascom1100		
<input type="checkbox"/> 1102	Ascom1102	Ascom1102		

SIP Data > SIP Phone Attributes(211)

Favorite PGM SIP Phone Attribute

Enter Station Range :  Load Save

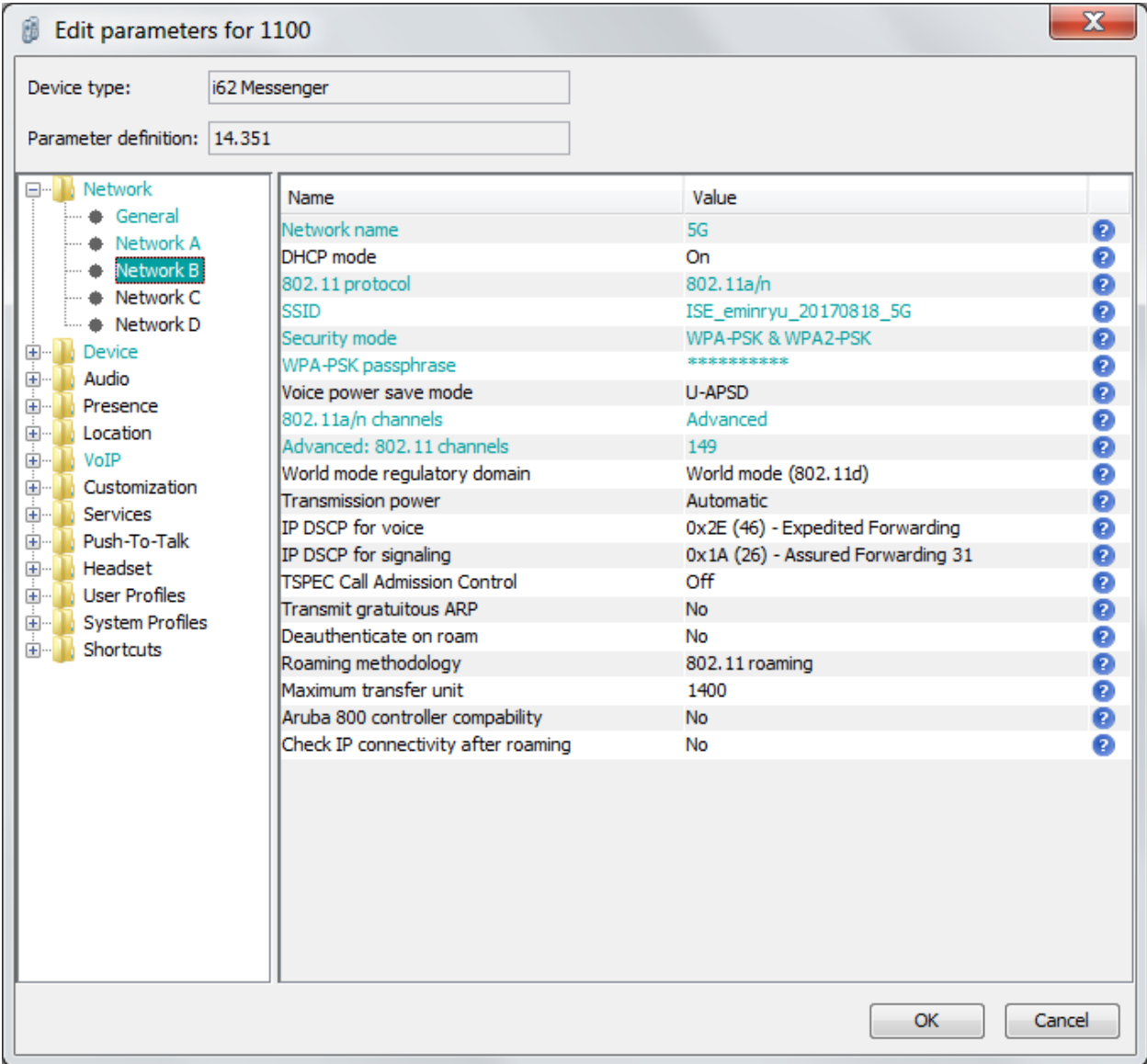
Station Range 1100-1102

Order	Check All	Attribute	Value	Range
1	<input type="checkbox"/>	Registering Mode	Register	
2		Registration Status	Registered	
3		IP Address	192.168.125.28	
4		IP Port	5060	
5		Transport Mode	UDP	
6		System SIP Port	5060	
7	<input type="checkbox"/>	SIP Phone Type	3rd SIP	
8	<input type="checkbox"/>	Device Register Mode	AUTO	
9	<input type="checkbox"/>	Registration Timer Usage	OFF	
10	<input type="checkbox"/>	Registration Timer	3600	30-3600 sec
11	<input type="checkbox"/>	Keep Alive Usage	OFF	
12	<input type="checkbox"/>	Retry Count	3	3-10
13	<input type="checkbox"/>	407 Authentication	ON	
14	<input type="checkbox"/>	181 Being Forwarded	OFF	
15	<input type="checkbox"/>	100rel	OFF	
16	<input type="checkbox"/>	Session Timer Support	OFF	
17	<input type="checkbox"/>	Max Session Timer	1800	180-3600 sec
18	<input type="checkbox"/>	Min Session Timer	90	60-150 sec
19	<input type="checkbox"/>	Within Same Firewall with UCP	ON	
20	<input type="checkbox"/>	SRTP Usage	OFF	
21	<input type="checkbox"/>	1ST CRYPTO	None	
22	<input type="checkbox"/>	2ND CRYPTO	None	
23	<input type="checkbox"/>	DTMF Type	INFO(DTMF RELAY)	
24	<input type="checkbox"/>	SMS TYPE	text/plain	
25	<input type="checkbox"/>	CO Dial Tone	OFF	
26	<input type="checkbox"/>	MWI NOTIFY	message-summary	3rd SIP Phone
27	<input type="checkbox"/>	Request URI Type	Normal	KT FMC
28	<input type="checkbox"/>	Busy Serve	System Busy Tone	
29	<input type="checkbox"/>	Call Initiation Mode	Multiple	
30	<input type="checkbox"/>	Pre Audio Connection For DTMF	200 OK	
31	<input type="checkbox"/>	Do Not Overwrite Station Name	OFF(INV)	
32	<input type="checkbox"/>	Follow CO Unblock Process	OFF	
33	<input type="checkbox"/>	Suffix DID Tbl to CLI	OFF	
34	<input type="checkbox"/>	SIP Profile	DEFAULT	
35	<input type="checkbox"/>	SIP Name Display	OFF	
36	<input type="checkbox"/>	Co Access Code	1st CO Code	

Please refer to Ericsson-LG Enterprise's documentation for further details about iPECS UCP configuration and licensing.

# Ascom i62 configuration

Ascom i62 WiFi network settings



*Network settings is provided as information only. This settings may have to be changed depending on infrastructure and its configuration.*

VoIP parameter settings

**Edit parameters for 1100**

Device type:

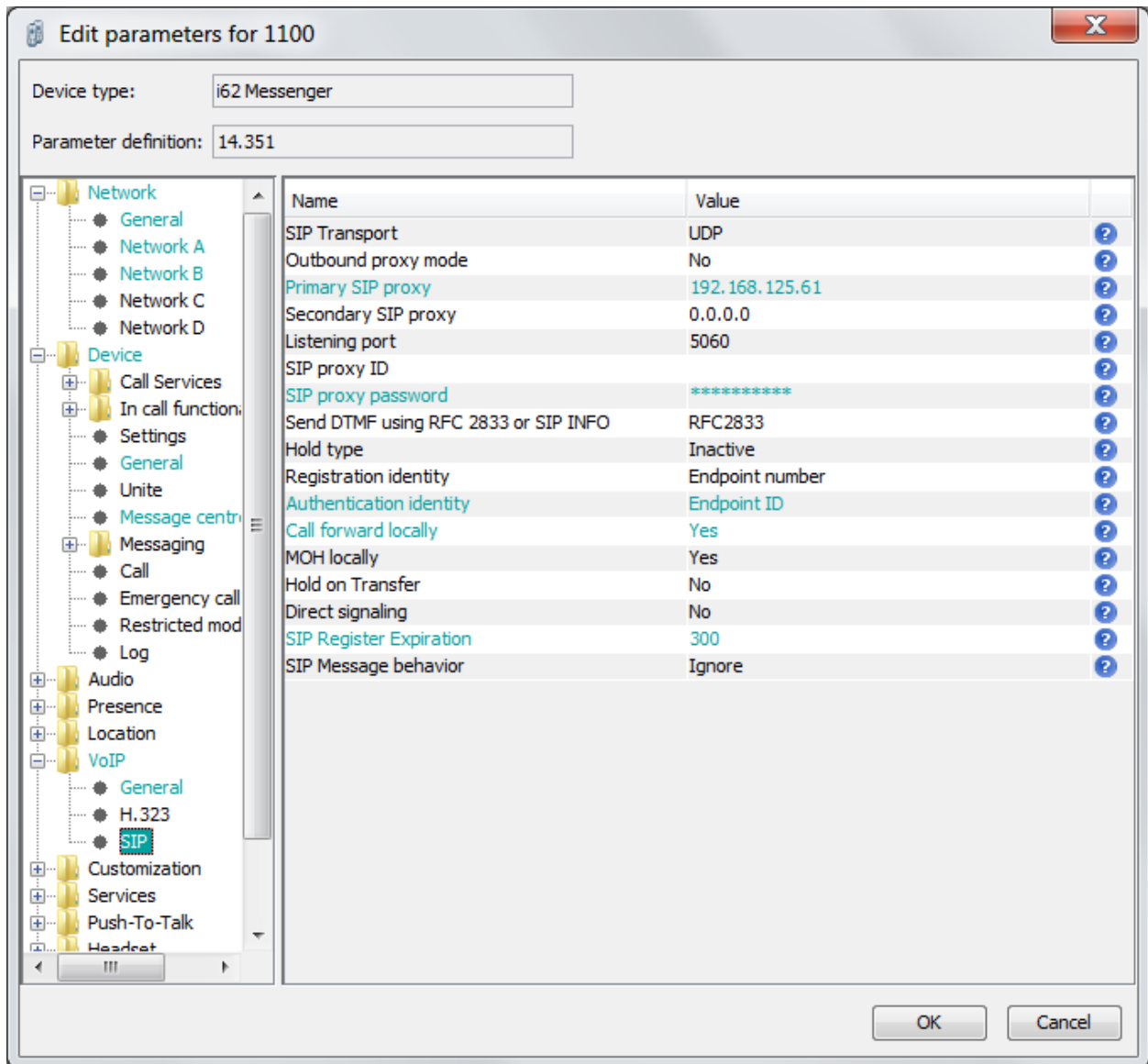
Parameter definition:

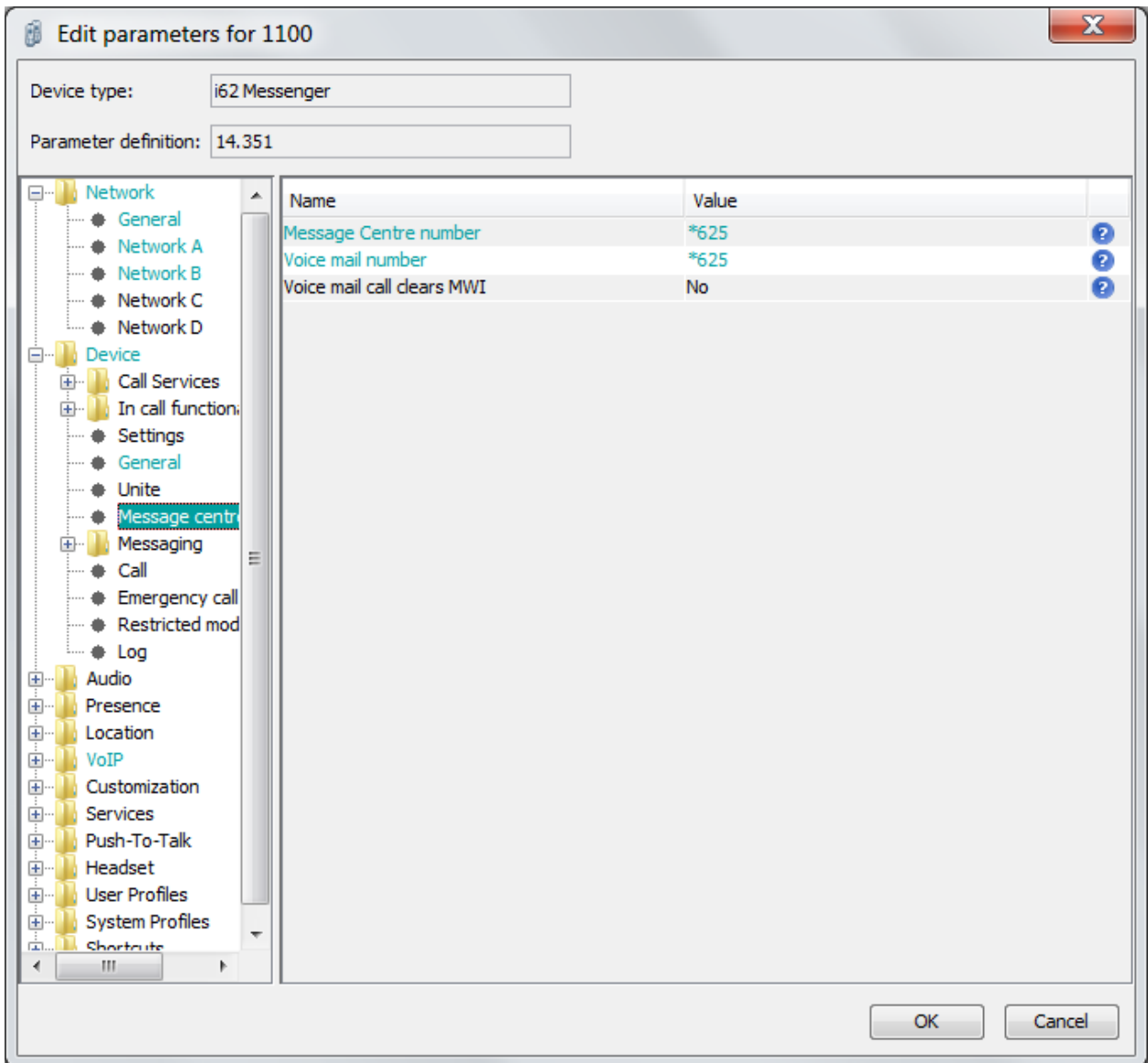
Name	Value	
Replace Call Rejected with User Busy	No	?
ICE negotiation	No	?
VoIP protocol	SIP	?
Codec configuration	G.711 A-law	?
Codec packetization time configuration	20	?
Offer Secure RTP	No	?
Internal call number length	0	?
Endpoint number	1100	?
Endpoint ID	Ascom1100	?

Navigation tree:

- Network
  - General
  - Network A
  - Network B
  - Network C
  - Network D
- Device
  - Call Services
  - In call function:
    - Settings
      - General
      - Unite
      - Message centre
  - Messaging
    - Call
    - Emergency call
    - Restricted mod
    - Log
- Audio
- Presence
- Location
- VoIP
  - General
  - H.323
  - SIP
- Customization
- Services
- Push-To-Talk
- Headset

Buttons: OK, Cancel





## Appendix B: Detailed Verification Records

### Ascom i62 with iPECS UCP/eMG R3.1.4

Pass	61
Fail	1
See Comments	19
Not Tested	29
<b>Total</b>	<b>110</b>

Refer to the attached file for detailed verification results.



Refer to the verification specification for explicit information regarding each verification case.  
The specification can be found here (requires login):

<https://www.ascom-ws.com/AscomPartnerWeb/en/startpage/Sales-tools/Interoperability/Templates/>

## Document History

Rev	Date	Author	Description
PA1	2018-07-19	HS. Cho	Draft version
R1	2018-08-14	SEKMO	Corrections after review round. Revision R1