WELCOME

What's new in OXE with DECT, My Cellular Extension and My Instant Communicator mobile

Presales presentation

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Genesys • Communications • Network

Alcatel·Lucent Enterprise

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AGENDA

1. What's new with ALU DECT handsets
    1. The new industrial 500 DECT handset
    2. Notification server integration enhancement on 400 & 500 DECT handsets
        A. Introduction
        B. Alarm input message
        C. Notification message
2. What's new with MCE and MIC mobile solutions
3. Q&A

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What's new with ALU DECT handsets

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The new industrial 500 DECT handset

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The industrial 500 DECT handset
Overview

Industrial DECT :

Alcatel-Lucent 500 DECT handset

- Robust design
  - inductive charging
  - IP 54 standard (Water and dust resistant)
- Advanced alarm management for isolated worker protection:
  - Emergency key (red key)
  - Man down detection (dead-man detection)
  - No movement detection
  - Shock detection (Roadmap: Q3 2011)
  - Message Waiting Indication - 3 LEDs

- Based on GAP mode
- Compatibility: OXE R10.0 and higher
- Retro-compatibility: OXE R9.1 (I1.605.28)
  OXE R9.0 (H1.301.50.c*)

*** Release date not known**

The industrial 500 DECT handset
Accessories

Desktop charger

Battery (spare)

Belt & Swivel clips

Horizontal pouch

Vertical pouch

Rack charger: charge of 6 handsets and 6 spare batteries

Bluetooth module

Bluetooth headset

Memory card (5X)

Downloader

The industrial 500 DECT handset
Features summary

DECT infrastructure

DECT Europe, US (DECT 6.0) and Latam support
DECT authentication, encryption
G726 Audio codec

Telephony features

GAP level services:

Available features: make and transfer call, Rejecting a call and voicemail consultation…

Restrictions: no call by name and no text messages sending/consultation

Local managed services:

Call log: Native dialed, missed, incoming calls list

36 phonebook memories maximum and can be extended with optional memory

Dial by name with local directory

7 ringing profiles (Normal, Meeting, Outdoors, Office, Home, Silent and Handsfree)

16 available ringing melodies + 4 available ringing others for notification integration

Agenda

13 MMI Languages: English, Spanish, German, French, Italian, Dutch, Portuguese, Danish, Swedish, Turkish, Polish, Greek, Russian

The industrial 500 DECT handset

Home Page

Icon line

Dialogue area

Soft key line

- Level of radio signal
- Bluetooth connection status
- Keypad locked
- Activated alarm
- Missed calls
- Ringer deactivated
- Battery status (resp. >75%, >33%, <33%, empty)
- Caller filter

- loundspeaker on
- Microphone muted while loudspeaker on
- Microphone muted while loudspeaker on
- Incoming Call
- Outgoing Call

To access to main menu

To access to the call log

The industrial 500 DECT handset
Call log menu

Menu section

CLID

Call time and date

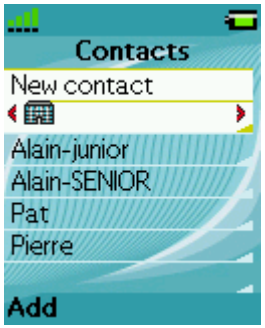
- All calls lists
- Answered calls lists
- Dialled calls list
- Missed calls list

Remark: when a call is answered on the fixed phone and the DECT handset is in twinset or supervision mode, the call is seen as “missed call” for the DECT handset

The industrial 500 DECT handset
Main menu

To access to the call log

To add a contact



- To access to agenda
- To manage an appointment

To manage settings menu

To access to accessories

The industrial 500 DECT handset

Settings menu : sounds & alerts

Menu sections:

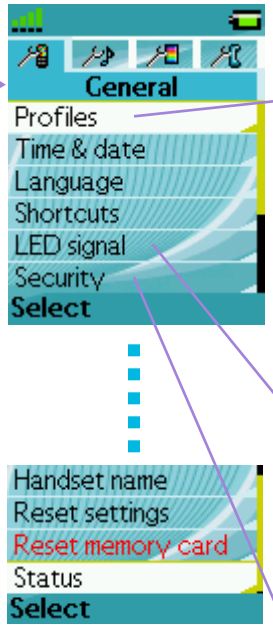
Sounds & alerts

To manage a generic ring volume for the business calls.
Remark: alarm ringing volumes are configured in other menu section.

The industrial 500 DECT handset
Menu Settings: general menu

Menu sections:

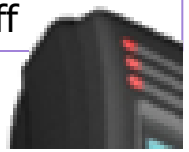
GENERAL



To personalize the sounds settings for seven profiles:

- Normal (default)
- Meeting
- Outdoors
- Office
- Home
- Silent (disables, or decreases the volume of, all alert signals)
- Loudspeaker

To configure individualy each of the three colored LEDs (red, orange and green) to flash depending on following triggers: missed call, text message, voice message , text or voice message, mandown, low battery, normal alarm, urgent alarm, very urgent alarm and off



To manage the alarm notification settings (included the alarm sounds parameters)

The industrial 500 DECT handset

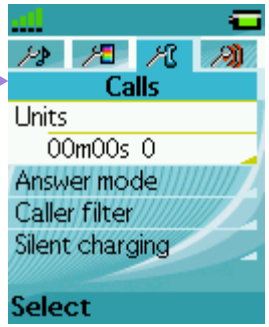
Settings: display, calls and connectivity menu

Menu sections:

Display

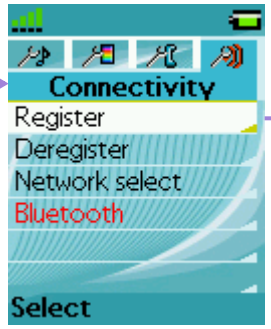
Menu sections:

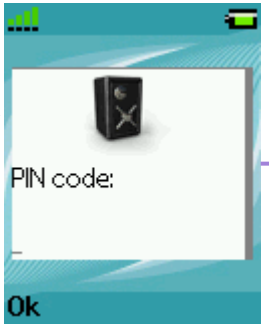
Calls

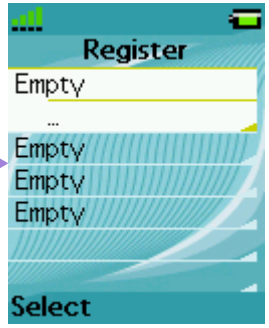


Menu sections:

Connectivity





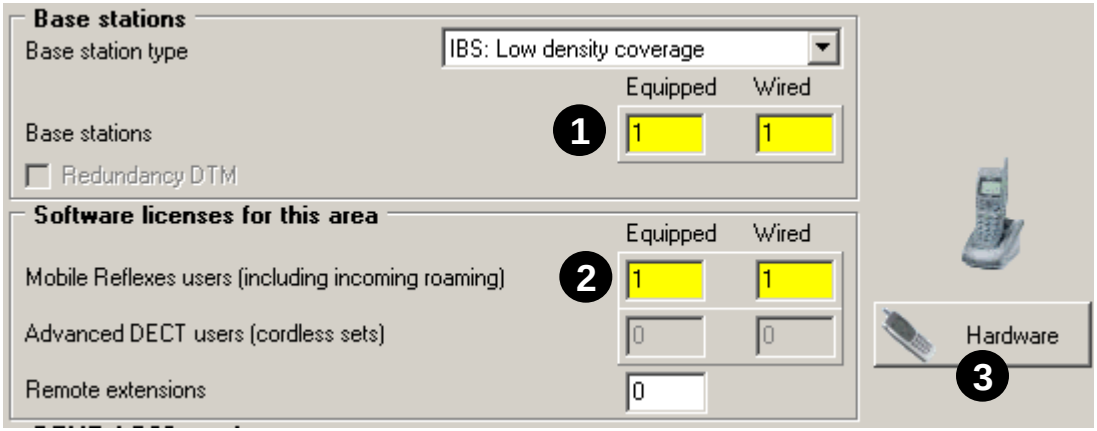


✓ Connectivity: Possibility to connect manually to 4 different DECT systems (4 PARIs). I.E: multi sites customer

The industrial 500 DECT handset
How to quote

1. **Declare Base Station**

2. **Declare the right mobile reflexes users according to the total of 300, 300ex, 400 and 500 dect Handsets**



3. **Click on menu to configure the DECT handsets and accessories**

minimum to declare => the three following items:

- ✓ 500 DECT handset pack (3BN67200AA) includes 500 DECT handset with battery and belt clip,
- ✓ 500 DECT handset desktop charger (3BN67201AA),
- ✓ A WW power supply: 500 DECT handset desktop charger PS WW (3BN67207AA)

The industrial 500 DECT handset
Catalogue offer

Reference	Short description
3BN67200AA	500 DECT Handset
3BN67201AA	500 DECT Handset desktop charger
3BN67202AA	500 DECT Handset battery (spare)
3BN67203AA	500 DECT Handset Belt clip
3BN67204AA	500 DECT Handset swivel clip
3BN67205AA	500 DECT Handset Bluetooth module
3BN67206AA	500 DECT Handset Rack charger
3BN67207AA	500 DECT Handset Desktop charger PSU WW
3BN67208AA	500 DECT handset Vertical pouch
3BN67209AA	500 DECT handset Horizontal pouch
3BN67210AA	500 DECT handset Memory card (5x)
3BN67211AA	500 DECT handset Download Tool
3BN67212EU	Bluetooth Headset - Eur
3BN67212NA	Bluetooth Headset - NA

New industrial Alcatel-Lucent 500 DECT Handset

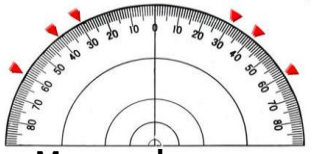
Alarms triggers

- Emergency key:

  Allowing the end user to trigger an alarm , following an unexpected event

- Man down detection:

  Monitoring to know if the end user has lost or not verticality



Man down
> 30-40-60°

- No movement detection:

  Consequently to user accident or injury, the Handset should detect a period of inactivity of the user and being able to trigger an alarm to the server

- Shock detection

  The Handset shall be able to detect any abnormal shock and trigger an alarm to the server

Shock
> 3G

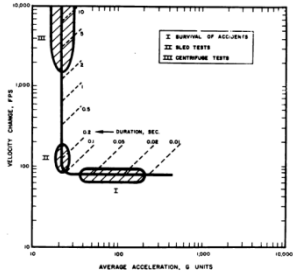


Figure 7. Human impact sensitivity curve.

- **Alarm feature requires external notification server (AAPP)**

New industrial Alcatel-Lucent 500 DECT Handset

Alarm Phases

Validation phase: this phase is the sensor validation signal

Delay phase: This is the time for which the handset is allowed to be in the alarm condition without triggering a pre-alarm state. The programmable duration range can be off (No delay phase/default value), 5s,10s, 20s, 30s, 60s, 90s, 120sor 240s.

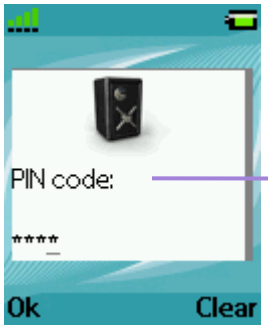
Pre-alarm phase: During this phase the end user is warned with an audio signal broadcasted in Loudspeaker mode and a screen display. The end user is able to cancel this state (Right Soft key or body movement or both), thus stopping the whole process.

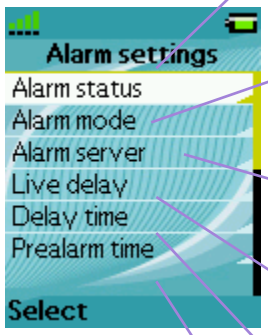
The programmable duration range can be 0, 5s,10s, 20s, 30s (default value), 60s, 90s, 120s or 240s.

Alarm phase: After the pre-alarm phase ends, and without user action to cancel, the DECT Handset will send the alarm to the server.

	Validation	Delay	Pre-alarm	Alarm
Man down	yes	Yes	yes	yes
No movement	yes	Yes	yes	yes
shock	yes	no	yes	yes

The industrial 500 DECT handset
Alarm settings





✓ Protected by a password, so the end-user is not able to change the alarm settings

To enable/disable independently the alarm input call (live, key event, emergency, status)

To configure the right mode: office for QSIG/GF and Enterprise for H323 link

To manage the alarm server and the backup alarm server

To manage the periodic live timer

To manage the duration range before taking account trigger

To manage the duration range for the end-user warning

To enable/disable the man down

To enable/disable the no movement

To enable/disable the shock

To manage the duration of the local audible alarm: 5mn / 10mn / 15mn (by default) / 20mn

Notification server integration enhancement on 400 & 500 DECT handsets

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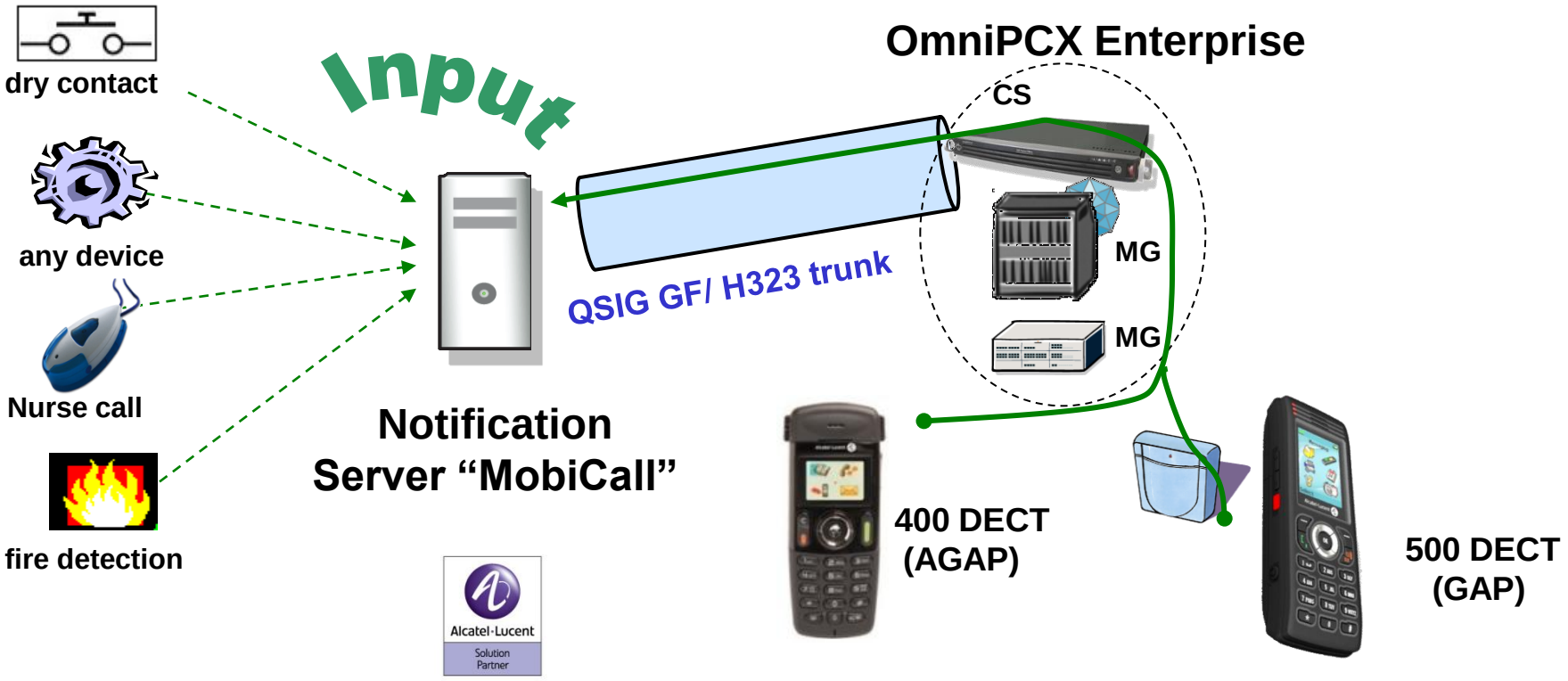
Notification server integration enhancement on 400/500 DECT handsets Overview

Goal is to offer advanced alarm inputs and notifications with location services on 400/500 DECT handsets. This solution is based on NewVoice AAPP Partnership, at first case.

Pre-requisites:

- ✓ Alcatel-Lucent OmniPCX Enterprise from R9.X
  - QSIG-GF or H323 link
  - Alcatel-Lucent 500 DECT handset
  - Alcatel-Lucent 400 DECT handset with the dedicated AAPP firmware (91.0-98.0 / firmware on request)
- ✓ The NewVoice notification server named MobiCall 7.5

Notification server integration enhancement on 400/500 DECT handsets
Architecture: how are managed the alarm input messages



Alarm input Message from 400/500 DECT toward MobiCall server is seen as a call by the OmniPCX Enterprise server. The call is splitted in two parts:

- **trunk access prefix,**
- **additional data digits**

Notification server integration enhancement on 400/500 DECT handsets
4 call types for alarm input message

Live calls

- Live call is periodically sent from the DECT handset toward to notification server with programmable interval (from 60 to 999 seconds)

Key events calls

- Key events calls are triggered by the end user press of certain digit keys for reporting process of completed tasks.

Emergency calls

- Alarm calls are triggered by the end user press of dedicated keys (included emergency key) for reporting an emergency situation

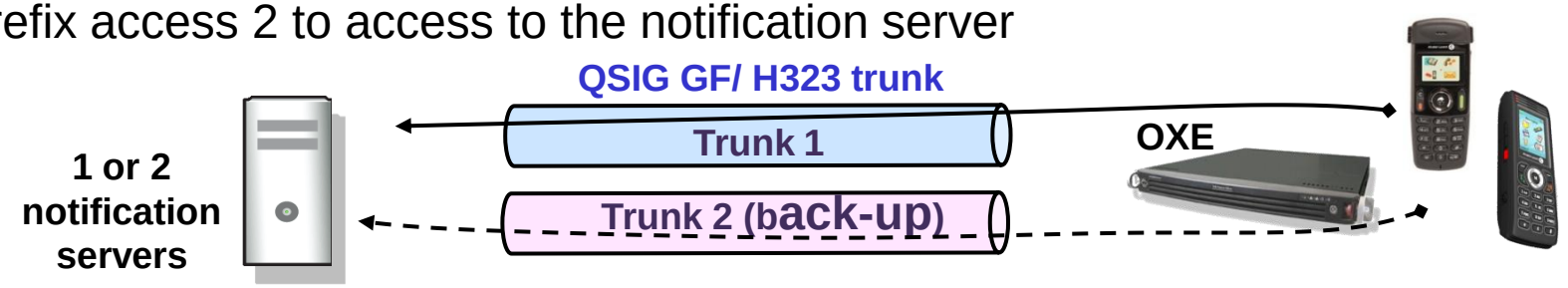
Status calls

- Status calls are triggered by DECT handsets status change (put in/out of charger and switch on/off)

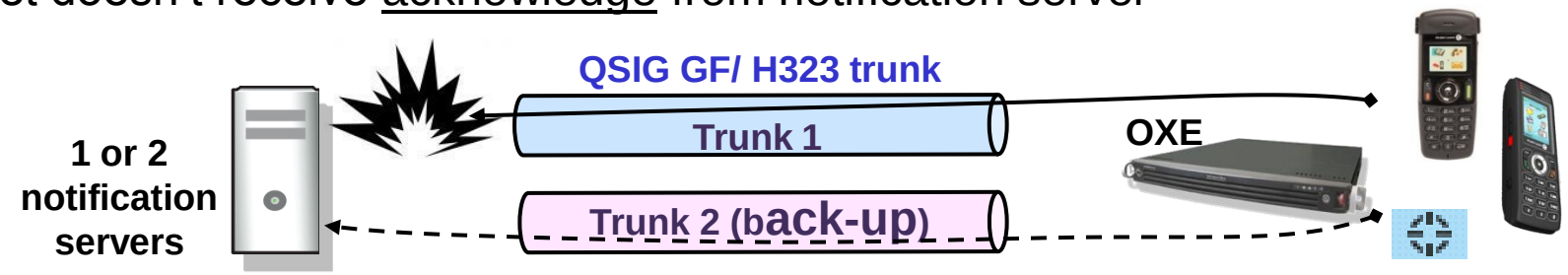
Notification server integration enhancement on 400/500 DECT handsets
Use cases of redundant notification server

- Both prefix accesses 1 & 2 (trunk 1 & back-up trunk 2) are managed via MMI

- For **Live and status message,** the handset sends alternately prefix access 1 and prefix access 2 to access to the notification server



- For **Alarm and key event** messages, the handset sends prefix access 2 if the handset doesn't receive acknowledge from notification server



Notification server integration enhancement on 400/500 DECT handsets
Alarm input message format

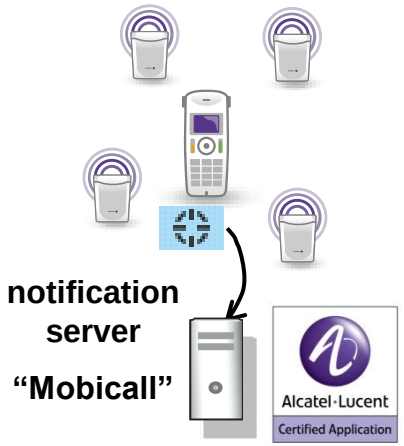
Alarm input message has an unique format, whatever the kind of calls (Live, status, etc…)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
PARI CODE					RPN 1			Signal level 1	RPN 2			Signal level 2	RPN 3			Signal level 3	RPN 4			Signal level 4	State	Pressed key	Battery level	call type	Call type 2

- PARI code of the DECT system
- The four strongest base station with the following information
  - their identity number (Radio Port Number)
  - their signal level (RSSI level)
- The DECT handset state: not in charger/ in charger, ringing on/off, vibrator on/off and switched on/off
- The pressed key in the case of emergency call or key event call
- The battery level
- The call type information: Live call, emergency call, event key call and status call

Notification server integration enhancement on 400/500 DECT handsets
DECT handset location services

The DECT handsets provides up to the four strongest base stations.



When the DECT handset sees several systems with different PARI's

- RPN1 shall always be strongest RSSI base station, not necessarily the one the Handset is currently locked to
- The unique PARI message shall be the PARI of RPN1
- RPN2 to RPN4 shall be the decreasing RSSI level base stations which are seen by the Handset belonging to the same PARI as RPN1

All these information is used by notification server MobiCall to triangulate the DECT handset position.

Remark: the relationship between distance and the signal level is provided the following table

	average distance (m)			
dBm value	open field	Office good	Office average	Office bad
-30	6,25	2,68	1,56	0,75
-36	12,5	4,60	2,38	1,00
-42	25	8,33	3,73	1,50
-48	50	14,67	6,11	2,00
-54	100	24,55	9,44	2,86
-60	200	42,00	15,56	4,00
-66	400	76,67	23,77	5,83
-72	800	133,33	37,30	8,33
-78	1600	222,73	61,11	11,67
-84	3200	383,87	94,44	16,67

Notification server integration enhancement on 400/500 DECT handsets
Priority of the alarm input messages

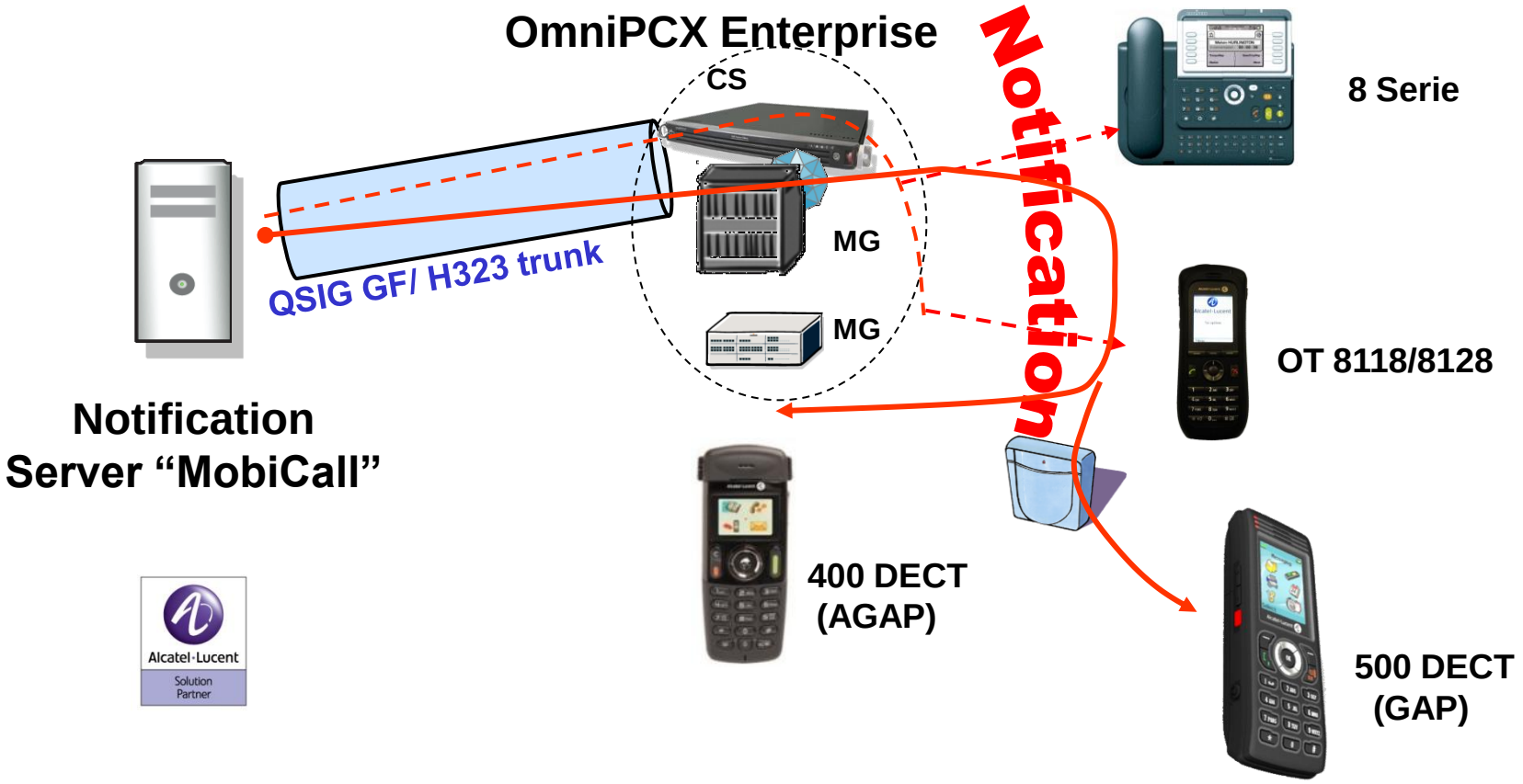
The priority list among input messages is:

Priority 1 (Highest priority):	Emergency key pressing
Priority 2:	Shock detection (500 DECT only)
Priority 3:	Man down detection (500 DECT only)
Priority 4:	No movement detection (500 DECT only)
Priority 5:	Status call
Priority 6 (Lowest priority):	Live call

Higher priority event takes precedence over lower priority events being processed

Notification server integration enhancement on 400/500 DECT handsets

Architecture: how are managed the notification messages



Notification message is triggered by the 400/500 DECT handset upon receiving an incoming call from notification server with specific Caller Name Identification (CNI)

Notification server integration enhancement on 400/500 DECT handsets
Notification alarm levels

400 DECT Handset is able to manage an unique notification alarm level

1. urgent alarm: melody at maximum with melody 5

500 DECT Handset is able to manage four notification alarm levels

1. normal alarm: melody and volume as programmed in the security settings menu
2. urgent alarm: melody and volume as programmed in the security settings menu
3. very urgent alarm: melody and volume as programmed in the security settings menu
4. alarm with hands free forcing

The alarm level is triggered by **the Caller Name Identification (CNI) value.**

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New industrial Alcatel-Lucent 500 DECT handset

3 Status LED

Volume up/down
(6 steps)

Alarm key

Make call
Register Recall

Headset connector

Microphone

Earpiece

Color display

2 Soft-keys:
Idle: menus access
Call: Mute/Loudspeaker

Menu access:
4 Navigation keys + OK key respectively to Navigate/confirm

Keypad lock soft key: short press on OK

On/Off (long press)
Release call