

Emergency Location Working Group

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EmLoc TG



Location Task Group : Routing 999/112 for VoIP to correct local Emergency Authority with VoIP caller's location

Membership : Alcatel-Lucent, BSKyB, BT, CPNI, Ericsson, EE, Huawei, Magrathea, Nominet, Ofcom, O2, Unify, Virginmedia, Vodafone and Ofcom +.....

Approach :-

- VSP, ISP and Access Provider can all be different
- Scope : excluded user and device inputs ; all parties UK based
- International Standards still developing (use wherever possible)
- Output was ND1638 in 2010:-
Increased co-op between 999 CHA (PSAP) and VSP, ISP and Access networks
New network entities : LIS (for ISP)and VPC(for 999 CHA)
New interfaces for all : Http/Https and XML
New requirements on all organisations
=> systems development.....not yet implemented.....
- <http://www.niccstandards.org.uk/files/current/ND1638%20V1.1.2.pdf?type=pdf>

Standards Groups monitored



- IETF : GeoPriv and ECRIT WGs
 - NENA and NG911 :-
 - i3 standard and US Government programmes (DoT and FCC)
 - 3GPP : IMS and NOVES
 - IEEE 802 - ESWG (using IETF approach)
 - **ETSI** – E2NA, formerly TISPAN EMTEL (working with 3GPP and EC), **M 493 mandate from EC**
 - EENA – NG112 requirements
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EmLoc TG – current work



- IP-PBX configuration : guidance for how Private Networks can be set-up to provide best possible location (ND1432 draft)
- ND1638 being updated – to allow for use of terminal location and to reflect recent IETF protocol changes
- ETSI M493 – this is likely to supersede ND1638 so is being tracked :-
 - UK contributions led by BT with EmLoc input
 - will be studied for UK implementation
- WiFi access – use case for ND1638 : being driven by mobile networks as implement 4G and WiFi access for voice
- New Work Item (working with SIP TG) :-
 - emergency calls are protected/prioritised in TDM networks : principles to be documented to guide requirements for SIP networks

Next Steps for VoIP 999 location

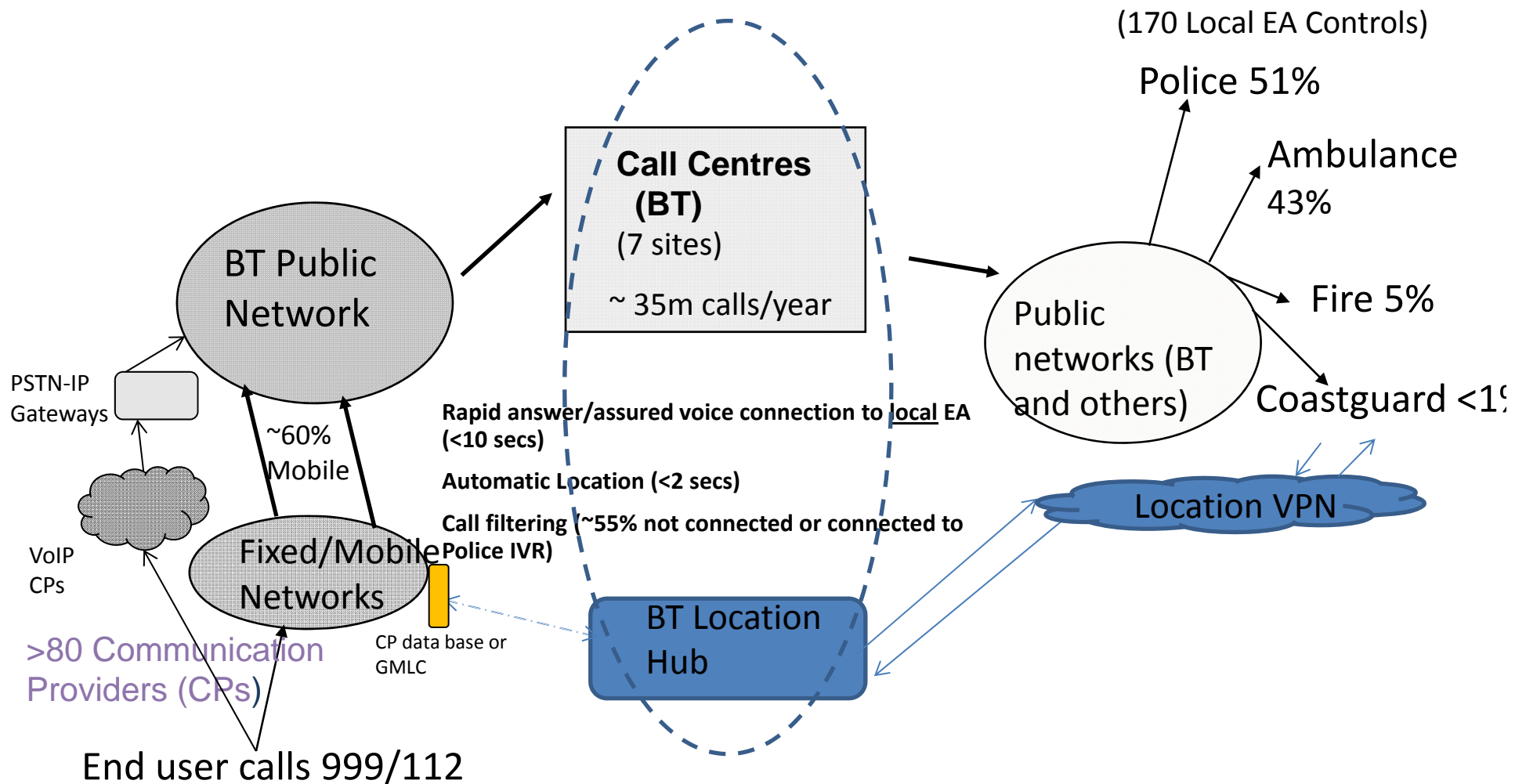
- More organisations involved to deliver 999 – more diverse communication (not just traditional telcos providing physical access networks but VSPs , ISPs and terminal providers)
- New operational components will be : Location Information Server, LIS (ISP + Access Ntwk) and possibly a VPC (for 999 PSAP) for VoIP
- New interfaces for all organisations : based on international standards as far as possible (eg IETF HELD)
- New terminal capabilities : location aware mobile handsets, in-vehicle units (ecall), routers
- Increased co-op between PSAP/VSP, PSAP/ISP and VSP/ISP/Access networks
- Timescales to implement uncertain : technically feasible, end user technology changes probably will drive it, regulation also possible
- NICC EmLoc work to continue : need more organisations!
[Eg : ITSPA, ISPA, Avaya, Cisco and Microsoft)

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UK Emergency Service

999/112 Call Handling Product : Voice + Location Data

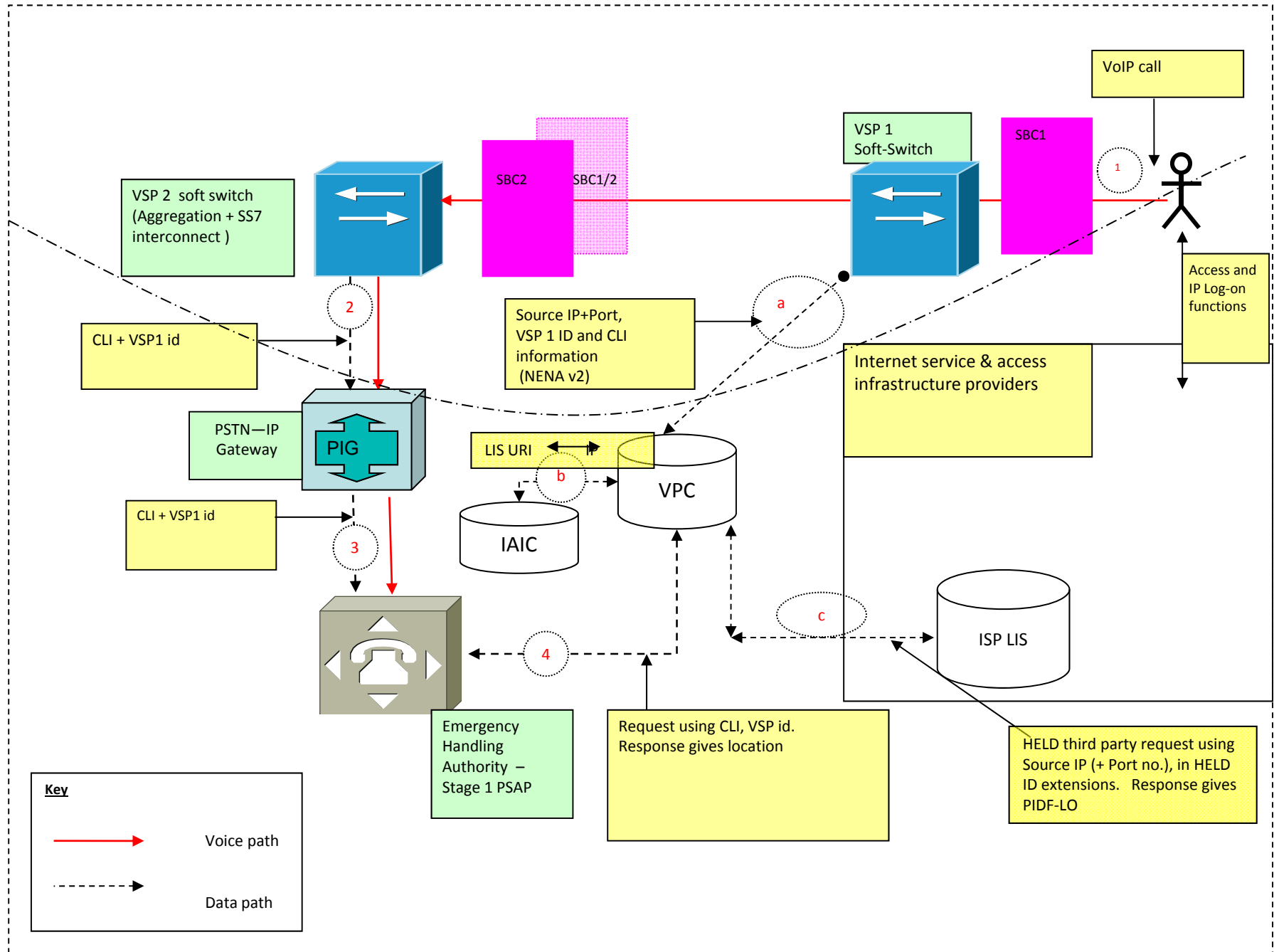
- Voice : Mobile, Fixed, VoIP
- eSMS for hearing impaired (also ITUv21 text over voice, real time text using special terminals)
- Telematics in certain vehicles that includes a voice call + separate SMS data message



Current VoIP Service

- Reach Call Centres through PSTN/IP Gateways
- Identified as VoIP
- Registered address accessed through tel number
- Name and address marked as needing confirmation
- Verbal routing.....
- Key issues for VSPs using 999 :
 - name and address data to 999 kept up to date
 - 24 hour VSP contact point (tracing)
 - information to 999 on nomadicity
 - end user education

Overview of ND1638 Architecture and Interfaces



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