

A Routing Extension for HELD

draft-winterbottom-ecrit-priv-loc-04

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Motivation and Scope

- Location on its own is not good enough to get an emergency call to where it needs to go. At a minimum the address of a gateway into an emergency network trusted by the access network is also required.
- The draft proposes a HELD extension enabling an access network to provide to a not trusted VSP the address of a gateway, e.g. in absence of public LOST servers and/or when, for privacy reasons, only the LbyR is delivered to the VSP.
- Needed in the context of the work on the European mandate M/493, tasking voice and access providers with ensuring that emergency calls are delivered to the correct PSAP with location.
- ETSI architecture to address M/493 requires routing information as well as location information be provided by a single node in the access network.

LOST Deployment Report:US

- NG9-1-1 depends on the ECRF (LoST server)
- To date ALL LoST servers been deployed inside the emergency services network
- Commercial operator's see no RoI in establishing national or global LoST servers
- No Government money for deployment and ongoing opex of forest guide networks
- Likely outcome in the US:
 - is existing i2 providers will establish private or semi-private forest guide and call deliver networks.
 - Call termination charges and LVF charges for using these networks
 - Likely constrained to national VoIP operators

LOST Deployment Report: Europe

- Emergency networks general run by previously state-owned operators
- No Pan-European emergency providers
- Address information far less structured than the US
- LoST not seen as being required
- No public or private funding for LoST deployments
- Privacy requirements constrain location-by-value to emergency authorities, the access network provider not allowed to deliver it to not trusted VSPs.

Options!

- Continue to push the LoST option.
 - Unlikely deployment in Europe
 - Unlikely public national forest guides in the USA
- Extend HELD to support a routing request and response.
 - Only requires minor update to existing ECRIT framework and procedures.
 - Largely maintains compatibility with NENA i3 deployments.
- Do nothing.
 - ETSI will likely adopt an updated version of MLP to provide the desired functionality.
 - Solution will still be deployed, eventually country-specific (huge burden for global VSPs as Skype), but incompatible with ECRIT and NENA i3.

Recommendation!

- Extend HELD
 - Optional routing request element in location request
 - Optional routing information in location response
- Minor alteration to call flow in RFC 6881
 - Maintains compatibility with ECRIT and NENA i3
- Allows location privacy
 - Return a location URI and emergency gateway URI
 - No need for location value in call routing
- Adopt draft-winterbottom-ecrit-priv-loc-04

THANK YOU!

What it does and what it is used for

Extends HELD with

- Optional routing request element in location request
- Optional routing information in location response

