French PSAP
solution for victim's location

CISA ICAR Borovets

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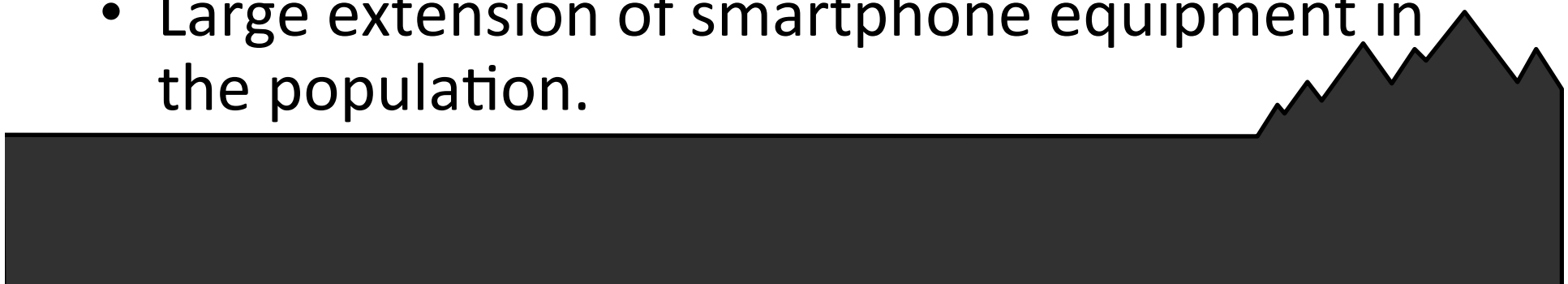*National firefighter federation: Specialized Radio and information systems commission animator*
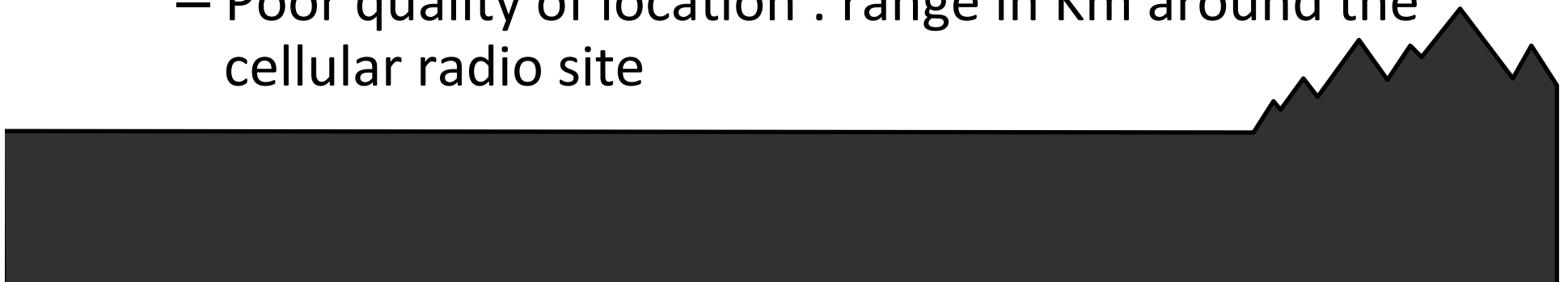
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genesis

- 2002: European directive for the Public Safety access to the Caller location;

- Phone company's response to the French law transcription, poor and delayed;

- Several initiatives using phone apps, tested in rural and mountain situations, but applied to a restricted public;

- Large extension of smartphone equipment in the population.
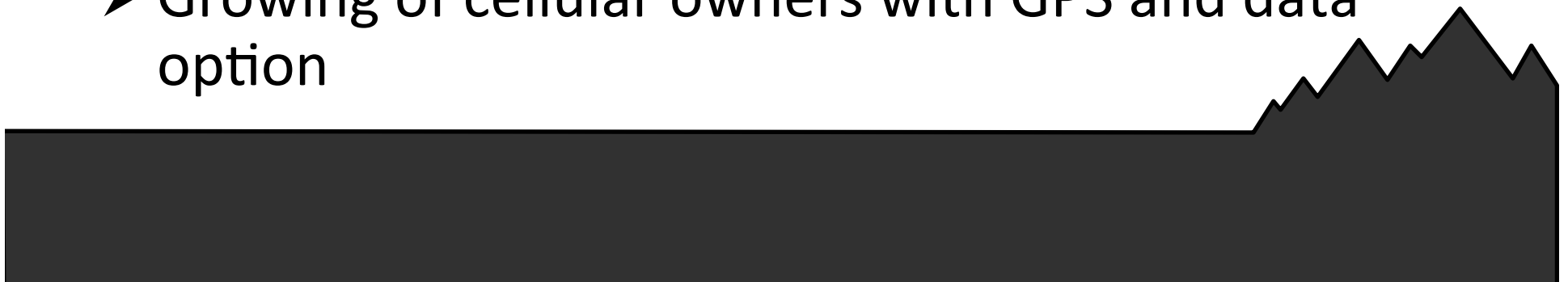
The main problems

- Solutions based on a pre-loaded smartphone application
  - concerning a restricted population;
  - Several development, no standard;
  - Need a inscription to every websites.

- Emergency call center's national location platform
  - Poor quality of location : range in Km around the cellular radio site
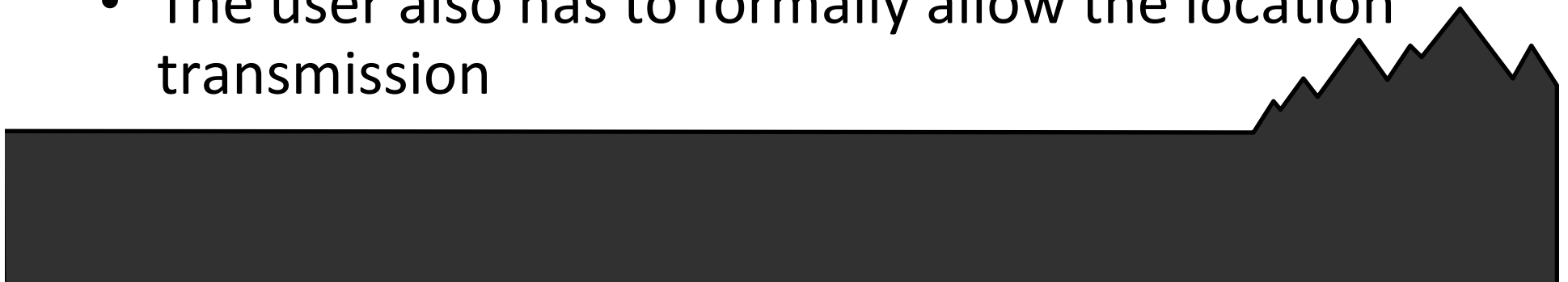
Mains steps identification

- Cellular GPS equipment generalization
  - \> 62 % for the whole population
  - \> 82 % for active population sample
- Phone company network upgrade is needed to provide precise location : "it will take time"
- Good cell cover in most of French landscape
- Html 5 functions *getCurrentPosition()*
- ➢ Growing of cellular owners with GPS and data option

The concept

- Use the cellular browser self-location function
- A html 5 based Website on the net
- The site's ULR sent to the caller by SMS
- The smartphone owner has to open the URL received
- The website ask the browser to access to the smartphone location (GPS or WIFI)
- The user also has to formally allow the location transmission

Benefits / limitations

Benefits

- **Very precise location** : 5 m
- **Caller allowed** (legal)
- Quick < 120 s
- Durable location settable: movement : from or to guidable

- Hours of search limited to a few minutes for helicopter's rescue teams
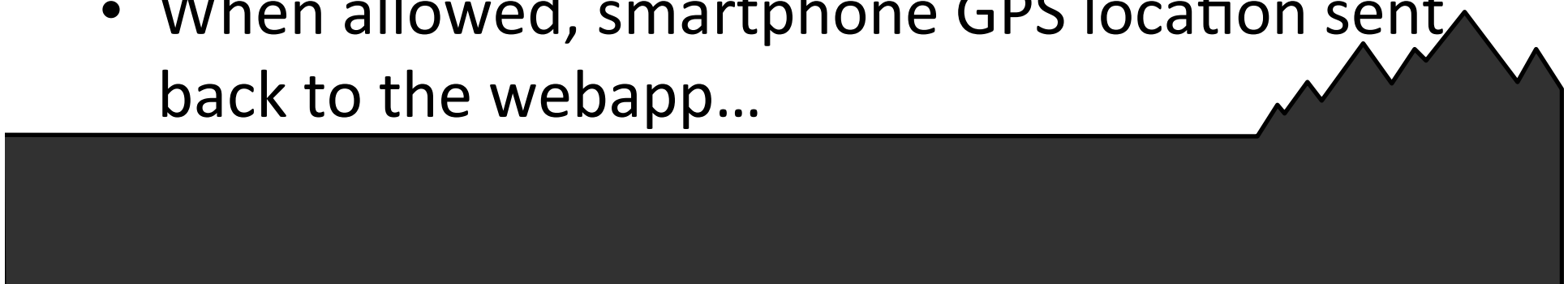
Limitations

- Smartphone with GPS and data access needed
- Distortion inside structure (up to 900 m)
- **GPS enabling (ability) : User dependent**
- Speed depending of local data access GPRS to 4G

Scenario

- PSAP call reception

- Phone Cell number recognition

- SMS sent to the caller phone number including an URL & a singular reference

- By activating the website url, gsm and geoloc PHP based webapp linked

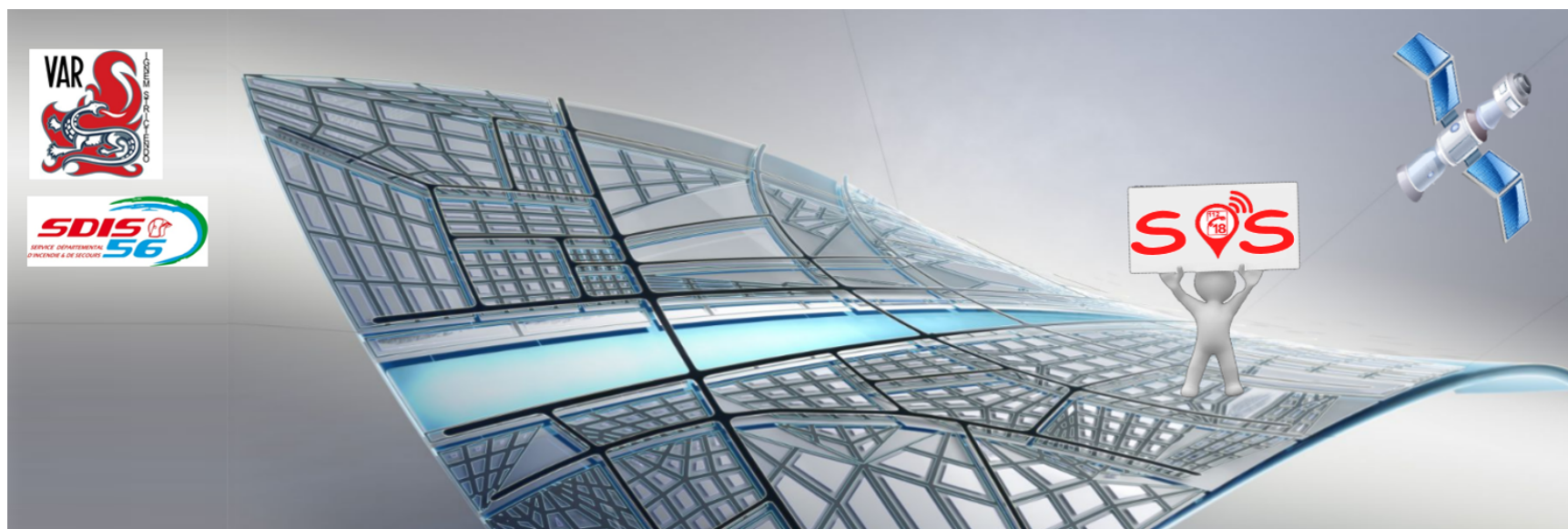- When allowed, smartphone GPS location sent back to the webapp...

- Film

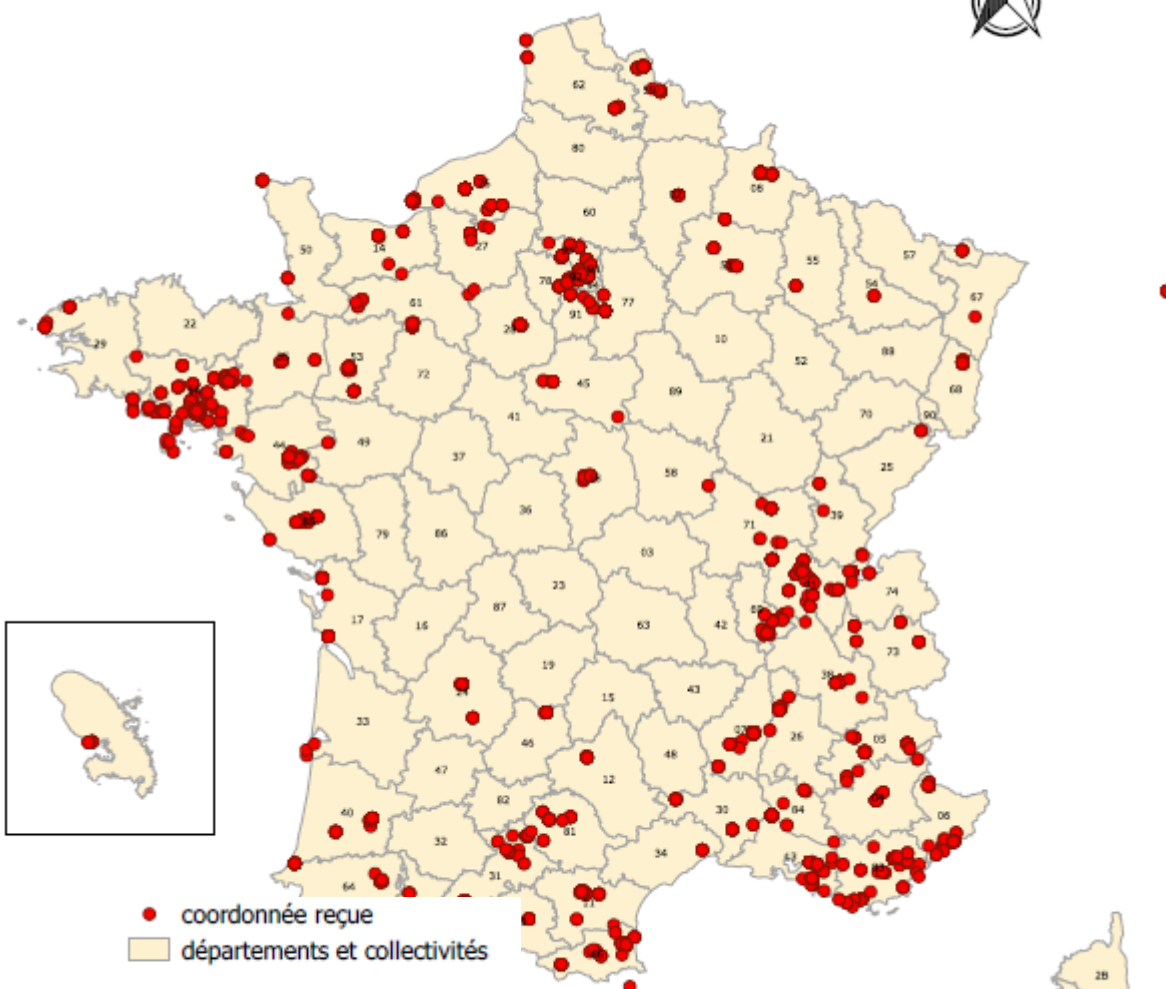*Dessin René Dosne / SPF Mag (édition n° 1086)*

Contacts

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6000 Short message sent since 2015

- 70 SDIS + BMPM
- DAM (CROSS + MRCC)
- 4 SAMU
- CNR114

coordonnée reçue

départements et collectivités

Sources : Geoloc18_112
Fait par le SDIS83 - service cartographie
Le 08/04/2016

Future improvement

- PSAP Software integration by Soft providers
  - Existing GIS interface for mixing Caller and existing rescues teams following…

- UK Google development on Android Operating system : an automatic SMS send when emergency number is composed

- GenLoc and Geoloc18_112 Hackatlon participation