Michel Monneret, Director - French Digital Agency for Civil Protection

"Multimedia Platform in Firefighters Control Room"

#TechForRescue @ANSC_Fr

December 5, 2019

This local firefighter PSAP can process from 50 to 100 calls/hour

October 15, 2018
South of France

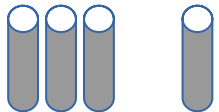670 calls to 18-112 within the first hour

Today, Fire and Rescue Services' (FRS) systems are partitioned, poorly scalable and of uneven quality.

Tomorrow, NexSIS 18-112 will allow for a supra-departmental – if not supra-national – operational management and a greater interoperability between FRS. It will also integrate new features.

Today

IT systems are partitioned and do not take advantage of the power of the digital revolution
.
→ **Phones and radios are the main emergency communication tools, data is not sharable.**

The procurement system has shown its limits in terms of cost-effectiveness and innovation.

Sometimes, local technical environments are fragile.
→ **Security levels depend on local capabilities.**

Tomorrow

NexSIS 18-112 is an open, user-oriented and scalable system, allowing for a greater mobility and a better use of data.

→ **Communication will be unified and information-sharing mechanisms will be improved.**

All the FRS will benefit from the best technologies while decreasing their expenses.

The national technical environment is safer.
→ **The digital infrastructure will belong to the Ministry of Interior.**

Emergency calls management in France: embracing the digital revolution.

Current situation

Fragmented and obsolete

➢ There are 13 emergency numbers in France.

➢ There are over 450 Public Safety Answering Point (PSAPs) for the 4 main emergency numbers (112, 18, 17, 15).

➢ PSAPs can only receive voice calls.

➢ There is no dedicated structure handling 112 calls.

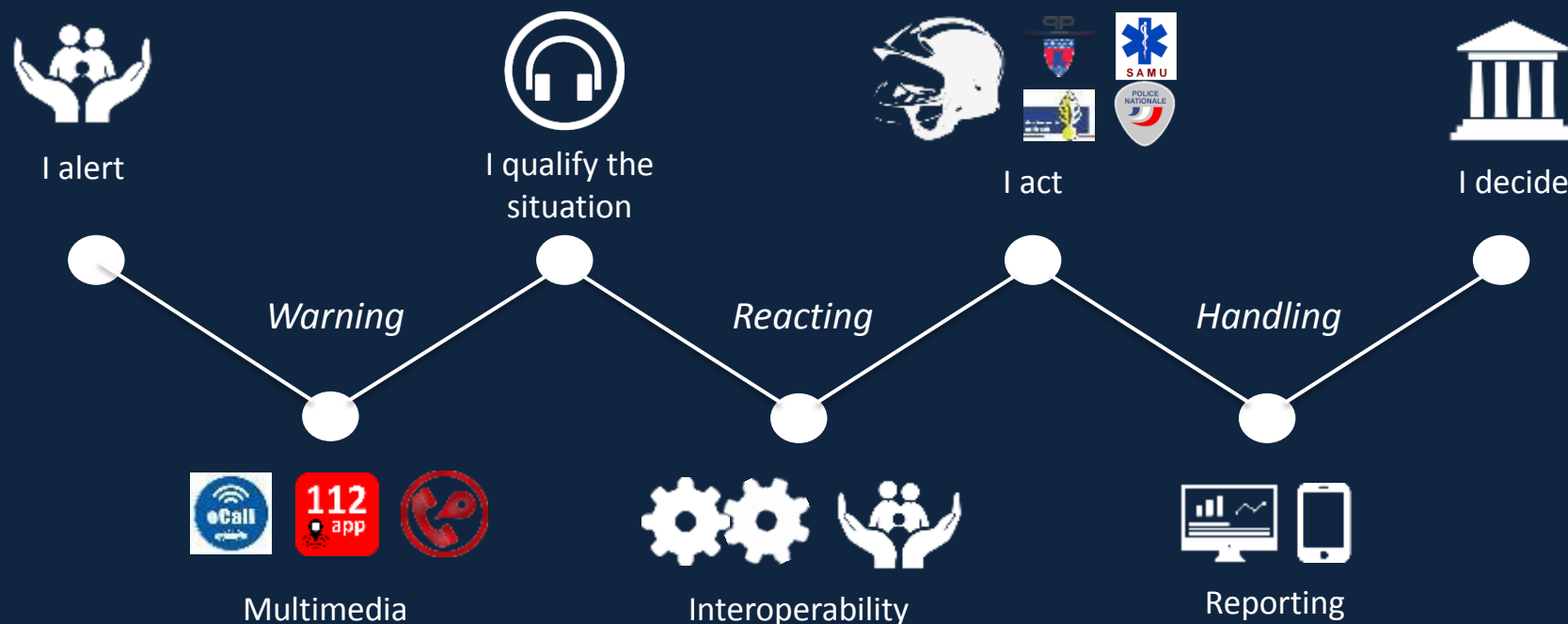## Tomorrow: towards a multimedia revolution

Unified and modern

➢ The rationalisation of the different numbers is in progress.

➢ 18 and 112 :
   ▪ These numbers will operate with the best technologies and will be user-centric.

   ▪ Calls to 112 will benefit from new services: geolocation system, multi-channel and multilingual capabilities, accessibility for hard-of-hearing or deaf people…

Connecting actors thanks to the best technologies in order to better manage emergency situations.
Enabling citizens to play a key role in the rescue chain.

UNIFYING THE RESCUE CHAIN

FROM THE CITIZEN TO THE HIGHEST AUTHORITIES

I alert

I qualify the situation

I act

I decide

Warning

Reacting

Handling

Multimedia

Interoperability

Reporting

NexSIS 18-112 is harnessing the best and sovereign technologies to date.

The best technologies

Ministry of Interior's cloud

Inter-agency Government Network

Emergency Services IP Network

An innovative and unified ecosystem

Co-engineering

Open source and open platform

Agile software development

A data-driven project

Dashboard

Decision-support

Artificial intelligence

The ambition of NexSIS 18-112 is to ensure high-quality emergency services, while adapting to citizens' use of new technologies.

The new system will comply with EU's standards and laws.

Main obligations _vis-à-vis_ the EU regarding 112 number, starting in 2020:

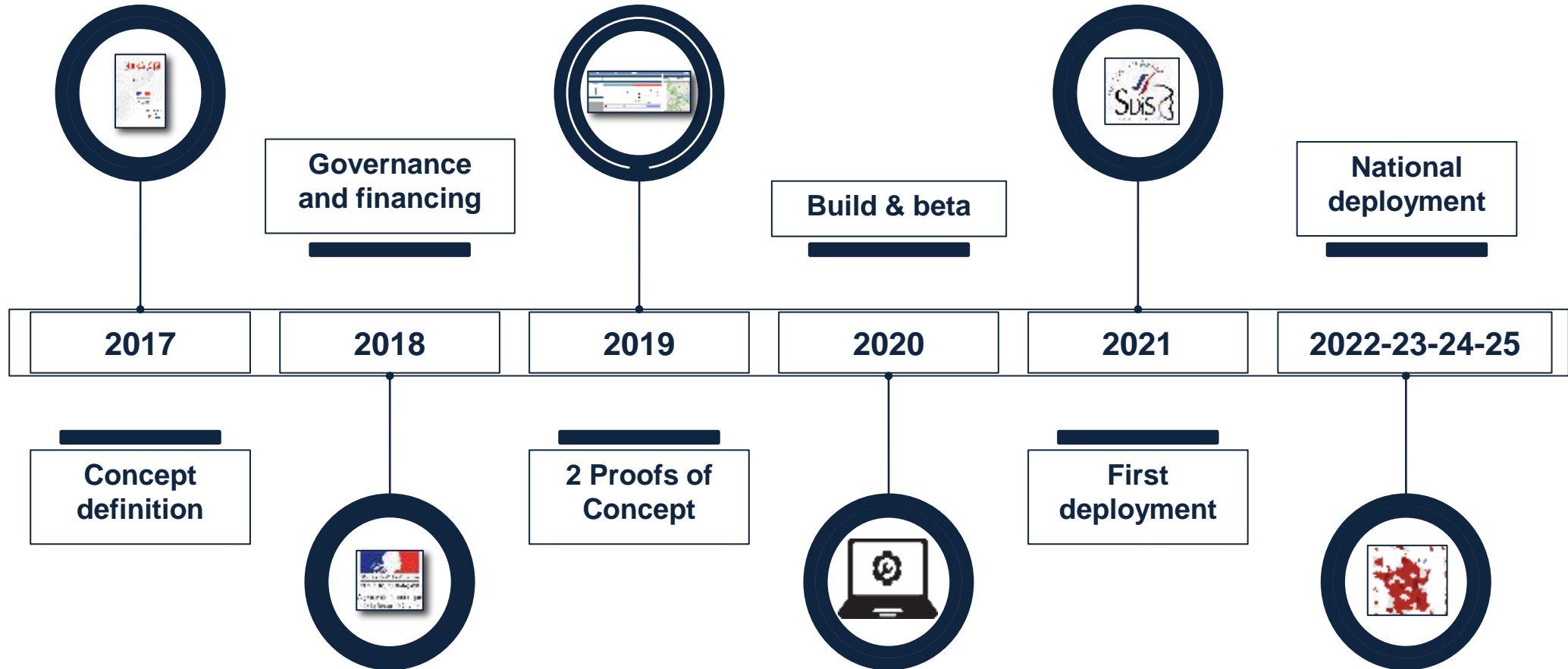Automatic location of callers

Accessibility

Emergency communication tools

Multilingual platform

A Proof of Concept on the alert management system has been completed. Main features proven :

→ Enabling each firefighter PSAP to support each other (call-sharing)

→ Multi-emergency qualification capability for police and medical PSAPs

→ Callers' distress written qualification for police and medical PSAPs (data-sharing)

→ Possibility for callers to send pictures and multi-media content

→ Compliance with European rules

Proof of Concept and first release of the operational management system.

- ➢ **The Agency's workforce is operational.**

- ➢ **We have started to build the system: a minimal Computer Assisted Dispatch has been completed and delivered.**

- ➢ **Integration of a Geographic Information System (GIS) in the operational management system.**

- ➢ **We are only 1 year away from the release of the first complete version!**
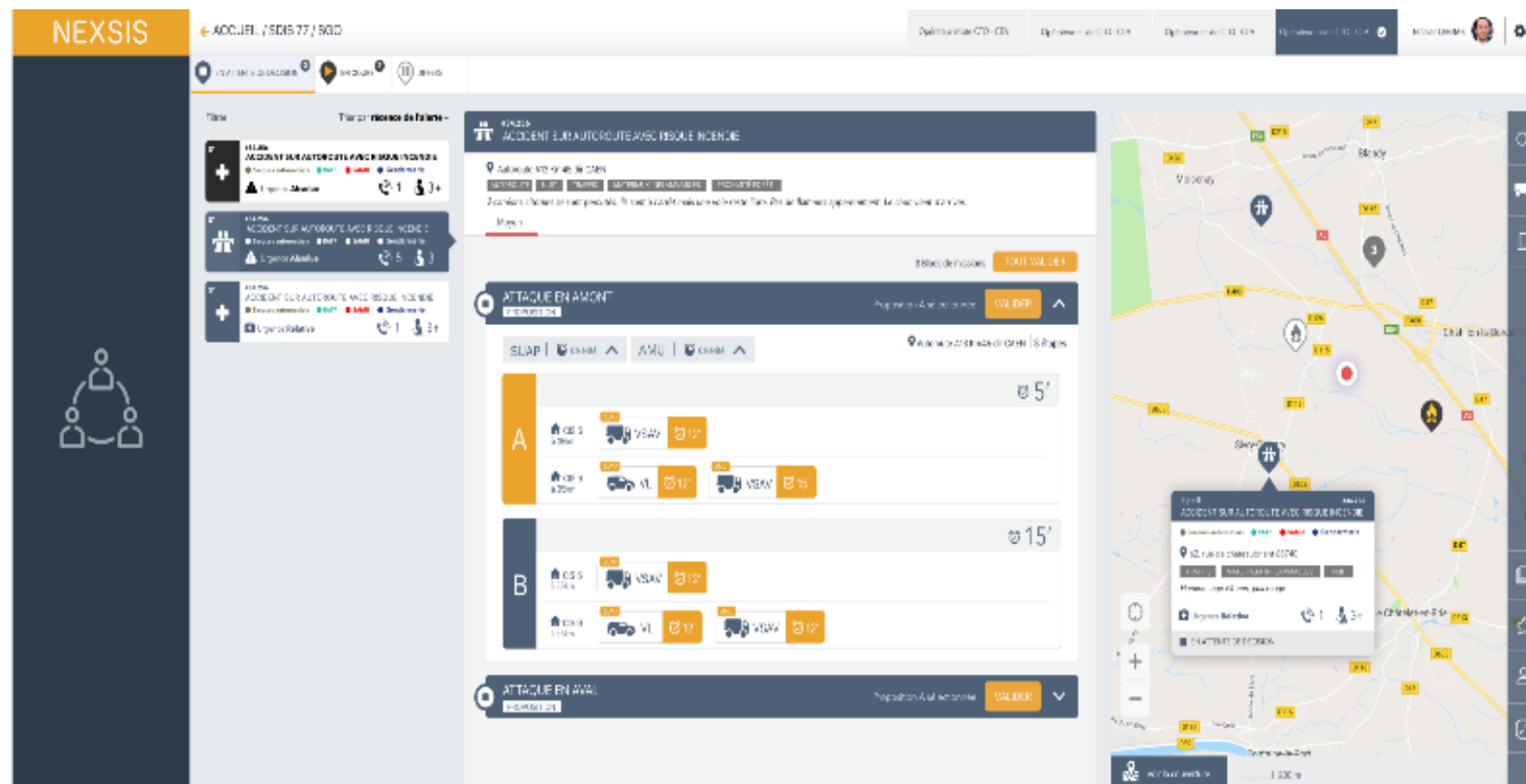
The first experimentation of the Advanced Mobile Location (AML) is being launched.

- **Currently tested in 4 departments: Alpes-Maritimes, Morbihan, Nord and Var.**
- **Will be activated in the entire country in 2020 and will be integrated in NexSIS 18-112.**
- **Will operate with IOs and Android :**
  - ➢ **with 18 and 112 emergency numbers in the short-term / with all emergency numbers in the long-term.**

From caller to PSAP

Advantages for the victim (incl. hard-of-hearing or deafened people)

- ➢ Automatic geolocation in emergency situations.
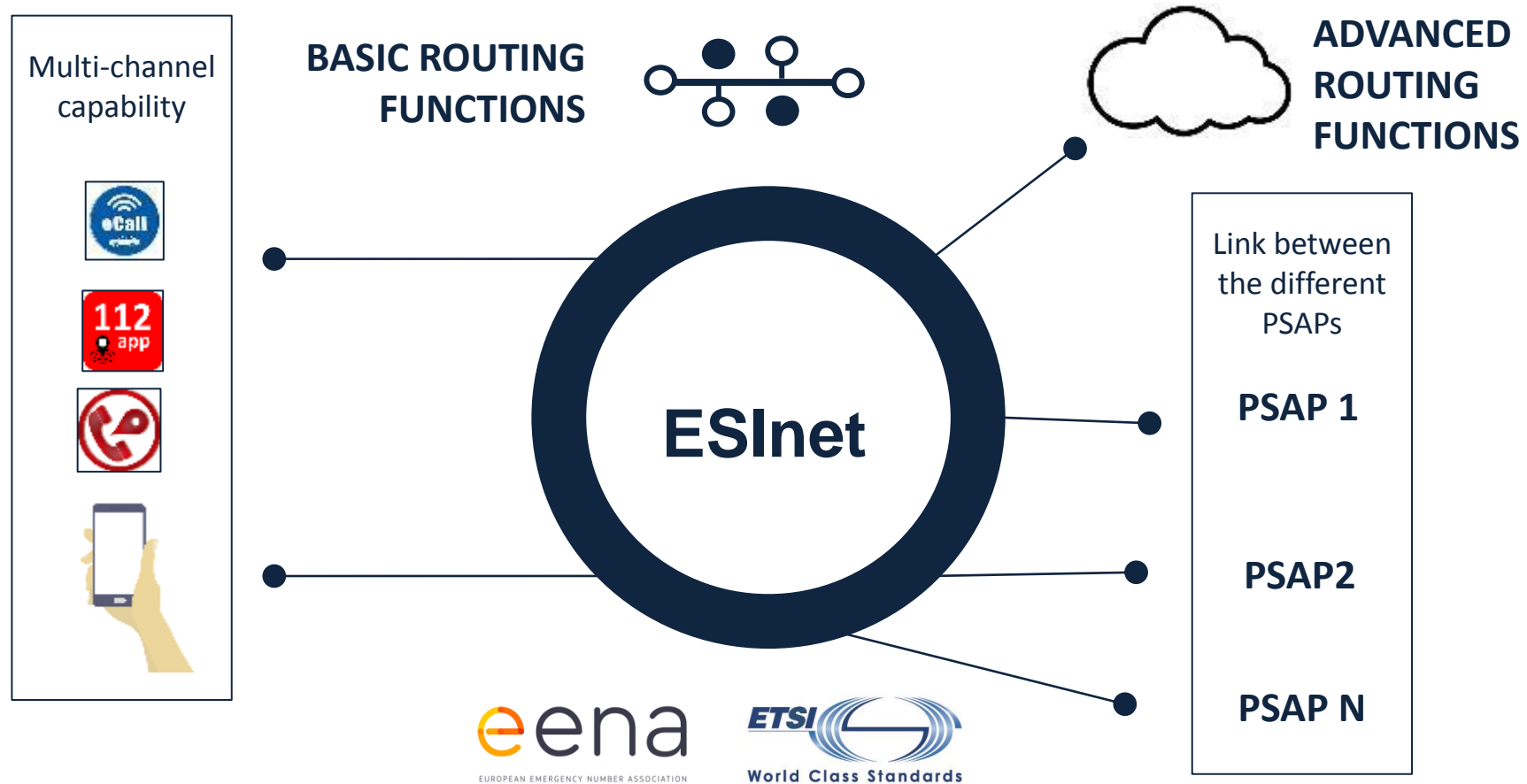
- ➢ No application has to be downloaded.

Advantages for the emergency call-centers

- ➢ Time savings (30 seconds on average).
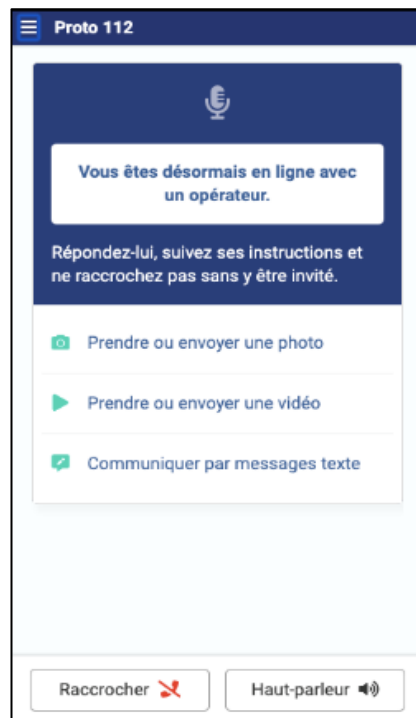
- ➢ Higher precision compared to the previous system.

"Next Generation 112" is on its way to deliver an efficient 112 service in France.

Multi-channel capability

BASIC ROUTING FUNCTIONS

ADVANCED ROUTING FUNCTIONS

ESInet

Link between the different PSAPs

PSAP 1

PSAP2

PSAP N

eena
EUROPEAN EMERGENCY NUMBER ASSOCIATION

ETSI
World Class Standards

A mobile app is being created for 18 and 112 emergency numbers.
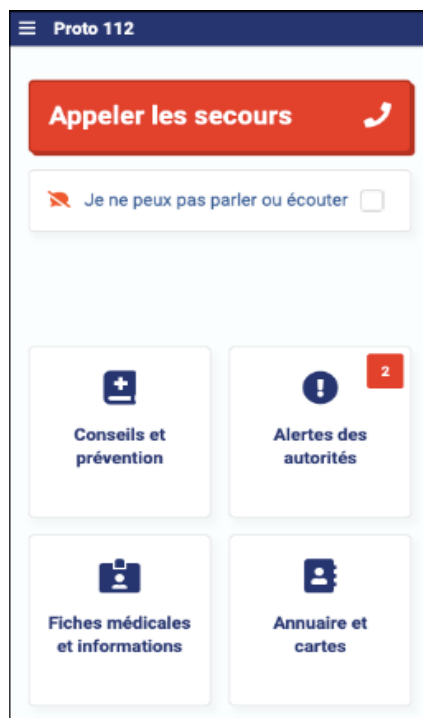
- A UX designer has been recruited to create a prototype of the 18-112 mobile app.

- A questionnaire system will enable to address calls according to the level of emergency.

- The app is also designed for hard-of-hearing or deaf people.

- A series of tests with a large users committee will allow to design a successful app.

- This app will constitute a basis for one of the features included in NexSIS 18-112.
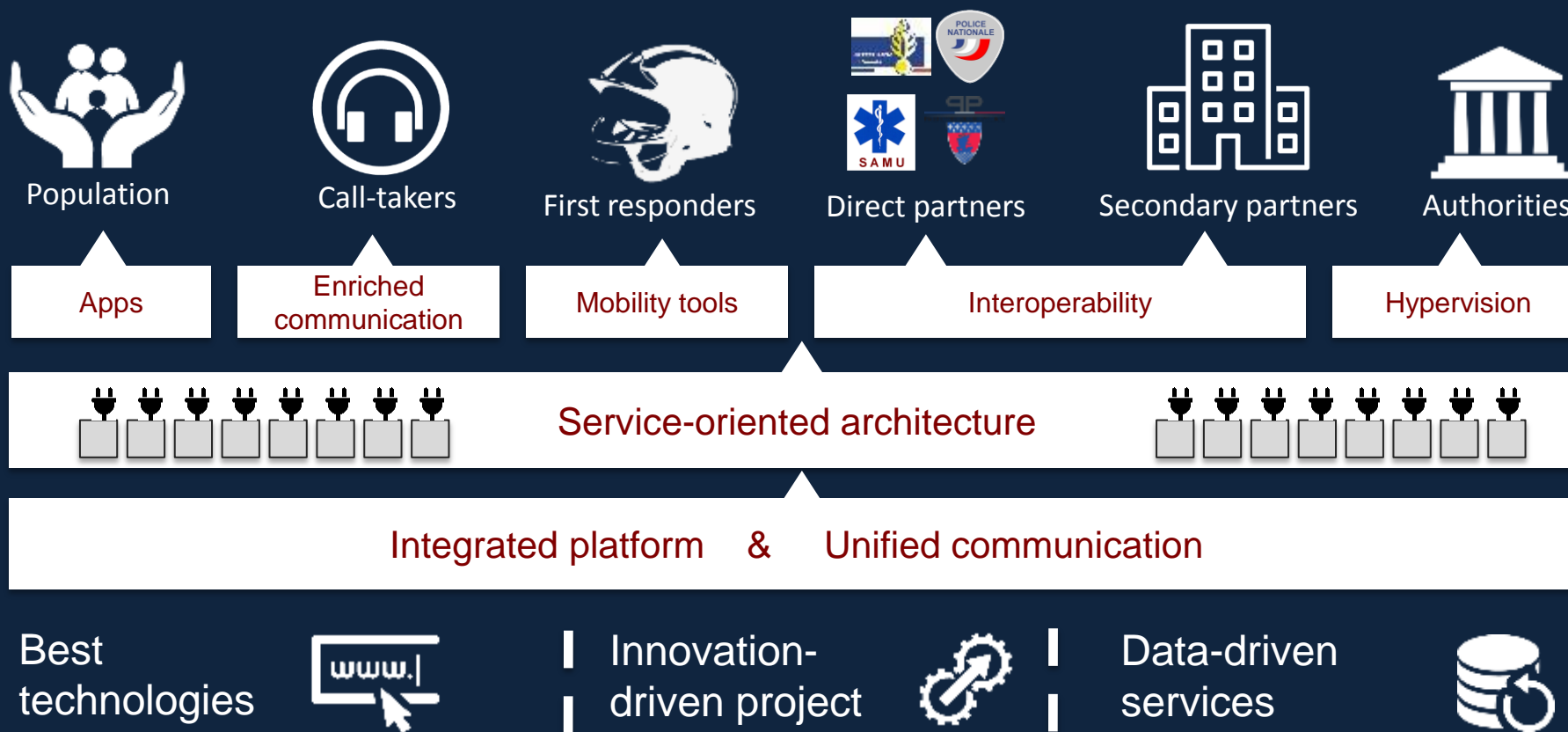
Digital platform: key numbers

1 — system to connect 99 PSAPs : ESInet

240 000 — firefighters connected

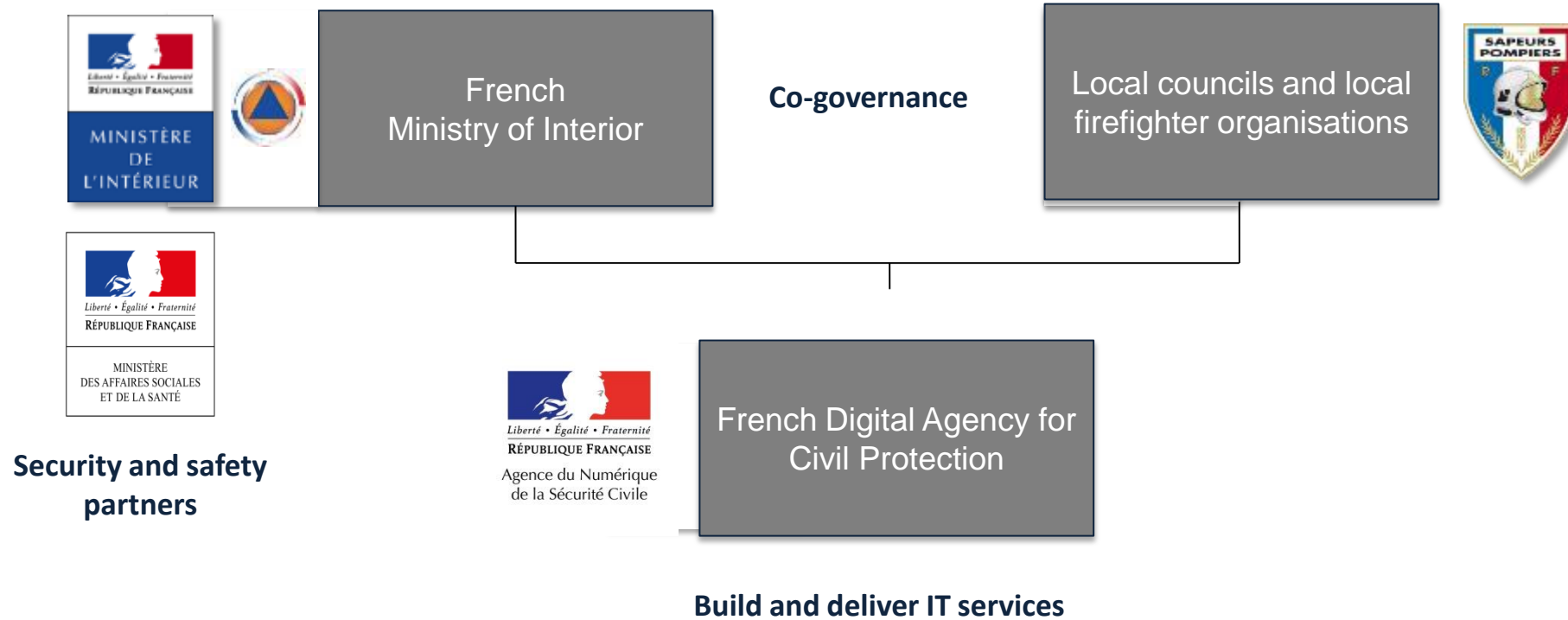**500 000** — public security forces connected

67 000 000 — citizens better protected

Thank you for your attention!

Annex 1:
NexSIS 18-112 in the French public safety landscape

French
Ministry of Interior

Co-governance

Local councils and local
firefighter organisations

**Security and safety
partners**

French Digital Agency for
Civil Protection

Build and deliver IT services

New possibilities for:

Victims

Witnesses

Rescue actors

➢ **New communication options for callers: chat, pictures, video…**

➢ **First aid capabilities through mobile apps for citizens who are nearby and can participate to the rescue process.**
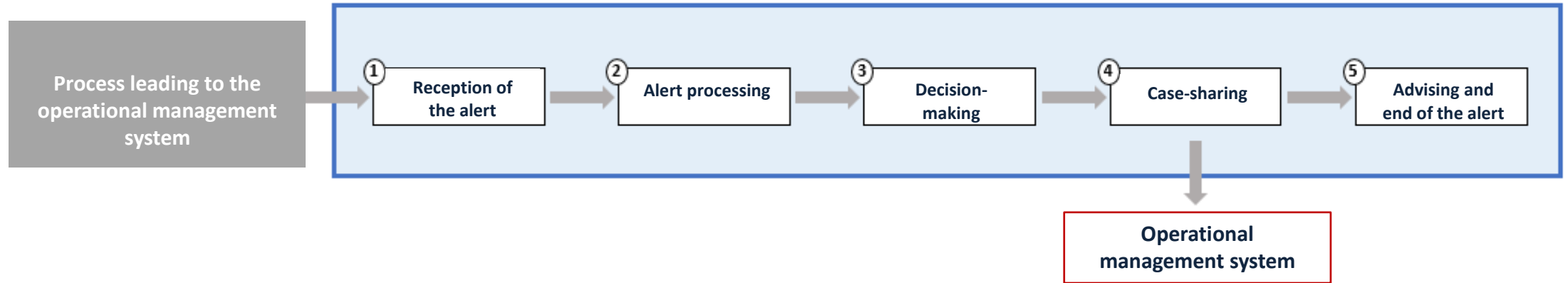
Advantages of the geolocation:

➢ **A quicker response**

➢ **Better information about the incident area**

➢ **Better coordination among the rescue chain**

Advantages of the number recognition:

➢ **More information about the caller (e.g. nationality)**

➢ **Easier collection of information (e.g. use of relevant language)**

Process leading to the operational management system → ① **Reception of the alert** → ② **Alert processing** → ③ **Decision-making** → ④ **Case-sharing** → ⑤ **Advising and end of the alert**

④ ↓ **Operational management system**

The operational management system included in NexSIS will allow:

➢ To mobilize and allocate available and relevant human and material resources to respond to an emergency situation.

➢ To oversee the interventions and keep track of all emergencies occurring in a specific area and their evolution.

Two main functionalities at the core of the system:

➢ A computer assisted dispatch (CAD) aiming at disseminating alerts to the appropriate fire and rescue department.

➢ An information, command and control (ICC) tool, which includes instant visualization of ongoing interventions, data-sharing between operational centers and units in the field, and other features such as reflex sheets or diagnosis assistance.

NexSIS
SI des Secours de nouvelle génération