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# **REACH112**

**REsponding to All Citizens needing Help**

**An introduction and some details on the  
emergency access pilots**

*Uberto Delprato  
IES SOLUTIONS*



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# Agenda

- Accessibility of 112 in Europe
- REACH112
- Pilot countries
- Project partners
- Deployment
- Devices
- Description of the pilots
- Challenges





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## Accessibility of 112

- **70 million citizens** with hearing impairment in Europe
- According to the EC, 112 accessible only in **7 countries**
- Various trials in the EU countries have revealed that:
  - ✓ Fax is a slow procedure that requires pre-registration of users
  - ✓ SMS is widely used but less effective in an emergency due to unforeseeable time transmission
  - ✓ Specific proprietary chat services implemented at local level will not spread all over Europe.
- The experts unanimously agree these are **not viable on the long run.**





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# REACH112 background

1. European Parliament Resolution on Sign Language 1998 (B4-0985-98)

Asks to: "ensure compatibility of telecommunications text and videophone equipment for deaf people across Europe."

2. INCOM report to COCOM 2004 (COCOM 04-08)

Reports need for urgent actions to improve access to communication for people with disabilities.

Puts highest priority on real time communication and emergency service access for deaf, deafblind hard-of-hearing and speech impaired people.

Fragmentation and low functionality observed.

Recommends to use the Total Conversation standards in IP networks to achieve good functionality and interoperability.

SIP with RFC 4103 for text.





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## REACH112 Contract

Project Acronym:	REACH112
Project Reference:	CIP-ICT-PSP-238940
Contract Type:	CIP Pilot Action B
Start Date:	01/07/2009
Duration:	36 months
End Date:	30/06/2012
Project Cost:	8,800,000 €
Project Funding:	4,4000,000 €
Project website:	<a href="http://www.reach112.eu">www.reach112.eu</a>

***PROJECT CO-FUNDED BY THE EUROPEAN COMMISSION***



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## Pilot Countries

5 pilots countries

6 Emergency Services

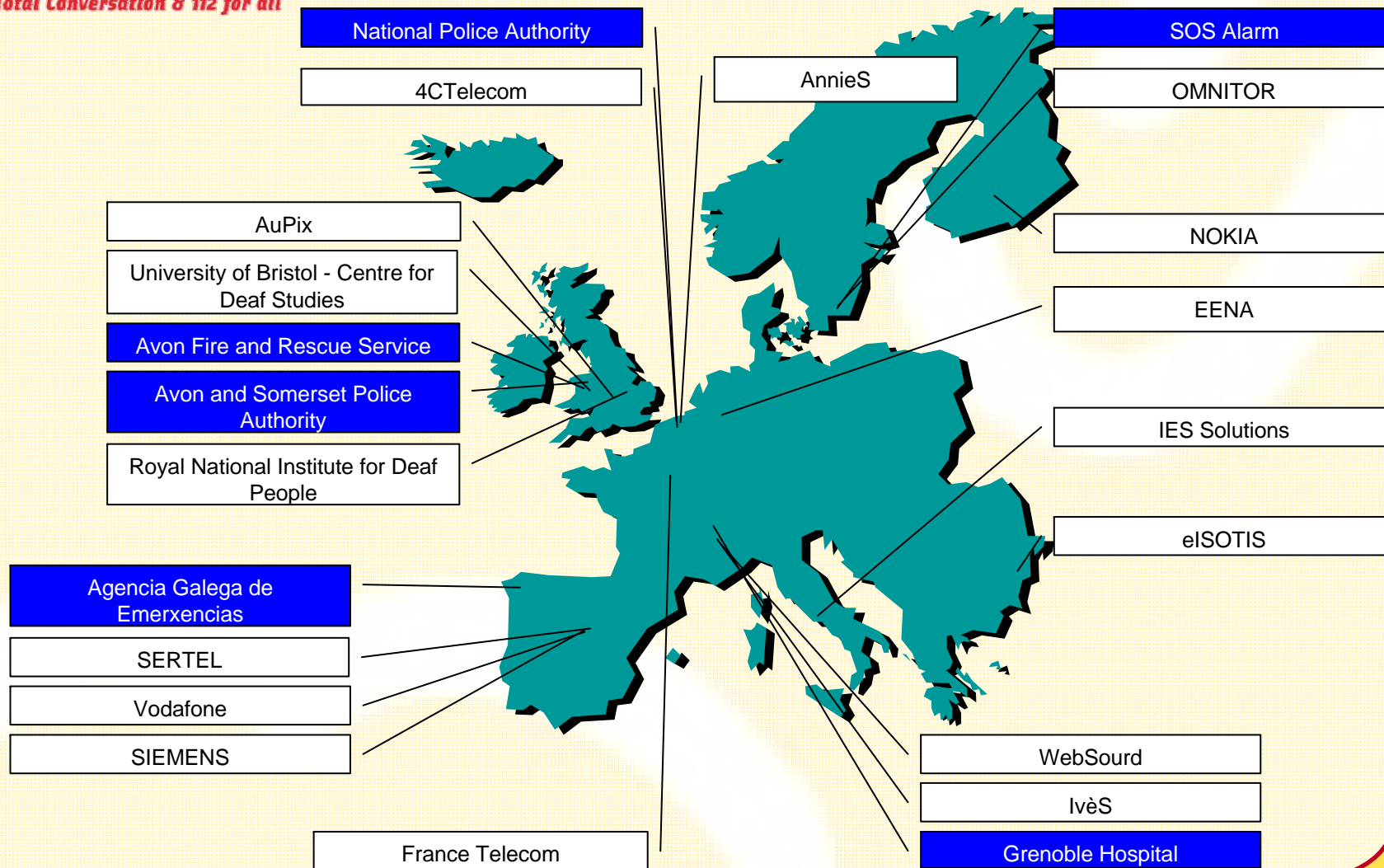






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# Project partners





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## REACH112 rationale

1. REACH112 will implement an accessible alternative to traditional voice telephony that will be suitable for all.
2. While people with disabilities find it hard to communicate with the existing solutions, REACH112 will provide modes of communication so that they will find a way to communicate in each situation, may it be with a live real-time text conversation, with sign language, with lip reading, with voice or with any simultaneous combination of these modes described by the concept of Total Conversation.
3. The service will be of benefit for all.





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# Objectives

1. Improve person to person communication
- 2. Improve accessibility of 112**
  - **IP devices** to be used by citizens
  - **Total Conversation:** simultaneous voice, real-time text and video (for sign language for instance)
  - Use of **relay services** (e.g. sign language to voice)
  - **12-month** with real emergency calls (if any)





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# Implementation

1. REACH112 will implement a 12-month pilot in Sweden, UK, The Netherlands, France and Spain allowing disabled users to communicate at a distance with each other and directly with the emergency services
2. IP devices will be provided in the homes, workplaces and on the move, connecting the users simultaneously in video, voice and text.
3. The service will be integrated with existing TC platforms and emergency service frameworks.
4. Additionally, a protocol for the exchange of information between emergency services will be made available.





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- PC/Laptops
- Videophones
- Textphones *i.e. telephone with a screen and a keyboard, designed for people with hearing problems.*
- Mobiles 3G video phones
- Mobile text phones
- Smartphones
- Total conversation phones

## Devices

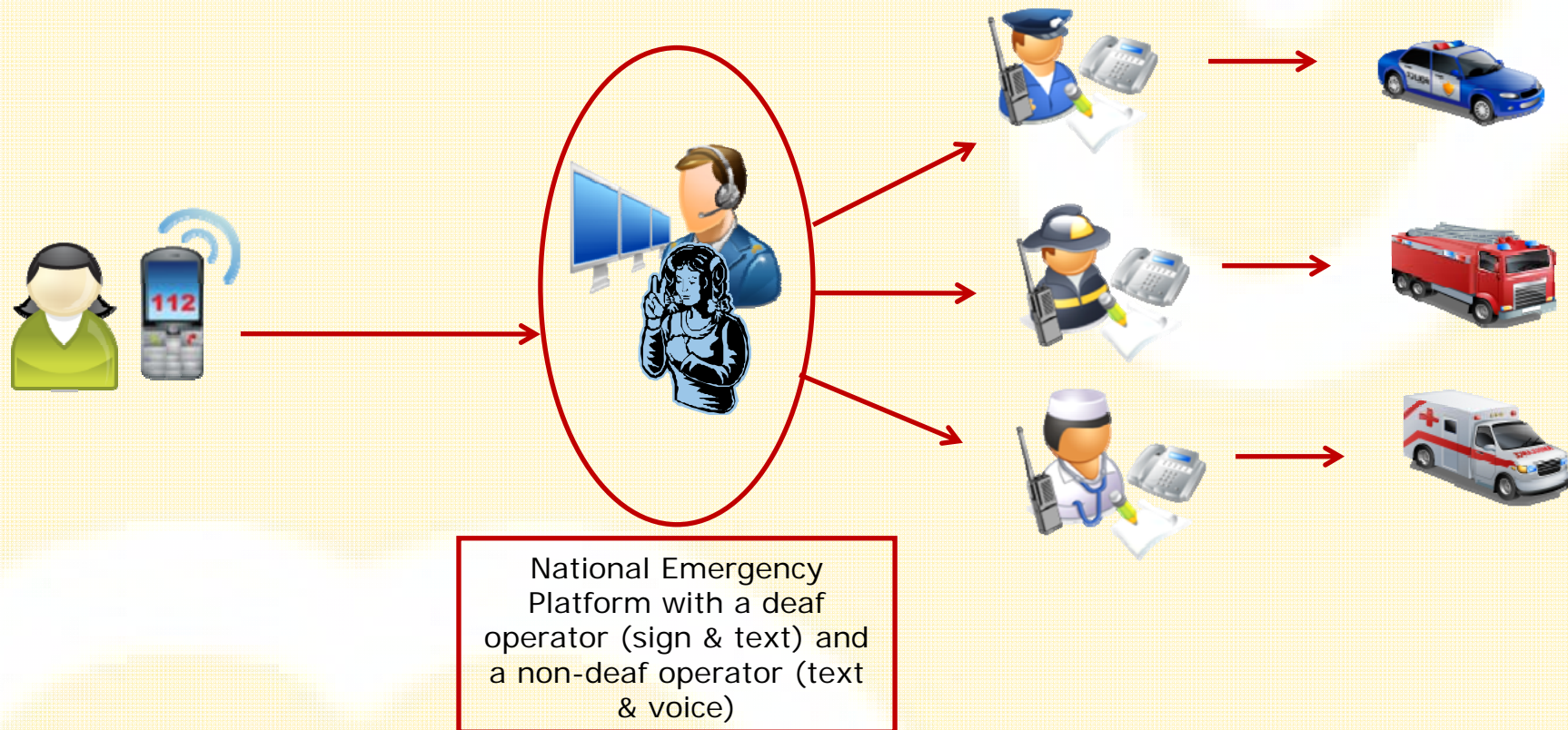






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# Pilots: France

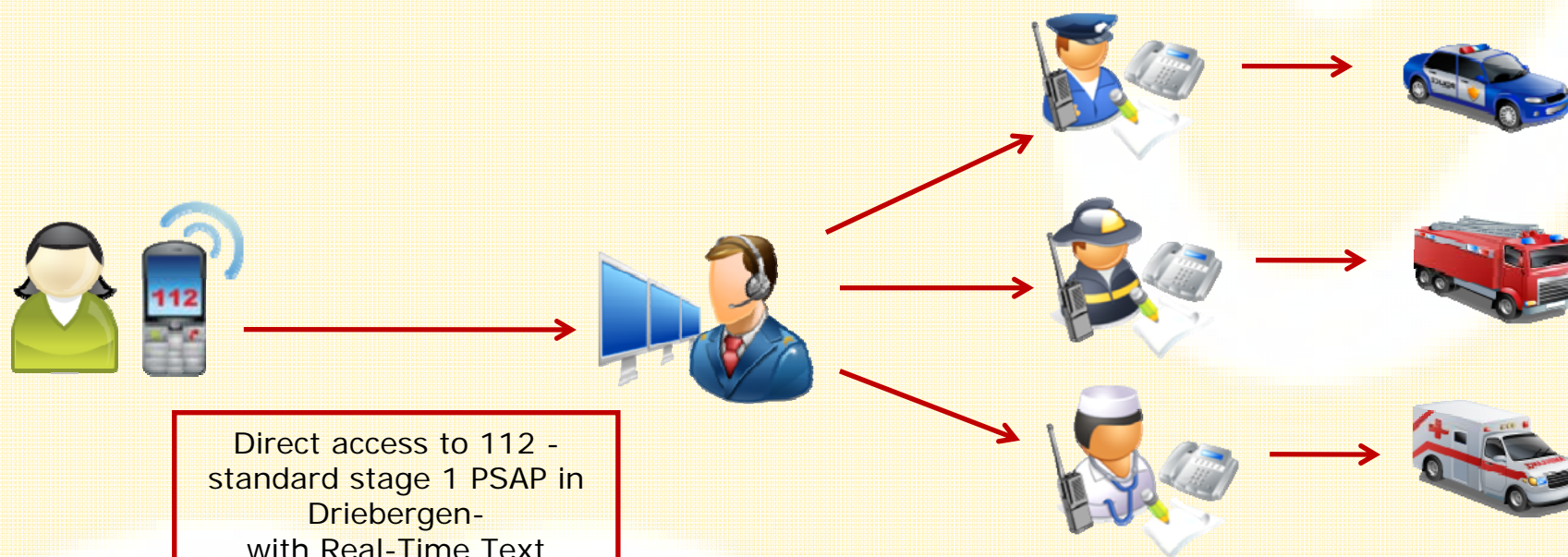






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# Pilots: the Netherlands



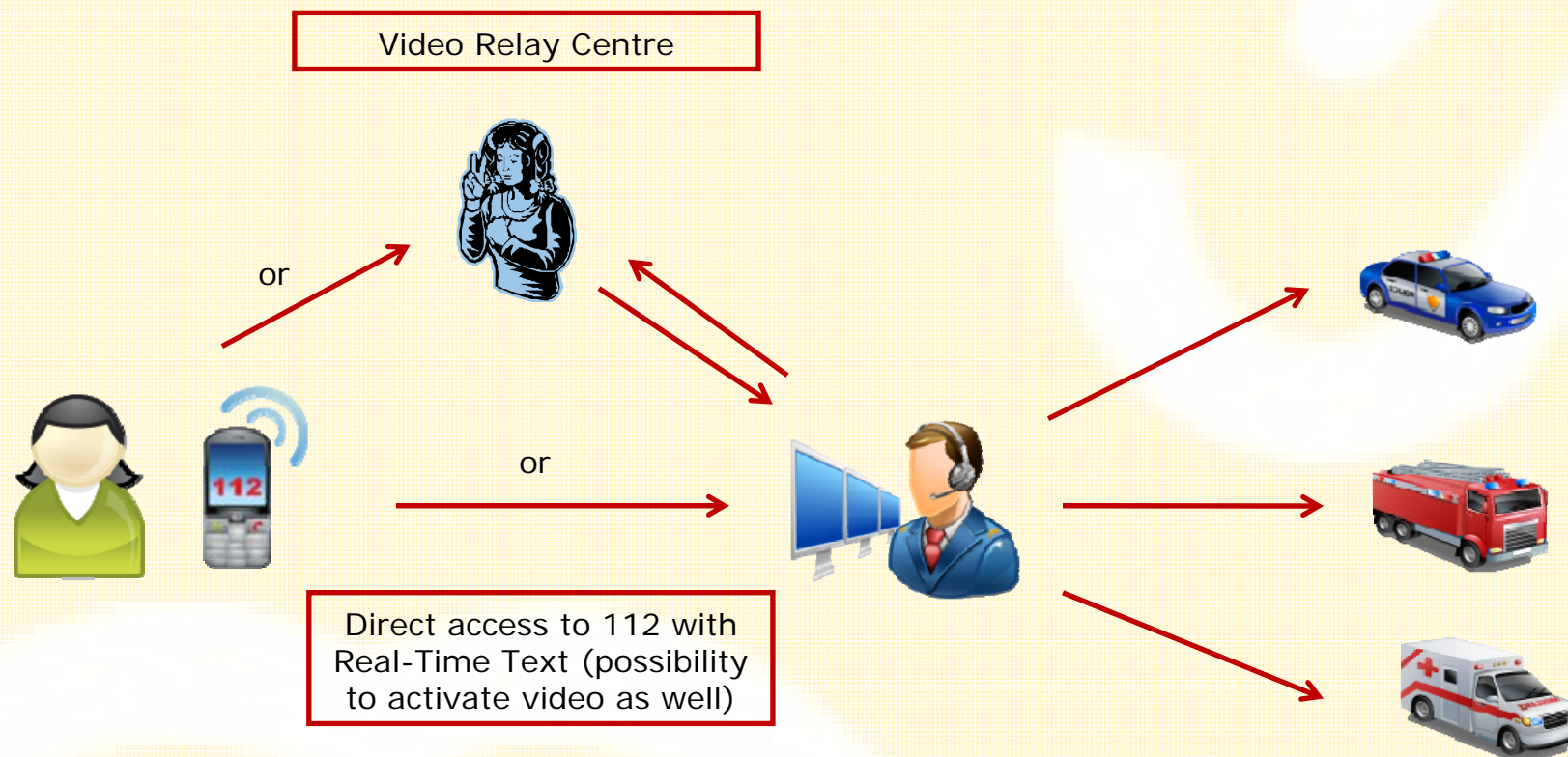
Direct access to 112 -  
standard stage 1 PSAP in  
Driebergen-  
with Real-Time Text  
(Real-time text  
discussions ultimately  
continues with local  
PSAPs)





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# Pilots: Galicia, Spain



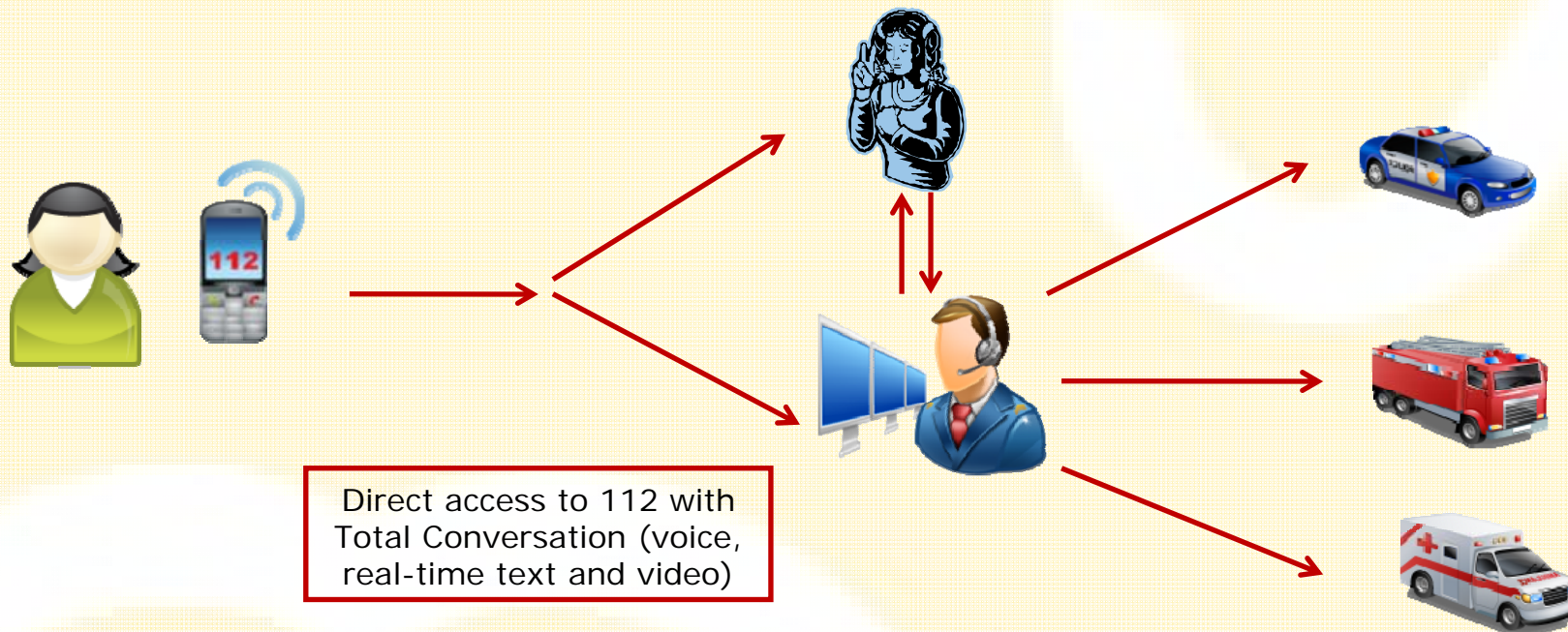




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# Pilots: Sweden

Video Relay Centre  
activated at the same time

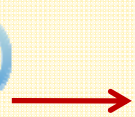






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### National pilot



Relay Centre:  
sign language/text to  
Voice

### Local pilot



Local emergency center  
(fire, EMS or Police) with  
sign language operator  
using video, text and voice

## Pilots: UK





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## Challenges for emergency services

- Adaptation of emergency services to **new media**: video and real-time text
- **Routing** the emergency call to the right PSAP
- Getting **caller-location information**



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## Challenges for industries

- Full interoperability of services and standards
- **Routing** of the emergency calls and **relay** with third parties
- Getting **caller-location information**
- **Make it a service valuable for all**





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# Uberto Delprato

## IES SOLUTIONS

**More information:**

**[u.delprato@i4es.it](mailto:u.delprato@i4es.it)**

**[www.reach112.eu](http://www.reach112.eu)**