



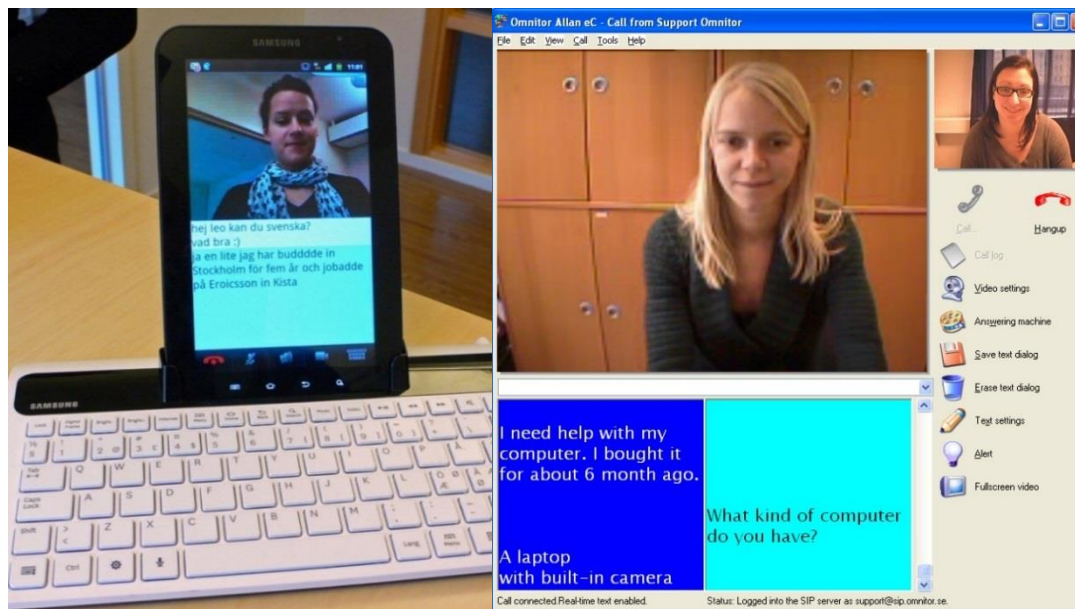
# Welcome to the World of Standards



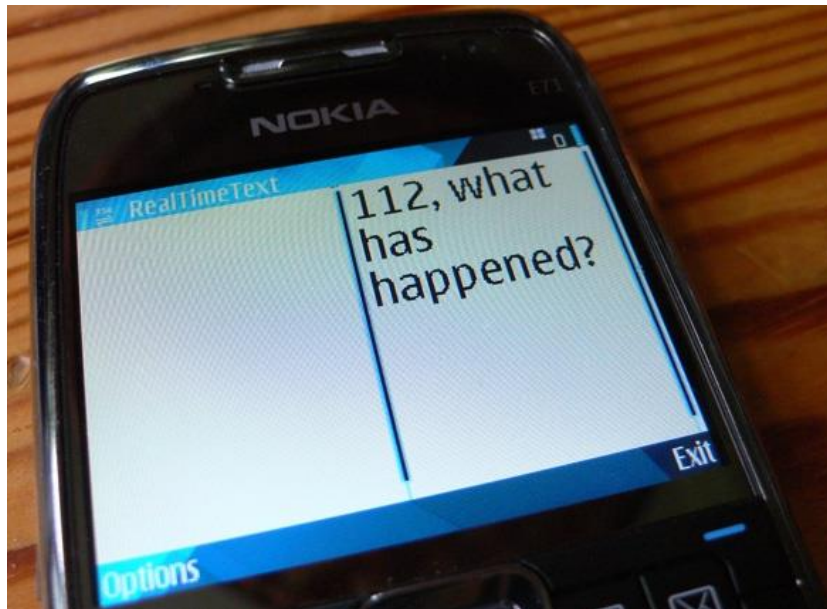
## **ETSI STF489: TOTAL CONVERSATION FOR EMERGENCY COMMUNICATIONS**

Presented by Gunnar Hellström, Omnitor for PSCE 2015, May 27-28, Graz

- Calls with Video, Real-time text and Audio (“TC”)
  - Very useful for deaf, hard-of-hearing, deaf-blind, speech-disabled etc, who may need real-time text for texting or video for sign language.
  - Combination of media provides communication for all.
  - Communication protocols are harmonized and interoperable

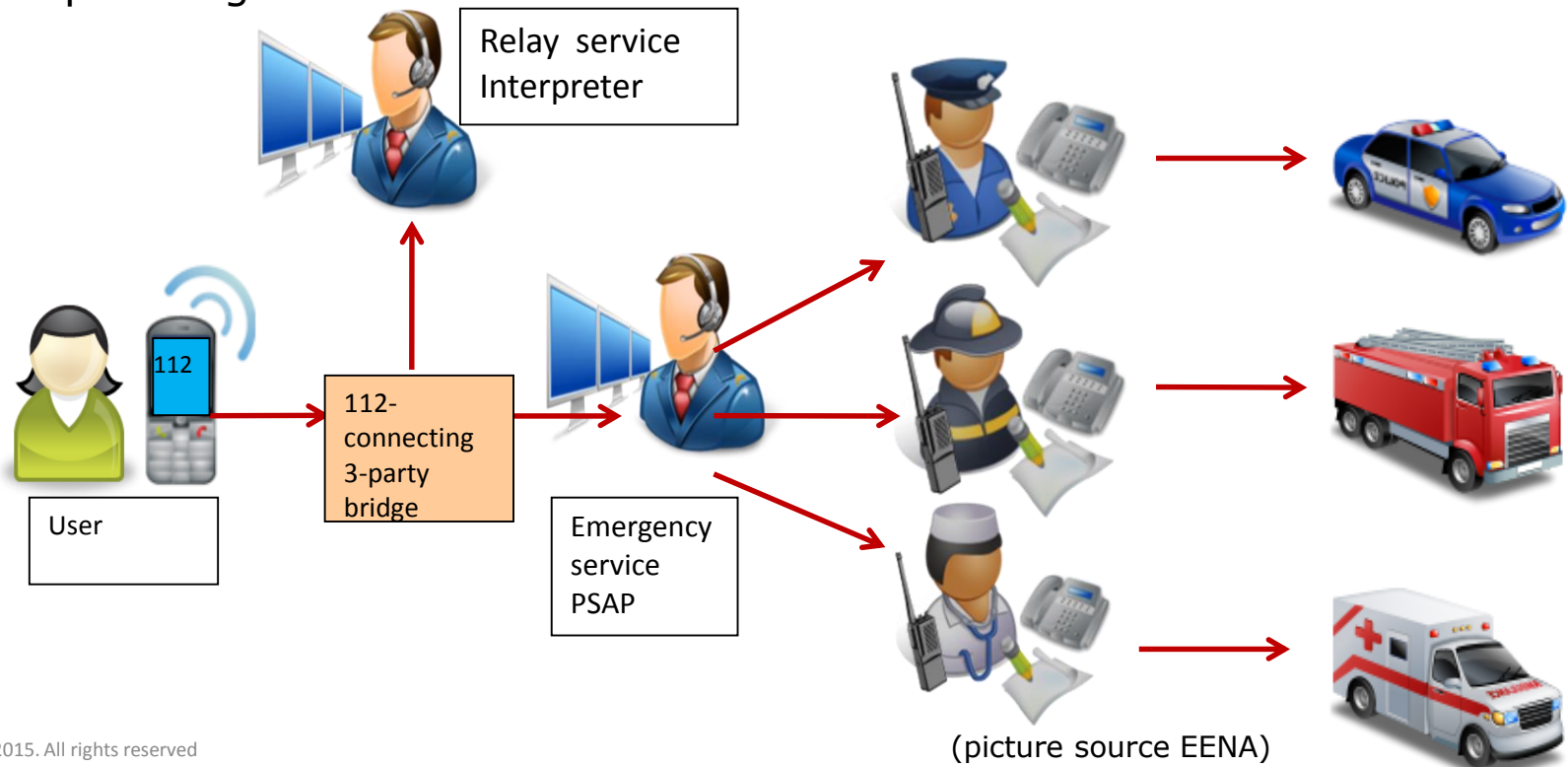


- Common subset of Total conversation is Real-time text and Audio
- Interoperability in common media with full Total conversation
- Real-time text is rapid texting without the waiting for completed messages. Text flows as typed.
- Useful for hard-of-hearing, noisy environments, etc
- Good when video is not needed or not feasible



# Relay service provision

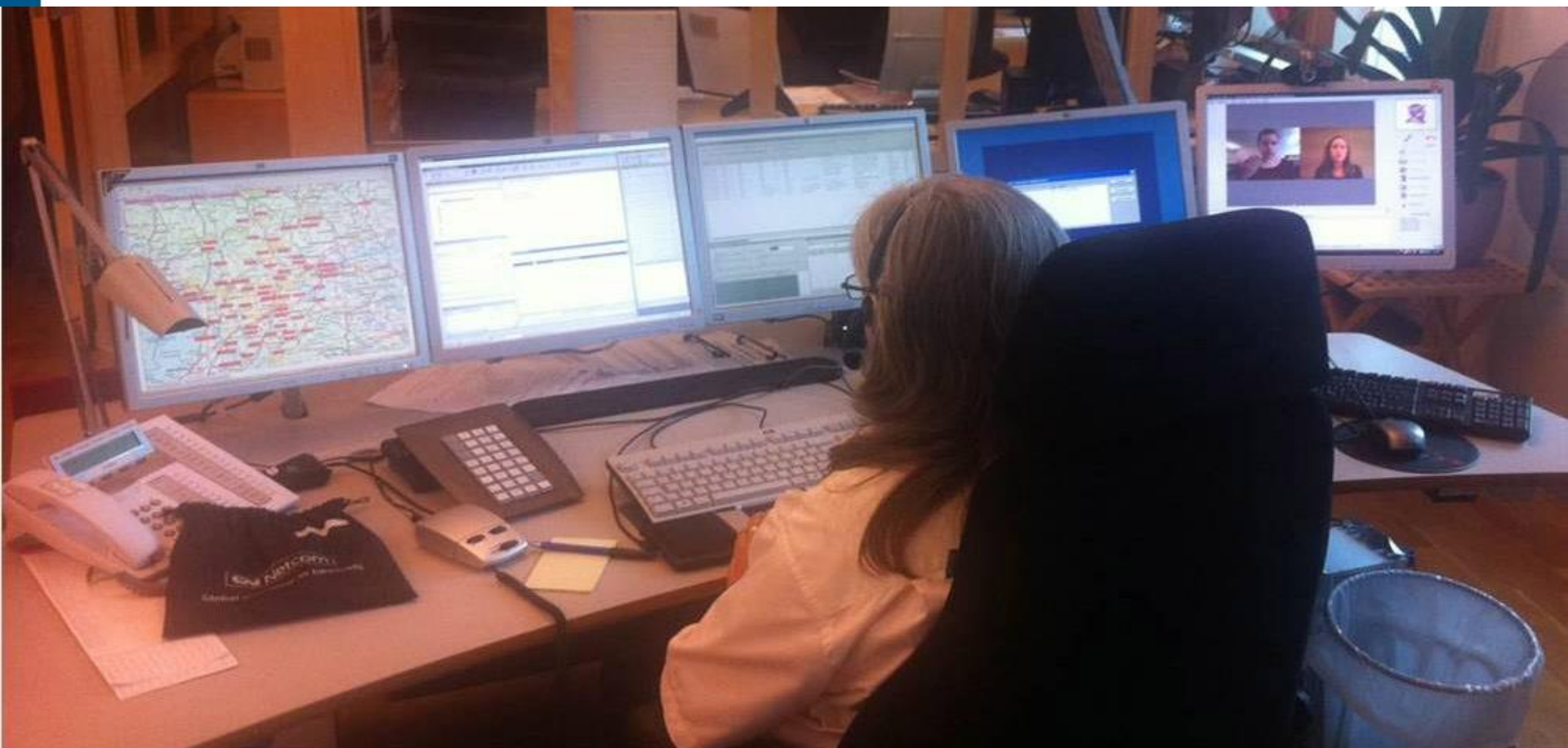
- May be needed when PSAP does not support user preferred language / modality
- Number analysis and routing logic may connect to 112-center and relay service in three-party connection simultaneously.
- Alternatively, PSAP may conference in relay service once session is established
- All parties get all media from each other



# The 112-center view of Total conversation



- 112-terminal with 3-party Total conversation view during EU-project REACH112
- video and real-time text display far right



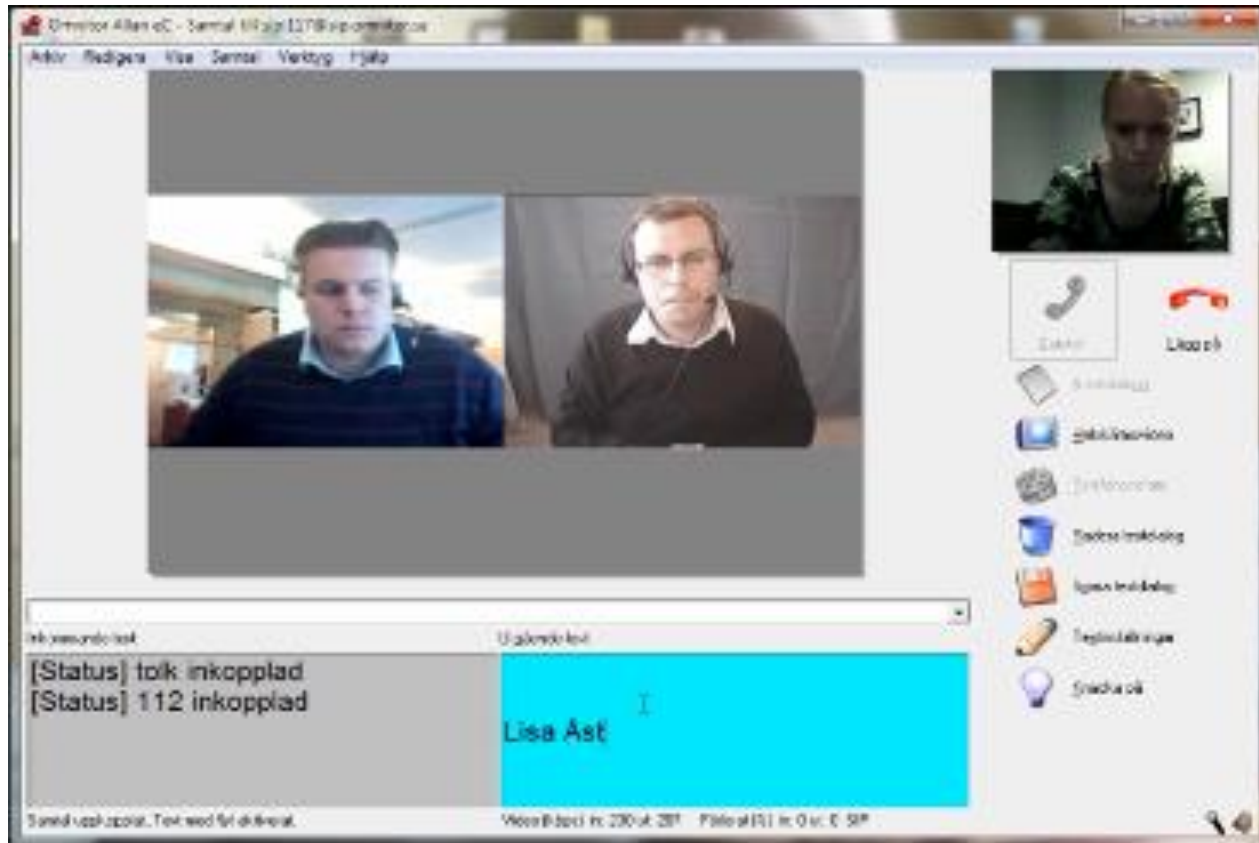
(Picture source SOS Alarm)

# Example of Total conversation 112 call -for sign language user



(click on picture to show video, also available at <https://youtu.be/mGS5JQboMKE> (provided by Omnitor )

# Example of Total conversation 112 call -for sign-language user of laptop



# Example view of Total conversation 112 call – for sign-language user of mobile phone



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# Benefits of Total Conversation for emergency communications



- 🌐 TC user feel confident by being able to see the call taker
- 🌐 112-operator can assess the situation visually and decide more precise action
- 🌐 Text is also very useful for conveying exact details rapidly. Addresses, names, medicine names etc. ( compare with voice spelling e.g. "Lima Yankee Oscar November" for Lyon )
- 🌐 Real-time text can be used in multiple ways. For whole conversation or in one direction with voice in the other direction depending on user capabilities
- 🌐 Some communication can be done even while waiting for a relay service to be included in the call needed for communication with a sign language user– e.g. by using Real-Time Text

- Requirement in Universal service directive (§26.4)

**”Member States shall ensure that access for disabled end-users to emergency services is equivalent to that enjoyed by other end-users.**

**Measures taken to ensure that disabled end-users are able to access emergency services whilst travelling in other Member States shall be based to the greatest extent possible on European standards or specifications published in accordance with the provisions of Article 17 of Directive 2002/21/EC (Framework Directive),**

**and they shall not prevent Member States from adopting additional requirements in order to pursue the objectives set out in this Article.”**

- 🌐 **Situation for sign language and text users during emergency in foreign country may be complex** - can home country interpreter be linked with visited country PSAP?
- 🌐 **Integration of Total Conversation in 112 call handling platforms – will the transition from voice-only be smooth?**
- 🌐 **Deployment.** Only what you use for daily communication will be used for 112 calls. – will Total Conversation be widely provided and adopted among those who benefit from TC?
- 🌐 **Europe-wide interoperability** is needed for TC user benefit of relay service access and emergency service access when travelling – will this level of harmonization be achievable?

# Current status of standardization and specifications





- Mobile and fixed IMS networks. 3GPP specifications.
  - IMS Multimedia Telephony is Total Conversation
  - IMS Multimedia Emergency Sessions specify support for Total Conversation emergency calls
- IETF specifies SIP based emergency calling
  - Total Conversation included in RFC 6881
- EENA NG 112 LTD specification for IP based Emergency Services
- ETSI Emergency Communications (EMTEL) Total Conversation Access to Emergency Services
  - Report: TR 103 170
  - Specification TS 101 470



- Create guide for implementation of Total Conversation for Emergency Services.
  - Standards exist, but are they complete and implementable?
    - Analyze and propose complementing work
  - Requirements exist, but are they well expressed.
    - Analyze, communicate, check and report
  - Gap analysis
    - Analyze, identify gaps, propose actions
- Engage stakeholders
  - To ensure their requirements are understood
  - To raise awareness of our Total Conversation for emergency communications supports Universal Service Directive Article 26.4.
- EU has co-funded STF489 work

- Goal 1: Awareness about usefulness of and requirements for Total Conversation
- Goal 2: Report ETSI TR 103 201 Guidelines on implementation and usage of Total Conversation.  
March 2016.
- Goal 3: Change proposals to existing standards and proposals for new standards work, if found required.

-  Is your country implementing Total Conversation access to 112?
  - Does 112 in your country support or plan to support real-time texting with the 112 PSAP operators?
  - Does 112 in your country support or plan to support sign language communication with 112, either via an interpreter or with sign language competent PSAP call takers?
-  Does 112 in your country co-ordinate with other 112 services to provide 112 service for travelling Europeans with and without disability?
-  Is Total Conversation provided for user-to-user calls in your country? -what you use for everyday calling is what you expect to use in emergency.

# Thank you!



## STF 489

[https://portal.etsi.org/STFs/STF\\_HomePages/STF489/STF489.asp](https://portal.etsi.org/STFs/STF_HomePages/STF489/STF489.asp)

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### **About ETSI Specialist Task Forces (STF):**

*STFs are teams of highly-skilled experts working together over a pre-defined period to draft an ETSI standard under the technical guidance of an ETSI Technical Body and with the support of the ETSI Secretariat. The task of the STFs is to accelerate the standardization process in areas of strategic importance and in response to urgent market needs. For more information, please visit the [STF home page](#)*

### **EU co-financed**

*The work carried out in STF 489 is co-financed by the EC/EFTA in response to the EC's ICT Standardisation Work Programme.*

***This information is based upon STF489 working assumptions. The views expressed do not necessarily represent the position of ETSI in this context.***

