



**WSIS  
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# Relay services and trends in electronic communication

Gunnar Hellström

GHAccess

# Principles and history of relay services

- Relay services provide modality conversion.
- Provides access to interpersonal communication
- First text relay services in 1970's.
- First public video relay services for sign language in 1997 in Sweden and Texas. See picture.----->
- The current relay services assume that the speaking user is called by a telephone number.
- Enormous development in reduced device size and increased network speed .
- There are trends in electronic communication which threaten the usability of current relay services. They need to follow the trends. That is the focus of this presentation.



# Trend 1: Non-number based calling

- **Speech calls are more and more often called without use of number.**
- **Click on a name or button, get a link, make the call without a number.**
- **Relay services need to open for non-number based calling.**
- **In Europe, regulation is ready for the move.**  
**The European Electronic Communications Code, EECC, and the European Accessibility Act EAA require relay services to operate on non-number based calling.**



**Relay service technology and other regions need to follow the trend. Otherwise we will see a reduction in accessibility to communication.**

# Trend 2: Multiparty calling

- More and more calls are made with more than two parties.
- Remote meetings are common.
- It is essential with affordable and smooth access to meetings with relay service support.
- The EECC and EAA require access to multiparty meetings by relay services.
- Multiparty communication with speech and video is well standardized.
- Two standards for multiparty calling with real-time text were published in 2021.
- ETSI is working on a report about multiparty RTT.
- We see in this meeting that relay service functionality is possible in multiparty calling and it needs to be made smooth and affordable and generally available.

```
[Alice] Hi, Alice here.
[Bob] Bob as well.
[Eve] Hi, this is Eve, calling from Paris.
      I thought you should be here.
[Alice] I am coming on Thursday, my
        performance is not until Friday morning.
[Bob] And I on Wednesday evening.
[Alice] Can we meet on Thursday evening?
[Eve] Yes, definitely. How about 7pm.
      at the entrance of the restaurant
      Le Lion Blanc?
[Eve] we can have dinner and then take a walk
<Eve-typing> But I need to be back to
              the hotel by 11 because I need
<Bob-typing> I wou
of course, I underst
```

# Trend 3: Web-based calling

- **More and more calls are made with real-time web communication technology.**
- **Calls are initiated from web pages or web communication apps.**
- **EECC and EAA regulations are valid also for web based calling.**
- **Relay service access is needed also in web-based calling.**
  
- **One of the new standards for real-time text is for web-based calling.**
- **Web based calling moves the interoperability from operators to web browser software.**
- **Web based calling moves accessibility requirements from communication devices to web page software.**

# Conclusion

- The goal for relay services is to make interpersonal communication smooth, simple and affordable when the different parties use different communication modalities.
- The rapid trends described should cause rapid redefinition of relay services and their regulation and implementation because of:
  - The move to non-number based calling
  - The move to multiparty calling
  - The move to web-based calling
- Let us keep the usability of relay services by following these trends.



Thanks

**Gunnar Hellström**  
**GHAccess**  
**gunnar.hellstrom@ghaccess.se**