

# Electronic Local and Remote Communication

## Punos System



# Electronic communication programme with video conferencing

- The Punos Project has created a communication system, where electronic communication software has been combined with video conferencing (tested with Grid 2 and Speaking Dynamically Pro; Rolltalk and Symbol for Windows are the next programmes to be tested)



# Starting point

- Speech-impaired clients are using e.g. Grid 2 and Speaking Dynamically Pro software as their personal communication aid for local communication
- Text-to-speech synthesis is included in the electronic communication software (Bitlips text-to-speech synthesis was used during testing)
- The Punos Project assessed and tested the functionality of the aforementioned software also during video conferencing



# Punos System

- The aforementioned software operated successfully with video conferencing during testing
- The video conferencing system used, which was connected to the communication software, was Polycom PVX (H.323 protocol)
- Punos System = electronic communication software + text-to-speech programme + video conferencing software + Internet connection with min. transfer rate of 512/512 Kbps



# Requirements

- Video conferencing systems used by the speech-impaired for remote service must have:
  1. Sufficiently fast internet connection, min. 512/512 Kbps (1Mb/1Mb recommended)
  2. High audio and picture quality
  3. Encrypted connection (AES)
  4. Document sharing feature (The desktop view of the speech-impaired user can be sent to the counterpart's screen)

# How does the system work?

- Demonstration videos available at:  
<http://www.hls-video.fi/index.php?kansio=Punos&valittu=Punos>
  1. Putu Remote Interpretation
  2. Putu Interpreter Request
  3. Multi-point Communication