



ÖREBRO LÄNS
LANDSTING

Tolkcentralen

Psykiatri och habilitering

Project Plan

Pocket Interpreter

Distance interpreting and mediation of mobile video calls



1. Background

The mediation service for video telephony has been available as a national service since February 1997. The service is currently only offered to sign language users via the ISDN network (128 Kbit/s).

There are three mediation studios in Örebro. Suppliers are engaged by signing a subcontract with other county councils that have the will and a progressive approach to videoconferences as a means of promoting activities in this area. By locating these subcontractors, resources have been engaged for this work based entirely on cost. When upgrading the end-equipment and from a service point of view the present solution is both costly and problematic.

In the normal course of events development has been conducted with the aim of handling calls through rational allocation. What is needed is a technical system that can offer efficient use of interpreter resources, good service to the users, a good working environment for the interpreters and good finances and control over the service for the principals.

According to a study (*PTS-ER-2002:2 Socio-economic evaluation of postal and tele-services for the functionally disabled – model development and application*) the cost of equipment to cover the need for video telephony for the group of sign language users who use a video telephone on ISDN is considerable. The operating costs are high for the individual user, which has probably had a braking effect on the customer base for this service.

In line with the expansion of the IP network nationally via public ADSL and other fixed links, the demand to be able to offer mediation using IP has become more and more obvious.

There are now products that use the broadband network for video telephony better than the products in the ISDN networks.

Alongside the development of services in the "IP – Access" project the mediation service for video telephony within the framework of "Mobile Video Communication for the Deaf", trials were run with distance interpreting and mediation via UMTS (3G).

During the year almost half of Sweden's deaf sign language users have acquired a 3G telephone for their remote communication. Since September 6, 2004, the project "Mobile Video Communication for the Deaf", run in collaboration with Örebro County Council, has run a small-scale mediation/distance interpreting service for some fifty project participants. The aim has been to evaluate whether it is possible, using current 3G technology, to run this type of service viewed from the point of view of the interpreter and the user. What we saw was that it functioned far beyond our expectations and that there was pressure from users outside the project who also wanted to make use of this service. On the whole, this reinforces



the need to assure the functionality and quality of the service even for customers in the 3G network.

During the current IP – Access project we have worked to ensure that existing equipment and development is harmonised with the current user structure with regard to the network and user equipment.

The proposal involves creating availability and service quality for the users who currently use 3G for their primary communication (video (H.324M) and sign language) also for the video telephony mediation service.

2. Project vision

- To supply services that are of good quality and are well defined from the point of the interpreter and the user.
- Users should have good knowledge of the service's products and find them efficient and useful.
- Users have a clear, uniform service, regardless of the technology applied, for access to sign language mediation and distance interpreting.
- To have good flexibility with regard to the users' communication requirements in terms of manning and availability.

3. Objectives

- 3.1 The project will quality assure standardised interpreting and mediation for service users from different access forms, e.g. mobile and IP-based video calls.
- 3.2 The project will identify the potential to improve the allocation of costs and resources for distance interpreting.
- 3.3 The project will examine the potential to assure, cost effectively and qualitatively, the availability of the service by preparing and investigating the potential to link up the service to, for example, external hosting and gateway suppliers.
- 3.4 The project will evaluate the gateway solution and present proposals for a long-term, cost-effective solution regarding the connection interface.
- 3.5 The project will develop and provide information for users with the aim of improving the efficiency and assuring their use of distance interpreting and mediation for sign language.



- 3.6 The project will investigate the potential for automatic initiation of mediation in conjunction, for example, with interactive voice response services.
- 3.7 The project will also generate a basis for implementing procurement of the mediation service for video telephony.
- 3.8 The project will formulate, assure and compile method documentation for interpreters involved in the service.
- 3.9 The project will create service methodology that harmonises with traditional interpreting and will identify any differences.

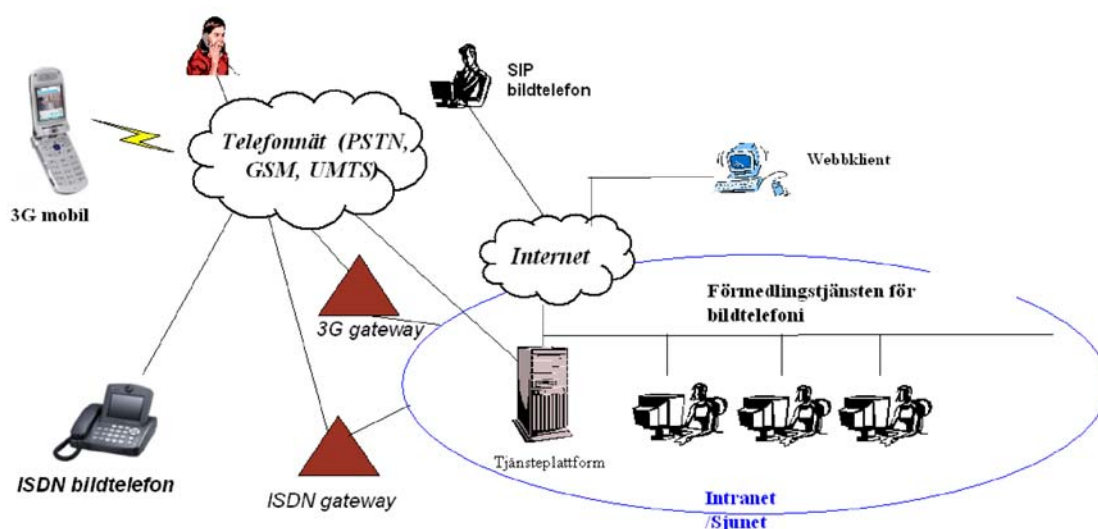
4. Method

- 4.1 The project will commission and assure functionality for users to and from the 3G network in the platform for dedicated 3G interpreters who will be included in the methodology development group.
- 4.2 The project will also from a behavioural science point of view evaluate the processes in mediation and distance interpreting using the new operating environment.
- 4.3 The project will create conditions for offering the users the potential to spontaneously and immediately present views, deviations, questions and proposals regarding the design of the service.
- 4.4 The project will also formulate training material for interpreters and users through experience from the behavioural science process study and will result in video information material being available on the website and in CD format.
- 4.5 The project will set up a homepage for the service to provide information and to facilitate notification of interest and registration of users. Another purpose of the homepage is to prepare the potential for charging and statistics and to investigate the scope for the registration data (the user profile) to form the basis for the automatic initiation of a service. Such a service could be mediation and other common services, such as a mobile answering service and other interactive voice response services.
- 4.6 The project will produce a service specification of the components in the service that could form the basis for further procurement.
- 4.7 The project will identify and check the service resources and cost requirements for distance interpreting with the orderer.
- 4.8 The project will produce a technical specification of how the platform is linked in modular terms to other services, e.g. hosting and gateway services.



4.9 The project will inform users who are currently working within the Mobile Video Communication for the Deaf project regarding availability changes and that registration will take place manually or via the Internet. If there is a significant fall-off of users, it will also be possible to issue notification of interest via a reference group and the homepage.

5. Technical overview



/Bild/

SIP video telephone

Web client

Mediation service for video telephony

Intranet/Sjunet

Service platform

ISDN gateway

3G gateway

ISDN video telephone

3G mobile

Telephone networks (PSTN, GSM, UMTS)

Internet



5.1 Technical description

The video mediation service will be expanded with an administrative interface, which makes it possible to define different services depending on A and B numbers, i.e. which number you are ringing from or which number you are ringing to. In this way a "black list" is created and services that an interpreter can work in.

The interface will also enable service prioritisation definition so that an interpreter can belong to several services and handle these services applying different priority levels.

A special service will be created where the users can record messages on video, allowing them, for example, to put forward views and complaints.

The services can be defined for all the different networks that the video mediation service uses, i.e. video from ISDN, IP, 3G or normal PSTN.

5.2 Gateway

Within the framework of the IP – Access project a UMTS/3G gateway will be evaluated and tested with regard to video quality and functionality in relation to the existing service platform. If the solution proves to be sub-standard in any way the hosting solution will be taken into account at an earlier stage than stipulated in the plan.

6. Summary of user benefit

User benefit is expected to be that the mediation service for video telephony has clear and well-defined services that are useable and functional.

The service will become more accessible in the fact that existing manning within the mediation service for video telephony will be optimised and availability can be put on a par with the existing service.

The users will be kept well up to date with regard to using the service and its processes will be known regardless of the media the user chooses in order to use the service.

7. Summary of orderer benefit

For the orderer, the service is expected to become more effective in terms of flexibility and cost. The service is also expected to be prepared for the implementation of supplementary services and functionality, such as the potential to "dock" to gateway services.



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8. Scope

We are planning to offer all users from "Mobile Video Communication for the Deaf" the opportunity to participate in the project from the outset, which will mean approximately 80-100 users.

The development of the project will permit the number of users to be increased during the course of the project when a definite gateway solution in relation to the service platform has been brought into operation. The decision regarding the expansion of the number of users is taken by the project's steering committee.

8.1 Availability

The availability of the service during the course of the project will be 8 am – 8 pm weekdays, i.e. the same level of availability as the existing mediation service. Current agreements regarding manning and dimensioning will form the basis for manning.

8.2 Manning

The project will be manned by interpreters who work within the mediation service for video telephony. Some ten interpreters within the service will be part of the group that is being studied within the framework of the project. These interpreters will also handle calls from the ISDN and IP networks but are assigned specifically to the project and the development of the service.