

TF- VVC **(Voice, Video and Collaboration)**

TERMS OF REFERENCE

1. A Task Force is established under the auspices of the TERENA Technical Programme (www.terena.nl/tech/ToR.html) to investigate the suitability of voice, video and collaboration technologies for implementation in research and education networks in Europe. It will be known as TF-VVC (Voice, Video and Collaboration).
2. The aim of the Task Force will be:
 - o to provide a forum for exchanging experience and knowledge
 - o to promote ongoing development and testing of currently available collaboration technology and implemented services
 - o to define, develop and test new video, voice and collaboration services, which can subsequently be introduced by national research and education networks and/or supported by the European research networking backbone infrastructure (GÉANT2).

The Task Force will build on previous work done by the TF-Stream and TF-Netcast task forces and in the IP Telephony Cookbook project. Its activities will be focused on exploring real-time communication and collaboration technologies and the services that may be developed across Europe in the research and education community. All aspects that relate to real-time communication, and the infrastructure that is required to support that communication, shall be within the remit of the Task Force.

It is expected that the Task Force will work closely with other TERENA task forces in areas such as lower layers technology testing (TF-NGN), Authorization and Authentication (TF-EMC²), mobility (TF-Mobility) and with any other task force when appropriate.

The Task Force will collaborate with similar activities in the US and other regions. The Task Force chair will be responsible for coordination of the collaboration activities.

3. The Task Force will be open to any individual who can offer appropriate expertise, manpower, equipment or services.
4. The Task Force will operate with a two-year mandate, starting 1st September 2004. Any continuance beyond this period must be approved by the TERENA

Technical Committee (TTC). If the mandate is not renewed, the Task Force will be dissolved. The Task Force may also be dissolved if the TTC considers that it is making insufficient progress or that its activities are no longer useful or relevant, or if the Task Force chair resigns and no replacement can be found.

5. Meetings of the Task Force will take place at least 4 times per year. At least one of these will be a physical meeting, the others are by telephone or videoconference. Physical meetings will be held at the suitable locations, taking care to reduce overall costs to participants.
6. The chair of the Task Force will be Egon Verharen, from SURFnet. He will be responsible for preparing the agenda for each meeting and for co-ordinating the work of the Task Force.
7. The secretary and administrative support for the Task Force, including maintenance of the web site and mailing lists, will be provided by TERENA. The secretary will be responsible for taking the minutes at the meetings and will collaborate with the chairman for providing the agenda and making logistic arrangements as necessary.
8. The Task Force has a broad remit allowing the participants to introduce new work areas in the course of its activity; the work of the Task Force will be organized in specific activity areas. The activity areas defined at the time of approval of these Terms of Reference are those listed in article 11. The actual up-to-date list of activities shall always be available from the Task Force web site.
9. Work items inside an activity area will be coordinated by a work item leader, who will be responsible for the work item plan and provide input to the Task Force meetings agendas, for ensuring that any agreed deliverables are produced and for reporting on the progress at the quarterly meetings.
10. Reports and other results of Task Force activities will be placed in the public domain, with the exception of information that is subject to a commercial non-disclosure agreement or other information that has been provided on a non-disclosure basis.
11. List of activity areas and work items:

Below is an initial list of activity areas. This list is subject to revision by the Task Force participants. A procedure for adding new work items will be published at the start of the Task Force.

- A Various guides relating to providing voice, video and data collaboration services
The Task Force will develop a collection of best-practice documents, overviews and guidelines related to these areas.

Work item:

- How to set up video conference rooms, leader - Rui Ribeiro, FCCN

- B** **Content Delivery Infrastructures for Video-on-Demand**
The Task Force will support the development, testing and roll-out of CDN software and networks.
Work item:
- Content Delivery Network – open source software and the instructions on how to participate, leader - Alessandro Falaschi, University of Rome
- C** **Content Access Portal (CAP)**
The Task Force will collaborate with other initiatives around the world in order to gather information about the existing content and to investigate other CAP related questions.
Work item:
- Coordination effort with the Internet2 Research Channel Global Initiative to extend their portal with European content and links, leader - Egon Verharen, SURFnet
- D** **Metadata**
The Task Force will promote existing materials about the metadata published by TF-Netcast and encourage the discussions about models and metadata.
Furthermore it will collaborate with the Internet2 Video- middleware-video-on-demand working group.
- E** **Academic Netcasting Channel (Live Streaming Infrastructure)**
The Task Force will promote the existing TF-Netcast Announcement portal and investigate its possible extension to an Academic Netcasting Channel.
Work item:
- Electronic programme guide delivery, leader - Michal Krsek, CESNET
- F** **Global Dialing Scheme**
The Task Force will actively contribute to discussions on international dial- and numbering plans for videoconferencing and VoIP services (independent of protocol) and make recommendations on how to set up interconnected systems.
Work items:
- New GDS recommendations, leader - Egon Verharen, SURFnet
 - Update VC services information, leader – Baiba Kaskina, TERENA
- G** **Integration of conferencing, streaming and data collaboration systems**
The Task Force will gather information and make it available to its membership on how the different collaborative multimedia technologies can be integrated.
Work items:
- Best practice report on integration of VC, IM, Presence and data sharing components, leader - Erik Dobbelsteijn, SURFnet
 - How to stream video conferences (integration of streaming and video conferences), proposed leader - Christian Schlatter, SWITCH

- Best practice document on archiving video conferences, leader - Andras Kovacs, HUNGARNET

H High-end/quality systems

The Task Force will organise workshops on high-end/quality systems for professionals in the area.

Work item:

- Workshop on high-end/quality systems, leader - Egon Verharen, SURFnet

I Usability – improving user interfaces

The Task Force will promote the discussion about user needs, collect these needs and contact equipment vendors to ask for improvements required.

J Access control to video resources

The Task Force will collaborate with other TERENA Task Forces (TF-EMC², TF-Mobility) to investigate the middleware requirements for content access portal and streaming.

Work item:

- Collaboration with TF-EMC² and TF-Mobility, leader - Jose Maria Fontanillo, RedIRIS

K IP telephony deployments

Work items:

- Survey about the existing IP telephony deployments, leader - Saverio Niccolini, EIVD
- Recommendations on how to connect different nodes, leader - Saverio Niccolini, EIVD
- Setting up SIP.edu services, leader - Erik Dobbelsteijn, SURFnet

L End-to-end measurements

The Task Force will investigate and write recommendations on how to measure end-to-end performance of real-time conferencing applications. This activity will seek collaboration with GN2 activities related to the end-to-end performance measurements.

Work item:

- End-to-end measurement possibilities investigation, leader - ?