PETRUS-III PROJECT
(Contract Number: FP7 - 605265)

Deliverable D6.681
Report on knowledge management

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ABSTRACT:
The report presents tools to manage project information and communication - website in order to provide project information for the public (“public webpage”) and to facilitate communication between consortium partners and any other stakeholders requiring information on the project (“internal webpage”, Petrus 3 common e-mail address). In order to support the “face-to face remote teaching” methodology developed by the PETRUS group (ENEN II and PETRUS II project) the work continues to survey videoconferencing technology, their availability within the project consortium and experience with such tools.

RESPONSIBLE:
Centre of Experimental Geotechnics, Faculty of Civil Engineering, Czech Technical University in Prague, Radek Vašíček

INTERNAL REFERENCES: None
Signatures

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Abbreviations

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<tr>
<td>ARNES</td>
<td>Slovenian National Research and Education Network</td>
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<td>CIRTEN</td>
<td>Consorzio Interuniversitario per la Ricerca Tecnologica Nucleare</td>
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<td>CTU</td>
<td>Czech Technical University in Prague</td>
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<td>CU</td>
<td>Cardiff University</td>
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<td>ENEN</td>
<td>European Nuclear Education Network Association</td>
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<td>ENEN-II</td>
<td>Coordination action project FP6 - 036414</td>
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<td>Nidia</td>
<td>Nidia scientific services</td>
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<td>Ragional Environmental Centere</td>
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<td>UPM</td>
<td>Universidad Politecnica de Madrid</td>
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1 INTRODUCTION

Work Package 6 supports the Project by managing “information technology” tools. This report consists of information on the works done on several components of the information system to support the targets of the project. The establishment, maintenance and further development of such components have been split between two of the participating organisations - ENEN association (ENEN, WP6 leader) and the Czech Technical University in Prague (CTU). The tools involved in internal communication during the project are handled by the CTU whilst communication outside the project are operated by ENEN.

ENEN’s responsibility for the establishment of the public project webpage guarantees the seamless implementation into the existing structure of the ENEN association website [1], ENEN webpages also contain interface to ENEN Database [2] - the well-established tool for providing the up-to-date information on education and training in the nuclear field over the European Union countries and beyond it.

The CTU provides the “temporary” service required for project communication (common e-mail address/ list and working data storage with restricted access) and hosts the “homepage” domain: www.petrus3.eu. Visitor of the domain is automatically redirected to the public ENEN webpage.

The structure and parameters of several project information technology tools can be seen in Fig. 1.

![Project Communication Tools](image-url)

**Fig. 1 – Project communication tools**
2 PUBLIC WEB PORTAL

The “homepage” domain www.petrus3.eu is hosted by the CTU (server located in Prague, at CTU campus) but is redirected to the public section of PETRUS III on the ENEN web portal (Fig. 2), direct link www.enen-assoc.org/en/training/petrus-consortium/petrus-iii.html [3] since the aim of this portal is to play the main informative role and to disseminate project information outside the consortium. The PETRUS III public main page may also be reached via a direct link from the ENEN main page (www.enen-assoc.org/ [1], Fig. 3).

![Fig. 2 – PETRUS III public main page](image)

The PETRUS III web page contains the sections necessary to keep the public informed (project objectives, overall information, ongoing events...). The emphasis is put on actual messages thus such information is prioritized on the webpage. The Petrus III PhD event (“Petrus PhD Conference 2015”; managed by UL, [4]) advertisement is of high priority in early 2015. The links (previews) of the Petrus Newsletters were also inserted [5][6].

Modern communication channels are addressed by ENEN Google+ and YouTube pages developed for general use of the ENEN - Fig. 5 and Fig. 6 [7][8].
Fig. 3 – ENEN association main page with the PETRUS III link

Fig. 4 – Petrus III PhD Conference 2015 web page (managed by UL)
Fig. 5 – ENEN Google+ page

Fig. 6 – ENEN YouTube page
3 INTERNAL COMMUNICATION

3.1 Internal part of the ENEN web page

The ENEN web page with restricted access is ready to manage the flow of information between project partners and other stakeholders. It also contains links to internal communication tools and will host final versions of all public and non-public, EC approved reports. The nature of the work described on this internal web page does not require personalized access rights, thus the common “PETRUS” account was created (contact: Pedro Diéguez Porras, ENEN secretary).

3.2 PETRUS III e-mail list

In order to ensure ease of communication, the common petrus3 (at) petrus3.eu e-mail address was established. Thus any e-mail addressed to it is forwarded to all the members included in the mailing list. The service is managed by the CTU and runs on “Mailman” software (version 2.1.9; currently newest available version is 2.1.20, released on 31-Mar-2015.).

Mailman, the GNU Mailing List Manager:
The Mailman service is free software, distributed under the GNU General Public License. Mailman is written in the Python programming language, with a little bit of C code for security. Mailman is software for managing electronic mail discussion and e-newsletter lists. It is integrated with the web, making it easy for users to manage their accounts and for list owners to administer their lists. Mailman supports built-in archiving, automatic bounce processing, content filtering, digest delivery, spam filters, and more...[9].

Updating of the mailing list can be done upon request (CTU contact person: Radek Vašíček). This tool will be terminated after closing of the PETRUS III project.

3.3 Internal project data storage

To ensure ease of data exchange and the concentration of all relevant working documents on one site, internal data storage was established in the same way as in Petrus II project. The service is managed by the CTU (contact person: Radek Vašíček) and run on “Doxbox/ Owl” software (Owl Engine MG, Version DoxBox 1.12 - 2013-Aug-15 [10]). The server is located at CTU campus in Prague. This method of communication will be terminated with PETRUS III project.

Owl is a multi-user document repository (knowledge base) system written in PHP for publishing files/documents onto the web for a corporation, small business, group of people, or just for individuals. Features to be highlighted for Petrus needs:

- Multi-user environment Folder and file permissions.
- ACL (Access Control List) Security
- Notifications for owner and group.
- Searchable (integrated search tool). Search within txt, MS-word and pdf files.
- Bulk operations (move, mail, delete...)
- Easy to use and clean administration interface Higly scalable, size of the database is limited only by available hardware.
- DB Backup tool
- News system.
- Version control.
• Custom document types.
• Peer review
• Built in Email Tool
• Thumbnail Generation (images, WORD, PDF, Video) 3 Sizes
• ZIP File Upload with automatic Extraction
• User favourite links
• Customizable User Interface
• Multi Database/Repository Support

For more information see [10]. Access rights are managed by the CTU (contact person: Radek Vašíček). Content can be managed by registered users according to the rights granted to them. “Student” (read only) access has been established to provide students with access to course material. Three main folders (Deliverables, Meetings, Project) can be seen after login (Fig. 7).

The Deliverables folder has been designed to host all the working documents concerned with deliverables – i.e. not only reports but any other necessary documentation concerning other types of project output (Fig. 8); report drafts and corresponding “comment files” are included. A structure of subfolders e.g. /Deliverables/Reports/D1.1.../ (i.e. separate for each report) is also provided. Following final approval of a report, the responsible person (the author) uploads it to the appropriate subfolder. Project meeting information is similarly handled in the “Meetings” subfolder into which travel information, the anticipated agenda and other useful files provided by meeting organizers are
deposited before the meeting is held. Presentations from the meeting and draft/ final versions of the minutes can be uploaded after the meeting.

“Project” provides access to the pdf of signed Grant Agreement and Description of work mainly.

Fig. 8 – “Deliverables” section of the internal file storage
4 DATABASE

The current, well established, ENEN Database can be used as tool for providing the up-to-date information in the field of education and training in the nuclear field over the European Union countries and beyond it. The former PETRUS II project contributed to extension to field of the deep geological disposal [11]. The Database is located within the ENEN Website (Fig. 9), [2]. The Database consists of the following four sections:

- Education and Training (E&T) courses
- Master Program
- Proposed PhD Topics
- Opportunities (scholarships, post-docs, internships and job opportunities)

The main Database responsible is ENEN secretary Pedro Diéguez Porras, for more information see Petrus II Deliverable D6.5 Database implementation report [11].
5 SURVEY ON VIDEOCONFERENCE TOOLS

5.1 Objectives

In order to support the “face-to-face remote teaching” methodology developed by the PETRUS group (ENEN II and PETRUS II project) the work continues to survey videoconferencing tools, their availability within the project consortium and experience with it. Consortium needs and technical requirements were defined. Follow up survey consisted of two main sections:

- A review and testing of actually available, well ranked/ most promising software systems for videoconferencing and
- Questionnaire distributed to the consortium and its evaluation.

5.2 Communication scheme

The scheme with 3 levels/ areas of participants according to required functionalities can be drawn (Fig. 10). As the participant is “farther” from the core, technical solution can be simplified and market provides more potential applications to be used. To satisfy requirements of remote teaching full communication scheme (two way transmission of voice, video and whiteboard) is required within the “core” of the group - among “lecturers and students”.

![Fig. 10 – Communication scheme](image-url)

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5.3 Technical requirements

The technical requirements on SW/HW tools were specified within Petrus II “D6.1 - Report on available e-learning technology and experiences in the consortium” [12] and later adapted according to knowledge gained from the PETRUS II on-line sessions. They can be extended as development in IT goes very fast and some additional functionalities can be useful for Petrus needs (in italic):

- The videoconferencing system for working groups must contain video, sound, whiteboard, chat, document share (ppt/ pdf/ doc), desktop share, co-browsing
- Communication between more people/ places/ rooms must run via IP
- Sufficient video signal resolution must be available - XGA (HD)
- Multiway transmission (M:N), data sending and receiving in two or more directions and places
- Real-time transmission, a time delay (even very short) is not permissible
- The system must be able to serve at least 6 participants, ideally 15
- The system should be free or low cost
- If a commercial system is used, all licenses must be acquired
- The ability to record the sessions (video and sound) is desirable
- Encrypted communication, Mobile access

5.4 Tools for videoconferencing

There are many SW/ HW solutions available. The target of this work is to update knowledge on available tools (proprietary or free), to advice suitable solution/ application for “new incomers” who would like to organise their meetings and/ or participate on current ones and do not employ any suitable tool yet. Emphasis was put on SW/ web based solutions. As Petrus group already uses combination of Adobe Connect (for whiteboard only) and HW Multipoint Control Unit Polycom (MCU, provided by UPM, video and voice) the capabilities of Adobe Connect were also checked. Extensive lists providing possibility of selection according to many criteria (Fig. 12 [13]) and list with application ranking according to users experience already exist on www pages (Fig. 11 [14]). SWs were selected according to Petrus III requirements and “user-s satisfactory” in quality/ usefulness noted on this webpage. Test were done on standard user office PC with cam and microphone/ Laptop.

![Fig. 11 – On-line review of SW solutions [14]](image-url)
**Fig. 12 – On-line review of SW solutions [13]**
5.4.1 Adobe connect

- Capacity: 1 – 1500 participants
- Runs on Windows XP or later, runs on Mac 10.5 or higher, participation with Flash Player 11.2 or higher, users on Linux can only attend meetings in the browser (no sharing of own screen)
- Audio, Video (VGA, HQ, HD), chat and desktop sharing support
- Whiteboard, upload PPT, PDF, DOC, DOCX
- Can host meeting from mobile
- Recording capabilities
- Participants roles: Host, presenter, participant
- Host – all rights, change roles and rights of others, manage layout of room
- Participant – only listener, can see what host allow
- Still improving (cost for update),
- Available in Petrus consortium (UPM, CTU/CESNET)
- Latest available version (9.2.2) at CESNET tested in CTU local network – overall satisfaction, intuitive, full functionality, very short (still reasonable) delay in voice-video

*Note: only one virtual room per session is needed. As one participant of the session has rights/access to "own" Adobe Connect virtual room, all other participants enter it through web link. They need to know passnumber (the same for particular static room).*

5.4.2 Citrix GoToMeeting

- Web based solution
- Testing free version for 3 participants only
- Screen sharing (entire screen or only selected applications, possibility to switch control of mouse and keyboard to any other participant).
- The solution is integrated into Outlook and the other Microsoft Office products
- Suitable for Windows and Mac OS
- Audio, Video (VGA, HD), chat support, recording, desktop share, whiteboard
- Mobile app
- Up to 25 participants (Up to 6 people in HD video)
- 30 days free trial, free – up to 3 participants
- 49 USD per month and host for up to 25 participants and unlimited meetings, annual subscription (pre-paid): 468 USD per year
- Trial tested (30 days), less user friendly and more significant delay in voice-video than Adobe Connect
  - http://www.gotomeeting.com/online/meeting/white-papers/gotomeeting-factsheet?c_name=ctxs&c_prod=GTM&c_cmp=sf-70150000000ZS3c

5.4.3 MS Lync

- Recommended by consortium member to include
- Fully integrated as part of the MS Office (incl. calendar planning), a request to log in through “Microsoft account” (i. e. necessity of this account)
- “Full service” - Instant messaging, audio, video, screen sharing, application sharing
- Suitable solution esp. for internal company use where the same platform is applied
• May be clumsy when connection among “external” participants is intended when MS Office (or MS account) is not used by all participants

5.4.4 AnyMeeting

• Free with limited functions (advertisement added)
• Free - 6 participants, voice, screen share, ppt share, mobile access, Google apps and Outlook integration
• Free – not available – records, file sharing, live chat
• https://www.anymeeting.com/landing/buy/ChoosePlan.aspx
• Application installation needed
• Installation failed several times (Win7 64bit), free version tested, sound not transmitted fluently sound/video, time delay …

5.4.5 Cisco WebEx Meetings Free

• Free plan includes: 3 people per meeting, 1 host license, VoIP audio, sharing of desktop, whiteboard and documents, Standard-quality video, 250 MB of storage, video from multiple webcams, collaboration tools like commenting, real-time annotation, and chat, shared Meeting Spaces with file sharing, comments, and IM, meeting recordings to share or review
• Delivery over the Cisco Collaboration Cloud
• Tested (1:1) in local network
• Not so intuitive as TeamViewer or Adobe Connect (follows), less delay in voice video than Citrix (worst) and Adobe Connect

5.4.6 TeamViewer

• Free for non-commercial use
• Capacity: 25
• Windows, Mac, Linux
• Quick and easy installation, easy log in – necessary only for presenter – or browser access
• Screen sharing, Video and audio sharing, Chat, file box, whiteboard
• Encrypted communication
• Records (installation needed to read the record file type), conversion of records possible http://www.ehow.com/how_6940963_play-teamviewer-tvs-file.html
• Participants with installed software can use: video, audio, screen and files sharing, whiteboard
• Website participant: video, audio, screen sharing, no files sharing, no whiteboard
• Lecturer’s screen and participant’s screen are similar (SW installed) Fig. 13, Fig. 14
• Tested in CTU local network, Intuitive use, overall satisfaction

5.4.7 Summary

Due to selection criteria all the applications offered needed functionalities. MS Lync is excluded from following ordering (although it can be suitable solution) as it is a part of the larger SW package MS Office and thus does not fulfil criteria for easy access and installation. Recommendations in order are as follows:
Intuitive use: Adobe Connect or Team Viewer then Cisco Webex Meetings
Video-voice delay: Cisco Webex Meetings or Team Viewer then Adobe Connect
5.5 Petrus current solution and alternatives

Current Petrus solution is based on combination of SW (Adobe Connect for whiteboard, by UL) and HW (Multipoint control unit Polycom for video and voice, by UPM). Thus there is a need of two “key-participant” – participant who owns/rents the “virtual room” (in Adobe Connect) and interconnects all the videoconferencing calls by its MCU. The other users access the meeting through...
web browser (to Adobe Connect, after invitation through the link) and by receiving IP call from UPM-s MCU by their own unit capable to run such calls.

It is important, for general use, to have a possibility to replace UL and UPM as a “key-participants” to be able to run the meeting when they are not available or involved in it.

Access to such tools (e. g. Adobe Connect, any MCU) can be on basis of ownership or provided as a service. Universities usually (can) have access to that through their “academic internet provider” (NREN - National Research and Education Network; e. g. CESNET in the Czech Republic, ARNES in Slovenia). It is advised to look for non-ownership forms, especially when only rare use is expected. Institutions like CESNET or ARNES already have available Adobe Connect and/or other SW/HW with large capacity to host the meetings, provide virtual rooms etc. The key advantage is low or no cost, sufficient capacity (number of virtual participants), and no need of maintenance and upgrade from side of the university/institution.

CTU can provide, for teaching purposes, a virtual room (Adobe Connect ver. 9.2.2) through CESNET free of charge (https://connect.cesnet.cz/petrus3). It is the permanent room established till end of the Petrus III project, moderated by R. Vasicek. Reservation of the capacity is necessary “a while” in advance (purpose, date, time and number of participants). Prolongation after the project period is possible. General test site on CESNET-s Adobe Connect can be found on https://connect.cesnet.cz/pokus.

In case of need of other “Adobe Connect” provider within the consortium it is recommended to attempt the arrangement of virtual space for videoconferencing with country corresponsible NREN. The Adobe Connect has also capability to transmit voice and video. Due to continuous improvement of such products it might be possible to use only this application and exclude need of MCU (IP calls). Testing of the latest available version (9.2.2 at CTU/ CESNET) is intended in near future. If need of MCU remains, CTU/ CESNET is also able to arrange the meeting and provide sufficient capacity after arrangement.

5.6 Recommendation for “new incomers” to the on-line teaching group

Future cooperation is possible in two ways:

1. the use of current tools when “key-participant” is available or your own SW/HW fulfils the requirements (on multi-way, quality, whiteboard share...) or
2. by finding/ using of new tools when institution do not have sufficient HW/ SW available. It is possible to buy “own” HW/ SW solution or have it as a service in the second case: Following order is recommended:

- Check what is around (MS Lync, NREN, tools at other cooperative institutions – you just could access to their tools)
- E. g. CTU through CESNET has large possibilities to coordinate the meeting (Adobe Connect, MCU = virtual and also real videoconferencing rooms)
- Check possibility to use free SW (Teamviewer) – free for non-commercial
- Check possibility to use paid web services
- Buy your own HW/ SW (but IT staff is needed…)

It is desirable to identify amount of institutions which would really like to access the videoconferences as part of the teaching effort. It would give better picture on demands of the project.
5.7 Available tools and experience

5.7.1 Questionnaire

To monitor available tools, experience and satisfaction with them, participants were asked to fill out the questionnaire. The results were analysed in order to address further options for the project and its participants; the results are presented below. The new, potentially important features as IPv6, shared browsing or mobile access, were also elicited. Questionnaire example (one page) is on Fig. 15, complete view is in Appendix.

Function expectations:
- Audio support
- Video support
- Multiway whiteboard
- Materials sharing (doc, pdf, ppt, xls...)
- Chat
- Desktop sharing
- Mobile device support
- [ ]

Type of communication:
- Multi-way (presenter to students, students to students, students to presenter)
- Two-way for all (presenter to students, students to presenter)
- Two-way for selected
- One-way (only presenter to students)

Capacity of conferencing room:
- To 10
- More than 10 and less than 100
- More than 100

Your possibility
Availability of room with conferencing technology:
- Whenever we need
- Limited
- Impossible
- [ ]

Internet security at your workplace
- Free (public IP - full in and out access)
- Only out free (NAT/Wire - Access to external sites and computers unrestricted other way blocked)
- Restricted - blocklisting (active filtering)
- Restricted - whitrlistng (access only to restricted set of sites)
- Full blocked (intranet only)

Fig. 15 – Questionnaire example
5.7.2 Results

The questionnaire was replied by: Cardiff University, Nidia, Posiva, CTU in Prague, ENEN, CIRTEN - University of Pisa, REC. The graphical overview follows. The list of options put on the questionnaire precede the responses where reasonable.

5.7.2.1 Function expectation and capability

Function expectation
- Audio support
- Video support
- Multiway whiteboard
- Materials sharing (doc, pdf, ppt, xls,...)
- Chat
- Desktop sharing
- Mobile device support
- Other:

![Audio support](image1)

![Video support](image2)

![Multiway whiteboard](image3)

![Materials sharing](image4)

![Chat](image5)

![Desktop sharing](image6)

![Mobile device support](image7)

![Other](image8)

Required type of communication
- Multi-way (presenter to students, students to students, students to presenter)
- Two-way for all (presenter to students, students to presenter)
- Two-way for selected
- One-way (only presenter to students)

![Multi-way](image9)

![Two-way](image10)

![One-way](image11)
Required capacity of conference room

Availability of room with conferencing tool
- Whenever we need
- Limited
- Impossible

Internet security of the workplace
- Free (public IP - full in and out access)
- Only out free (NAT/Firewall - Access to external sites and computers unrestricted other way blocked)
- Restricted - blacklisting (active filtering)
- Restricted - whitelisting (access only to restricted set of sites)
- Full blocked (intranet only)
- Other
Forbidden application
List without scoring: SKYPE, MSN, GOOGLE DOCS, cloud services, dynamic IP addresses, unclassified, Entertainment classified sites, any server that resides outside the European Union (especially USA hosted servers)

Type of the tool usually used

Software/Hardware tool identification
In bold – mentioned more times: Webex, Skype, Adobe Connect, Google+, Cisco - Elisa Videra vidyo; MS Lync (on intranet); BigBlueButton, Polycom

How often do you (your group) use videoconferencing technology?
- Every day
- Several times in week 1x
- Several times in month
- Several times in year 5x
- I have never used the videoconferencing technology 1x

The technology you use is able to provide:
- H.323 based
- SIP based
- Proprietary
- Gateway to H.323 (H.239)
- Gateway to SIP
- Other
Video resolution

- HD (Ready 1920x1080)
- XGA (1024x768)
- SVGA (800x600)
- HQ (720x576)
- VGA (640x480)
- CIF (352x240)
- Ostatní

Access to videoconferencing tools

- Free
- Free but limited
- Commercial
- Other

Necessity of conferencing room booking reservation

- Yes, needed time for reservation (e.g. two days before videoconferencing)
- No
- Other
Networking

Protocol version

Do you have access to Adobe Connect to host a meeting?

Mobile device support:
- No
- Host meeting from mobile
- Attend meeting from mobile
5.7.2.2 User experience

The software is used generally for:
- Sharing of courses materials (off-line e-learning)
- Videoconferencing
- Whiteboarding
- Face-to-face remote teaching (with ppt presentation)
- Other

Satisfaction with the tools:
The scale is as follows

<table>
<thead>
<tr>
<th>Excellent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Very bad</th>
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Sharing of learning materials (ppt, pdf, doc, xls...): Videoconferencing:
**Audio support:**

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**Chat:**

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**Desktop sharing:**

*Desktop sharing allows remote access and remote collaboration on a person's computer desktop*

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**Whiteboard:**

*Whiteboard allow one or more people to write or draw images on a simulated canvas*

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**Co-browsing:**

*Co-browsing is the joint navigation through the Web by 2 or more people accessing the same pages at the same time*

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**Mobile device support:**

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**Other suggestion**

The connections require being present in the office in the videoconference room, even in some cases there might be network problems that prevent the connection. Best results are when the videoconferencing is carried out in the company intranet. External connections may have disturbances. After consultation with our schools IT support, it is expected that we will be able to meet the needs for recording lectures and providing remote follow up sessions as required. As this will be the first time our institution has done this however, we are unfortunately unable to provide advice on our user experience, and will be taking our cues from institutions that have experience with these activities.
5.7.2.3 Summary of the questionnaire:

Although more than 20 institutions are involved in the Petrus consortium only 7 responded. The users typically use video, audio, whiteboard, chat and material share – all the typical features of the videoconferencing tool. They also probably found and use SW application/ HW what they need even it is not ideal (no ranking “excellent” in 8 categories). Many of options (SW/ HW) are used but Adobe Connect and Polycom HW is “often” mentioned (3/7). Sometimes exists limited access and possibilities but “it can be solved in reasonable time and effort”. The “on-line” group is probably slowly growing up but modern trend as a mobile access is not supported yet.

Serious limits can be restrictions on installation of application on PC or internet security/ policy at institution.
6 CONCLUSION

The aim of the work package was to support project development by the creation and subsequent management of a web portal as well as to set up and maintain an internal communications system.

In order to support the “face-to-face remote teaching the work continued to survey videoconferencing technology, their availability within the project consortium and experience with such methods.

Internal communication performs well through the use of a common e-mail address and internal data storage with personalized access. The public webpage contains all the appropriate information regarding the project.

The videoconferencing tools experiences boom during last years. They are especially focusing on web based solutions. The users already can benefit from free tools dedicated to non-commercial use. Possibility of mobile access is one of new potential challenges.
7 REFERENCES


Petrus III - Videoconferencing technology questionnaire

Member identification

Institution: 

Contact person: Name: 

Contact person: Email address: 

What do you need?
Function expectations:
- Audio support
- Video support
- Multiway whiteboard
- Materials sharing (doc, pdf, ppt, xls...)
- Chat
- Desktop sharing
- Mobile device support

Type of communication:
- Multi-way (presenter to students, students to students, students to presenter)
- Two-way for all (presenter to students, students to presenter)
- Two-way for selected
- One-way (only presenter to students)

Capacity of conferencing room:
- To 10
- More than 10 and less than 100
- More than 100

Your possibility

Availability of room with conferencing technology:
- Whenever we need
- Limited
- Impossible

Internet security at your workplace
- Free (public IP - full in and out access)
- Only out free (NAT/Firewall - Access to external sites and computers unrestricted other way blocked)
- Restricted - blacklisting (active filtering)
- Restricted - whitelisting (access only to restricted set of sites)
- Full blocked (Intranet only)
Forbidden applications (e.g. Skype, MSN, Google docs,...)

What you usually use

Software/Hardware tool identification + version of SW (e.g. Polycom, Adobe Connect, MS Lync,...):

Type of tool:
- [ ] HW videoconferencing
- [ ] SW videoconferencing
- [ ] WEB conferencing
- [ ] Whiteboard
- [ ] E-learning
- [ ] Material storage
- [ ] JIně

How often do you (your group) use videoconferencing technology?
- [ ] Every day
- [ ] Several times at week
- [ ] Several times in month
- [ ] Several times in year
- [ ] I have never used the e-learning technology
- [ ] JIně

The technology is (able to provide):
- [ ] H.323 based
- [ ] SIP based
- [ ] Proprietary
- [ ] Gateway to h.323 (h.239)
Gateway to SIP

Video resolution:
- HD (Ready 1366x768, 1600x900, full 1920x1080)
- XGA (1024x768)
- SVGA (800x600)
- HQ (720x576)
- VGA (640x480)
- CIF (352x240)

Access to videoconferencing software:
- Free
- Free but limited
- Commercial

Necessity of conferencing room reservation:
- Yes, needed time for reservation (e.g. two days before videoconferencing)
- No

Networking:
- Wireless
- Modem
- DSL
- LAN

Protocol version usage:
- IPv4 only
- IPv6 is possible

Do you have access to Adobe Connect to host a meeting?
- Yes
- No

Mobile device support:
- No
- Host meeting from mobile
- Attend meeting from mobile
User experience

The software is used generally for:

- Sharing of courses materials (off-line e-learning)
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Sharing of learning materials (ppt, pdf, doc, xls,...):

1 2 3 4 5

excellent o o o o o very bad

Videoconferencing:

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excellent o o o o o very bad

Audio support:

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Chat:

1 2 3 4 5

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Desktop sharing:

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Co-browsing:

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the same web pages at the same time

1 2 3 4 5

excellent ☐ ☐ ☐ ☐ very bad

Mobile device support:

1 2 3 4 5

excellent ☐ ☐ ☐ ☐ very bad

Any other suggestion, not mentioned above:

Nikdy přes Formuláře Google neposílejte hesla. 100 %: Hotovo.