

ROXANNE

**Real time network,
text, and speaker
analytics for
combating
organized crime**

ROXANNE Training Platform

ADDITRESS



This project has received funding from the European Union's Horizon 2020 Work Programme for research and innovation 2018-2020, under grant agreement n°833635

Overview

- **Web based Training (WbT)** in distance learning education/training is considered to be an innovative method of learning
- In the **security domain**, where the usage of innovative and state of the art tools becomes a necessity, the **continuous training** of end-users is a **challenge**.
- The ROXANNE project presents **a great potential** for WbT where the training of tools by the technology providers should take place **during and after** the implementation of the project
- Training is available to the end-users through the ROXANNE Training Platform (Based on Moodle)



Training Platform

<https://roxanne.kemea-research.gr/>

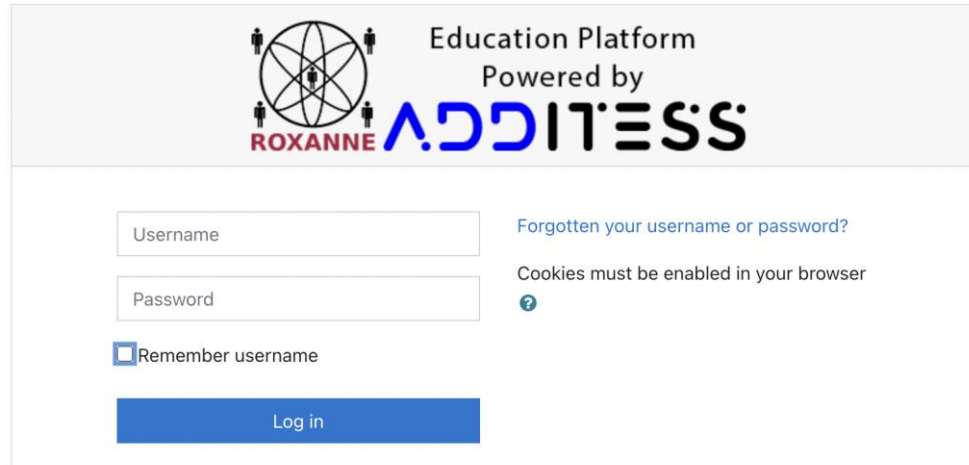
The screenshot displays the ROXANNE Training Platform dashboard. The interface includes a left sidebar with navigation options: Dashboard, Site home, Calendar, Private files, My courses, and SLAGI. The main content area is divided into several sections:

- Recently accessed courses:** A horizontal row of six course cards with colored backgrounds and titles: ROXANNE Forensics Visualisation Toolkit, ROXANNE Automatic speech recognition, ROXANNE Topic detection, ROXANNE Network analysis, ROXANNE Voice Biometry, and ROXANNE Named-Entity Recognition.
- Course overview:** A grid of course cards, each showing the course name and a progress bar indicating 0% completion. The courses listed are: ROXANNE Automatic speech recognition, ROXANNE Forensics Visualisation Toolkit, ROXANNE Named-Entity Recognition, ROXANNE Network analysis, ROXANNE Topic detection, and ROXANNE Voice Biometry.
- Timeline:** A section indicating "No upcoming activities due".
- Private files:** A section indicating "No files available".
- Online users:** A section showing "1 online user (last 5 minutes)" with a profile icon for Michael Skitsas.
- Latest badges:** A section indicating "You have no badges to display".
- Calendar:** A calendar view for September 2021, showing dates from 1 to 30.
- Upcoming events:** A section indicating "There are no upcoming events".

At the bottom of the dashboard, a status bar indicates "You are logged in as Michael Skitsas (Log out)".

Training Platform: How to access?

<https://roxanne.kemea-research.gr/>



Education Platform
Powered by
ROXANNE ADDRESS

Username [Forgotten your username or password?](#)


Password [Cookies must be enabled in your browser](#)

Remember username

Log in

You are not logged in.

[Home](#)
[Policies](#)



Education Platform
Powered by
ROXANNE ADDRESS

This project has received funding from the [European Union's Horizon 2020 Work Programme for research and innovation 2018-2020](#), under grant agreement n° 833635. Disclaimer: the document reflects only the author's views and the European Commission is not responsible for any use that may be made of the information contained therein.

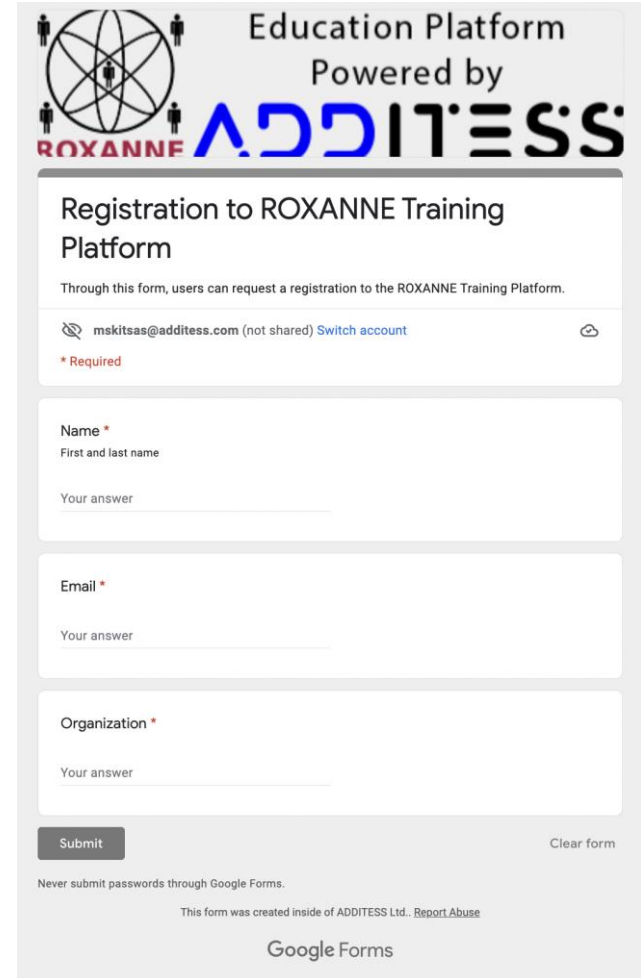
If you continue browsing this website, you agree to our policies:
[Privacy Policy](#)

[Continue](#)



Training Platform: How to register?

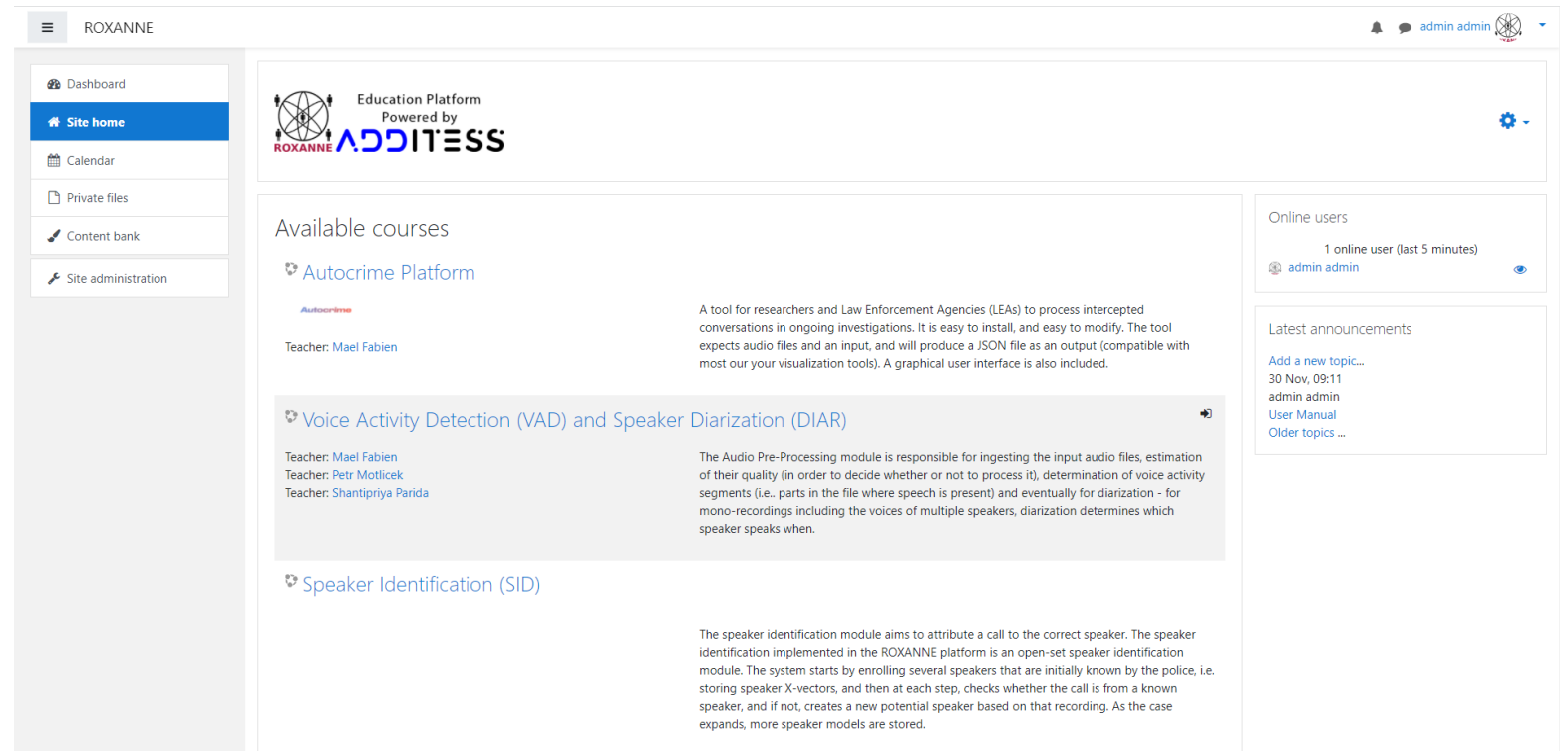
- Self-registration is NOT allowed
- Request registration through:
 - Email to contact@additess.com
 - Subject: [ROXANNE] Request for registration
 - Google Forms
 - <https://forms.gle/ppZfFj72vkasUHZr7>



The screenshot shows a Google Form interface for registration. At the top, it features the ROXANNE logo (a globe with four human figures) and the text 'Education Platform Powered by ADDITESS'. The form title is 'Registration to ROXANNE Training Platform'. Below the title, a description states: 'Through this form, users can request a registration to the ROXANNE Training Platform.' The user's email is displayed as 'mskitsas@additess.com (not shared)' with a 'Switch account' link. A red asterisk indicates a required field. The form contains three input fields: 'Name *' (with subtext 'First and last name'), 'Email *', and 'Organization *'. Each field has a 'Your answer' placeholder. At the bottom, there are 'Submit' and 'Clear form' buttons. A footer note says 'Never submit passwords through Google Forms.' and 'This form was created inside of ADDITESS Ltd. Report Abuse'. The Google Forms logo is at the very bottom.

List of courses

- Autocrime Platform
- Voice Activity Detection (VAD) and Speaker Diarization (DIAR)
- Speaker Identification (SID)
- Voiceprint Extraction
- Gender Identification
- Automatic Speech Recognition
- Topic Detection
- Named Entity Recognition
- Mention Network
- Network Analysis
- Forensics Visualisation Toolkit



The screenshot displays the ROXANNE Education Platform interface. The top navigation bar includes the ROXANNE logo, the text 'Education Platform Powered by ADDITRESS', and a user profile for 'admin admin'. A left sidebar menu lists navigation options: Dashboard, Site home (selected), Calendar, Private files, Content bank, and Site administration. The main content area is titled 'Available courses' and lists three courses:

- Autocrime Platform**: A tool for researchers and Law Enforcement Agencies (LEAs) to process intercepted conversations in ongoing investigations. It is easy to install, and easy to modify. The tool expects audio files and an input, and will produce a JSON file as an output (compatible with most of our visualization tools). A graphical user interface is also included. Teacher: Mael Fabien.
- Voice Activity Detection (VAD) and Speaker Diarization (DIAR)**: The Audio Pre-Processing module is responsible for ingesting the input audio files, estimation of their quality (in order to decide whether or not to process it), determination of voice activity segments (i.e., parts in the file where speech is present) and eventually for diarization - for mono-recordings including the voices of multiple speakers, diarization determines which speaker speaks when. Teachers: Mael Fabien, Petr Motlicek, Shantipriya Parida.
- Speaker Identification (SID)**: The speaker identification module aims to attribute a call to the correct speaker. The speaker identification implemented in the ROXANNE platform is an open-set speaker identification module. The system starts by enrolling several speakers that are initially known by the police, i.e. storing speaker X-vectors, and then at each step, checks whether the call is from a known speaker, and if not, creates a new potential speaker based on that recording. As the case expands, more speaker models are stored.

On the right side of the interface, there are two additional widgets: 'Online users' showing 1 online user (last 5 minutes) 'admin admin', and 'Latest announcements' with a link to 'Add a new topic...' and a recent announcement from 30 Nov, 09:11 by 'admin admin' with links to 'User Manual' and 'Older topics...'.

Course Management

Course categories

Create new category

ROXANNE 👁️ ⚙️ 12🎓

Sorting

Selected categories ▾

Sort by Category name ascending ▾

Sort by Course full name ascending ▾

Sort

Move selected categories to

Choose... ▾ Move

ROXANNE

Create new course

Sort courses ▾
Per page: 20 ▾

<input type="checkbox"/>	Autocrime Platform	⚙️ 📄 🗑️ 👁️ ↓
<input type="checkbox"/>	Voice Activity Detection (VAD) and Speaker Diarization (DIAR)	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Speaker Identification (SID)	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Voiceprint Extraction	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Gender Identification	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Automatic Speech Recognition	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Topic Detection	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Named Entity Recognition	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Mention Network	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Network Analysis	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Forensics Visualisation Toolkit	⚙️ 📄 🗑️ 👁️ ↑ ↓
<input type="checkbox"/>	Voice Biometry	⚙️ 📄 🗑️ 👁️ ↑

Showing all 12 courses

Move selected courses to...



Choose... ▾ Move



Course Enrolment

- Self Enrolment is enabled

Enrolment options

 **Autocrime Platform** 

Autocrime

Teacher: [Mael Fabien](#)

A tool for researchers and Law Enforcement Agencies (LEAs) to process intercepted conversations in ongoing investigations. It is easy to install, and easy to modify. The tool expects audio files and an input, and will produce a JSON file as an output (compatible with most our your visualization tools). A graphical user interface is also included.


▼ Self enrolment (Student)

No enrolment key required.


[Enrol me](#)


 Autocrime Platform	 
 Voice Activity Detection (VAD) and Speaker Diarization (DIAR)	 
 Speaker Identification (SID)	 
 Voiceprint Extraction	 
 Gender Identification	 
 Automatic Speech Recognition	 
 Tonic Detection	 


Autocrime Platform



[Dashboard](#) / [My courses](#) / [Autocrime Platform](#)

You are enrolled in the course. 

Your progress 

 Announcements

Course Structure

Add an activity or resource

Search

All **Activities** Resources

Assignment	Book	Chat	Choice	Database	External tool
Feedback	File	Folder	Forum	Glossary	H5P
IMS content package	Label	Lesson	Page	Quiz	SCORM package
Survey	URL	Wiki	Workshop		

Autocrime Platform

Dashboard / My courses / Autocrime Platform

Announcements

Structure

Installation

Run the ROXSD case

Running your own case

Automatic Speech Recognition

Dashboard / My courses / ASR

Update 10.09.2021: A new topic "The ASR Component in the Autocrime Platform", is now online.

ASR: Setting, Benefits and Limitations

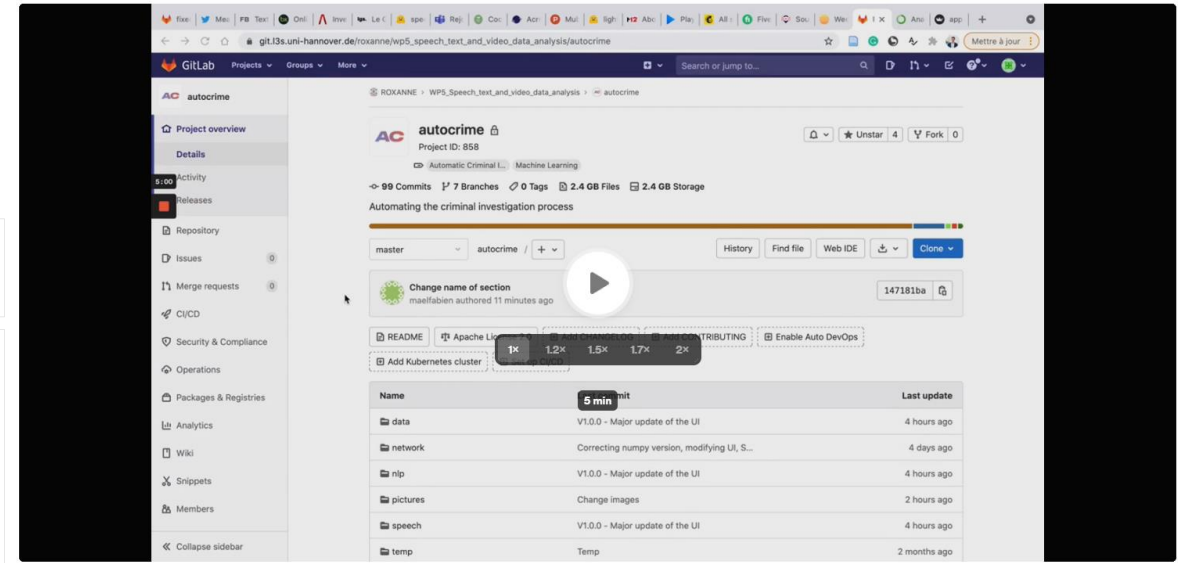
The ASR Component in the ROXANNE Platform

The ASR Component in the Autocrime Platform

The Language Model Toolkit



Course Material



Autocrime Platform

Dashboard / My courses / Autocrime Platform / Installation / Hardware Specifications

Hardware Specifications

The platform currently supports:

- Linux Ubuntu
- macOS (BigSure with M1 will not work)

Windows integration is a work in progress. However, running the platform in a virtual machine has already been tested. The following requirements should be respected:

- 16Gb of RAM
- 50Gb of disk space

Last modified: Thursday, 7 October 2021, 11:44 AM

Autocrime Platform

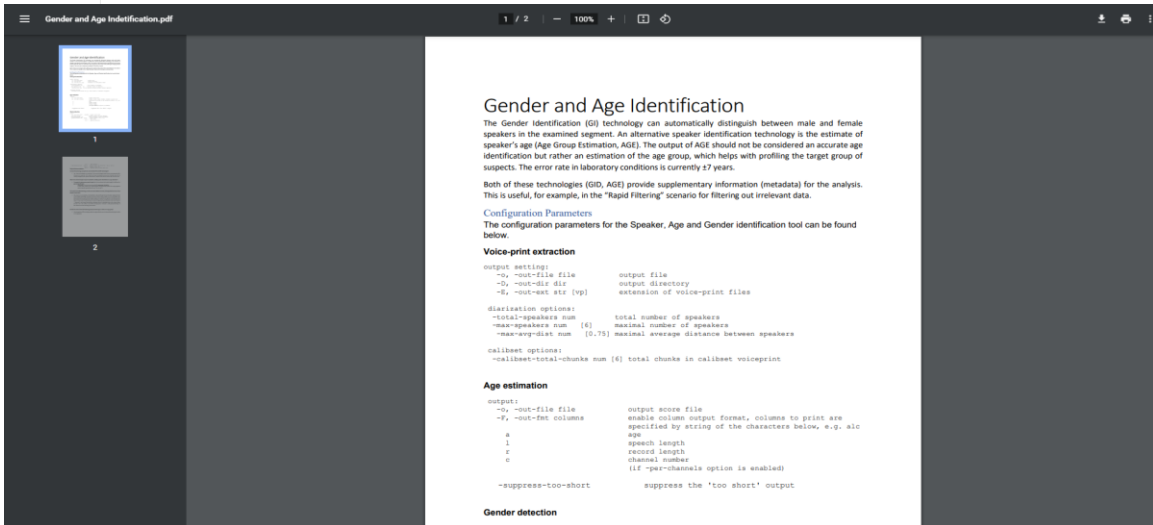
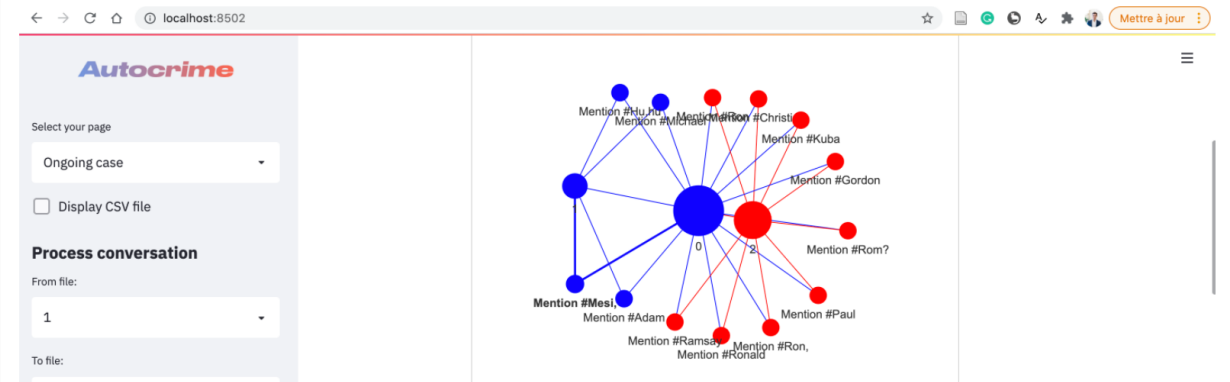
Dashboard / My courses / Autocrime Platform / Run the ROXSD case / Run and Visualize the Results

Run and Visualize the Results

You now have two ways to run the algorithm and visualize the results:

1. Process a **batch** of data (fully automatic), which will simply generate the JSON output. In the `config.yaml`, change `method` in `run` to "batch".
2. Process the data **file by file** via a user interface provided with an embedded network visualization tool, that lets you correct errors of the models. In the `config.yaml`, change `method` in `run` to "file".


This is what it looks like:



Progress Tracking


Course overview

▼ All (except removed from view) ▼



ROXANNE
Autocrime Platform

45% complete



ROXANNE
Automatic Speech Recog

0% complete

Your progress ?

Announcements

Structure

- Structure



Installation

- Hardware Specifications
- Install and downloads
- Video Tutorial: Installation Guide

Run the ROXSD case

- Input Data
- Output Data
- Choosing Technologies to Run
- Run and Visualize the Results
- Video Tutorial: Getting Started
- Video Tutorial: The platform

User Profile

 Michael Skitsas [Message](#) 

[Dashboard](#) / [Profile](#) [Reset page to default](#) [Customise this page](#)

User details [Edit profile](#)

Email address
mksktsas@additess.com

Privacy and policies
[Data retention summary](#)

Course details

Course profiles

- [Autocrime Platform](#)
- [Voice Activity Detection \(VAD\) and Speaker Diarization \(DIAR\)](#)
- [Automatic Speech Recognition](#)
- [Topic Detection](#)
- [Named Entity Recognition](#)
- [Network Analysis](#)
- [Forensics Visualisation Toolkit](#)

Miscellaneous

- [Blog entries](#)
- [Forum posts](#)

Reports

- [Browser sessions](#)
- [Grades overview](#)

Login activity

First access to site
Monday, 22 February 2021, 3:21 PM (226 days 22 hours)

Last access to site
Thursday, 7 October 2021, 2:57 PM (36 secs)

Mobile app



QR code for mobile app access
Scan the QR code with your mobile app and you will be automatically logged in. The QR code will expire in 10 minutes.

[View QR code](#)

This site has mobile app access enabled.
[Download the mobile app.](#)

Online users

1 online user (last 5 minutes)

 [Michael Skitsas](#) 



Conclusion

- The training material is documented in order to familiarize the non-experts to the usage of high-tech components.
- Future updates on training content will allow interactive training sessions and workshops.
- The trainees will be able to “asynchronously” attend online courses related with the tools of ROXANNE project.
- Announcements, calendar and more tools are available.
- Blogs and direct messages will establish a communication channel between members of a course.