

Erasmus + Project No598241-EPP-1-2018-1-RS-EPPKA2-CBHE-JP
**Strengthening Educational Capacities by Building Competences and
Cooperation in the Field of Noise and Vibration Engineering
SENVIBE**

Quality Report for WP4

Activity 7.2

Date: 11/11/2022

1. DESCRIPTION OF THE WORK PACKAGE (WP)

This WP is the second Development WP. Two types of LLL courses were developed depending on the learning outcomes defined in WP1. Besides developing learning material and training packages accompanied with lab exercises, measurements and e-material, a SENVIBE Glossary was created and published. During the project duration, these courses were implemented in different regions of Serbia (the number of attendees planned was ~90).

2. ACTIVITIES AND THEIR REALIZATION

2.1. Assessment per task

SENVIBE activities		State		
No.	Title	Fully Completed	Partially Completed	Not Completed
WP.4.1.	Development of LLL courses	✓		
WP.4.2.	Development of learning materials and training packages	✓		
WP.4.3.	Creation of a SENVIBE Glossary	✓		
WP.4.4.	Implementation of LLL courses	✓		

2.2. Description of the implemented activities

WP.4.1.

- Targeted groups, learning goals and learning outcomes were defined in this phase. Also, 2 types of LLL courses were defined:
 - 1) **Environmental & Occupational Noise and Human Vibration Risk Assessment:**
 - Human vibrations (HAV, WBV);
 - Workplace noise;
 - Environmental noise.
 - 2) **Environmental Noise Management:**
 - Environmental noise monitoring;
 - Acoustical zoning;
 - Acoustical mapping and planning.

WP. 4.2

- All Serbian partners were involved in the development and implementation of both LLL courses.
- The learning material for both LLL courses was developed in e-versions.

WP 4.3

- **SENVIBE Glossary** consists of two parts:

1) The first part describes the relevant field-specific terms associated with noise and vibration, as well as with the accompanying phenomena and systems in which they occur. The terms are defined descriptively.

2) The second part of the publication presents descriptions of European and national regulations in the field of noise and vibration in the context of environmental protection and occupational safety.

WP. 4.4.

- First type of LLL course – Environmental & Occupational Noise and Human Vibration Risk Assessment was held online on Microsoft Teams platform due to pandemic limitations.
- 53 candidates attended this LLL course.
- The learning material was uploaded on e-Senvibe platform.
- Second type of LLL course – Environmental Noise Management was held live on two locations (Novi Sad and Kraljevo).
- 66 candidates attended this LLL course.

The learning material was also uploaded on e-Senvibe platform.

2.2.1. Involvement of people with fewer opportunities

NA

2.2.2. Refugees

NA

2.2.3. Innovation

LLL courses, Glossary

2.3. Impact

2.3.1. Unexpected outcomes/ spin-off effects

NA

3. STATISTICS AND INDICATORS

For Training/Mobility Activities

Number of partner country "HEIs' students" trained

NA

Number of partner country "HEIs' academic staff" trained

NA

Number of partner country "HEIs' administrative staff" trained

NA

Number of partner country "non-HEI individuals" trained (priv. sector, NGOs, civil servants, etc.)

119

Impact at individual level

Extent of attention given to vulnerable groups

NA

Number of direct beneficiaries in the Partner country(ies) per year: academic staff from HEIs

10

Number of direct beneficiaries in the PCs (/year): administrative staff from HEIs

5

Number of direct beneficiaries in the PCs (/year): HE students

NA

Number of direct beneficiaries in the PCs (/year): non HE individuals

125

4. QUALITY ASSURANCE MEASURES

4.1. Reviews conducted in a descriptive form

Reviewed activity	Internal/External review	Reviewer	Description
W.P.4.1. Development of LLL courses	External	Aleksandar Cvjetić	The report is accompanied by the evaluation of the LLL type 1 course - Environmental & Occupational Noise and Human Vibration Risk Assessment. The material used for course evaluation, available on the e-senvibe webpage, was in the form of methodological units: Theoretical parts (Power point presentations, with animations, graphs and equations) and Quizzes (digital tests with correctness of answers)
W.P.4.1. Development of LLL courses	External	Aleksandar Cvjetić	This report is accompanied by the evaluation of the LLL type 2 course - Environmental Noise Management. The material used for course evaluation, available on the esenvibe webpage, was in the form of Power point presentations, with animations, graphs and equations.
W.P.4.2. Development of learning materials and training packages	External	Miomir Mijić	The review was written based on documents from E-SENVIBE learning platform at address: https://www.esenvibe.senvibe.uns.ac.rs/course/view.php?id=8&lang=en , part for Undergraduate Courses on NOISE AND VIBRATION: - Neil Ferguson PowerPoint presentation "Sound and Noise", - its translation, also in pptx, - documents and software for reverberation time calculation, - all available information available at the address.
W.P.4.3. Creation of a SENVIBE Glossary	External	Aleksandar Pavic	The review of the SENVIBE Glossary – Part I was written based on almost 30 years of work in an English speaking country (UK) specifically with terms relating to vibration. I am a Professor of Vibration Engineering (one of two or three in the whole country) and I am also a native speaker of Serbian language. These provided me with opportunity to competently evaluate the Glossary.
W.P.4.3. Creation of a SENVIBE Glossary	Internal	Momir Prašćević	The review of the SENVIBE Glossary – Part II was written based on the analysis of the SENVIBE Glossary – Part II and the International and Serbian regulation in noise and vibration area concerning living and working environment.

W.P.4.4. Implementati on of LLL courses	Internal	Zorana Georgijev- SUPEP	<p>According to Detailed description of the Senvibe project, two types of LLL courses have been developed. The content of the LLL1 course covers all the necessary topics and each topic was clearly covered and presented.</p> <p>Participants rated the course with a high score indicating the high quality of the course's content, as well as its presentations. First type of LLL course is separated in 3 thematic areas: Vibrations that affect man, occupational noise and environmental noise. Vibration and noise are evenly distributed and each topic is presented with examples from the practice.</p>
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Two types of LLL courses have been developed: 1) Environmental & Occupational Noise and Human Vibration Risk Assessment and 2) Environmental Noise Management. The learning material for both LLL courses was developed in e-versions. The SENVIBE Glossary has been created. First type of LLL course was held online with presence of 53 participants. Second type of LLL course was held live on two locations (Novi Sad and Kraljevo) with 66 candidates. The number of planned participants in the proposal was 90, so this goal has been exceeded.

The tasks in this WP are completed, and the number of attendees of the SENVIBE LLL courses were LARGER than planned.

4.2. Rebuttal/answer to reviews with the actions taken to improve the state

First term of LLL type 1 course was the test for organizers and lecturers for material optimization according to target group of participants. Participants emphasized that there should be more practical examples in video format and lecturers should prepare concrete examples of solutions for the implementation of legal regulations, etc. The comments were accepted and implemented in the LLL2 course.

**Prepared by Ivan Lomen,
Novi Sad, 10/11/2022**

**Enhanced by the Quality Assurance Group Leader, Natasa Stojic
Sremska Kamenica, 10/11/2022**

**Approved by Project Coordinator
Novi Sad, 14/11/2022**

"This project has been funded with support from the European Commission. This publication [communication] reflects the views only of the author, and the Commission cannot be held responsible for any use which may be made of the information contained therein"

1. ANNEX 1

Evaluation reports

Evaluation report template

Erasmus + Project No598241-EPP-1-2018-1-RS-EPPKA2-CBHE-JP

**Strengthening educational capacities by building competences and cooperation
in the field of Noise and Vibration Engineering**

SENVIBE

Reviewer:	Aleksandar Cvjetić
Executive summary	This document provides the review of the WP 4, Development of LLL (Lifelong learning) courses, for Work packages 4.1. Development of LLL courses and Work packages 4.4. Implementation of LLL courses.
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p><i>The review was written base d on available documents from the project web page https://senvibe.uns.ac.rs/lll- courses/</i></p> <p>According to Detailed description of the Senvibe project, two types of LLL courses have been developed:</p> <ol style="list-style-type: none"> 1) Environmental & Occupational Noise and Human Vibration Risk Assessment; 2) Environmental Noise Management <p>Every type has separated section on the web page LLL courses with detailed information about it. The LLL courses learning material is available on the webpage e-senvibe https://www.e-senvibe.senvibe.uns.ac.rs/login/index.php</p> <p>Work Package 4.4 - Implementation of LLL courses</p> <ol style="list-style-type: none"> 1) LLL type 1 (Environmental & Occupational Noise and Human Vibration Risk Assessment): 2) LLL type 2 (Environmental Noise Management)

	<p>The report is accompanied by the evaluation of the LLL type 1 course - Environmental & Occupational Noise and Human Vibration Risk Assessment. The material used for course evaluation, available on the e-senvibe webpage, was in the form of methodological units: Theoretical parts (Power point presentations, with animations, graphs and equations) and Quizzes (digital tests with correctness of answers).</p>
<p>Work Packages</p>	
<p>Deliverable/ Activity Ref. No</p>	<p>4.4. Implementation LLL courses LLL COURSES – SENVIBE (uns.ac.rs) 7.2. Internal and external reviews processes and outcomes.</p>
<p>LLL type 1 - Environmental & Occupational Noise and Human Vibration Risk Assessment</p>	
<p><i>PLEASE WRITE HERE YOUR OPINION IN A DESCRIPTIVE FORM IN ENGLISH:</i></p> <p>Lifelong learning is a process of gaining knowledge and new skills throughout life for personal or professional fulfilment. Lifelong learning helps create a positive attitude to learning both for personal and professional development. By accumulating new knowledge and skills, you are more likely to develop new, ground-breaking ideas and solutions. At work, lifelong learning is essential to adapt to changes and seize new opportunities – it helps you become more flexible, which is a key skill for the modern workplace.</p> <p>In accordance with lifelong learning goals, the presented LLL1 course can be assessed as competent and complete. The learning material is well structured and covers all the necessary topics. At the end of each thematic unit a quiz is attached in order to facilitate the adoption of the presented material.</p> <p>It is obvious that lifelong learners will satisfy from the expected outcomes of the LLL1 course regardless of the existing knowledge. By the end of the course, lifelong learners are supposed to acquire the knowledge which is supposed to enable the expansion of the previous knowledge fund and possibly give them new competences.</p>	
<p>Suggestions for improvements: <i>PLEASE COMPLETE</i></p>	

Given the objective of the LLL1 course, the subjects included, the quality of the material presented and the relevance of the examples, there is just minorsuggestion. Because of a number of lecturers, it is common that slides of presentations are little different in the styles (fonts, bullets, colours and etc.) In this regard, efforts should be made to harmonize styles in order to achieve visual coherence.

EVALUATION

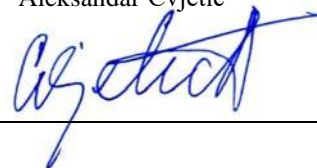
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The content of the LLL course covers all the necessary topics.	+				
Vibration and noise are evenly distributed.	+				
Each topic was clearly covered and presented.	+				
The LLL course enables the expansion of the previous knowledge fund.	+				
The length of the presentation was appropriate	+				
Relevant examples from practice are explained.		+			
The knowledge test was of the appropriate level.		+			
The total duration of the LLL course is appropriate to the amount of material exposed.	+				
The accompanying documentation is of appropriate volume.		+			

Place, date:

Belgrade, 27.06.2022.

Name and signature:

Aleksandar Cyjetic



Evaluation report template

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**Strengthening educational capacities by building competences and cooperation
in the field of Noise and Vibration Engineering**

SENVIBE

Reviewer:	Aleksandar Cvjetić
Executive summary	This document provides the review of the WP 4, Development of LLL (Life long learning) courses, for Work packages 4.1. Development of LLL courses and Work packages 4.4. Implementation of LLL courses.
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p><i>The review was written base d on available documents from the project web page https://senvibe.uns.ac.rs/lll- courses/</i></p> <p>According to Detailed description of the Senvibe project, two types of LLL courses have been developed:</p> <ol style="list-style-type: none"> 1) Environmental & Occupational Noise and Human Vibration Risk Assessment; 2) Environmental Noise Management <p>Every type has separated section on the web page LLL courses with detailed informations about it. The LLL courses learning material is available on the webpage e-senvibe https://www.e-senvibe.senvibe.uns.ac.rs/login/index.php</p> <p>Work Package 4.4 - Implementation of LLL courses</p> <ol style="list-style-type: none"> 1) LLL type 1 (Environmental & Occupational Noise and Human Vibration Risk Assessment): 2) LLL type 2 (Environmental Noise Management)

	<p>The report is accompanied by the evaluation of the LLL type 2 course - Environmental Noise Management. The material used for course evaluation, available on the e-senvibe webpage, was in the form of Power point presentations, with animations, graphs and equations.</p>
<p>Work Packages</p>	
<p>Deliverable/ Activity Ref. No</p>	<p>4.4. Implementation LLL courses LLL COURSES - SENVIBE (uns.ac.rs) 7.2. Internal and external reviews processes and outcomes. <i>PLEASE DO NOT CHANGE</i></p>
<p>LLL type 2 - Environmental Noise Management</p>	
<p><i>PLEASE WRITE HERE YOUR OPINION IN A DESCRIPTIVE FORM IN ENGLISH:</i></p> <p>Lifelong learning is a process of gaining knowledge and new skills throughout life for personal or professional fulfilment. Lifelong learning helps create a positive attitude to learning both for personal and professional development. By accumulating new knowledge and skills, you are more likely to develop new, ground-breaking ideas and solutions. At work, lifelong learning is essential to adapt to changes and seize new opportunities – it helps you become more flexible, which is a key skill for the modern workplace.</p> <p>In accordance with lifelong learning goals, the presented LLL2 course can be assessed as competent and complete. The learning material is well structured and covers all the necessary topics. It is obvious that lifelong learners will satisfy from the expected outcomes of the LLL2 course.</p> <p>At the end of the course, lifelong learners are supposed to acquire the knowledge which is supposed to enable the expansion of the previous knowledge fund. Whether pursuing personal interests and passions or chasing professional ambitions, the LLL2 course is supposed to help attendants to achieve personal fulfilment and satisfaction.</p>	
<p>Suggestions for improvements: <i>PLEASE COMPLETE</i></p>	

In order to facilitate the adoption of the material and topics presented, efforts should be made to create quizzes, questionnaires, or some other way of verifying the knowledge gained.

EVALUATION

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The content of the LLL course covers all the necessary topics.	+				
Vibration and noise are evenly distributed.				+	
Each topic was clearly covered and presented.	+				
The LLL course enables the expansion of the previous knowledge fund.	+				
The length of the presentation was appropriate	+				
Relevant examples from practice are explained.	+				
The knowledge test was of the appropriate level.				+	
The total duration of the LLL course is appropriate to the amount of material exposed.	+				
The accompanying documentation is of appropriate volume.		+			

Place, date:

Belgrade, 27.06.2022.

Name and signature:

Aleksandar Cyjetić



Evaluation report template

Erasmus + Project No 598241-EPP-1-2018-1-RS-EPPKA2-CBHE-JP

Strengthening educational capacities by building competences and cooperation in the field of Noise and Vibration Engineering

SENVIBE

Reviewer:	Miomir Mijić
Executive summary	<p>This document provides the review of the Learning and teaching materials for undergraduate courses in Noise & Vibration at different engineering departments</p> <p><i>PLEASE DO NOT CHANGE</i></p>
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p><i>The review was written based on documents from E-SENVIBE learning platform at address: https://www.e-senvibe.senvibe.uns.ac.rs/course/view.php?id=8&lang=en, part for Undergraduate Courses on NOISE AND VIBRATION:</i></p> <ul style="list-style-type: none"> - Neil Ferguson PowerPoint presentation “ Sound and Noise” , - its translation, also in pptx, - documents and software for reverberation time calculation, - all available information available at the address .
Work Packages	
Deliverable/ ActivityRef. No	<p>3.3. Development of learning materials</p> <p>7.2. Internal and external reviews processes and outcomes.</p> <p><i>PLEASE DO NOT CHANGE</i></p>

Learning and teaching materials for undergraduate courses in Noise & Vibration at different engineering departments

PLEASE WRITE HERE YOUR OPINION IN A DESCRIPTIVE FORM IN ENGLISH:

E-SENVIBE is an interesting concept that enables education and self-evaluation in the field of acoustics. Acoustics is an important, although neglected area in the system of formal education, at all levels. That is why the introductory lecture was made in a popular way, which is undoubtedly important. It is not clear who will be the participants in the courses and with unknown previous knowledge, so it is difficult to give a more precise evaluation of the course content appropriateness. But the presented form will certainly correspond to the largest number of course participants.

Suggestions for improvements:

A. General remark

Introductory presentation "Sound and Noise" is too short (only 14 slides). Therefore, it does not provide enough knowledge to understand following parts of the course and the level of knowledge presentation applied in them. Thus, one can recognize a serious misalliance between introductory presentation and other parts of the course.

B. Logical and terminological weaknesses

1. The title of the entry-level presentation "Sound and Noise" is confusing. Noise is also sound, but in subjective, i.e., psychological domain it is specially marked as unwanted. Title "sound and noise" is wrong in the same sense as for example "sound and music".
2. At slide "Frequency analysis of the car sounds" title of the first diagram is "SPL (pressure) versus time". That is wrong, because the diagram represents sound pressure (i.e., voltage from microphone's output) and not SPL (which means Sound Pressure Level). The same is in next slide.
3. At the same slide title of the second diagram is "Time and spectrogram (frequency content)". Term "Spectrogram" means time vs frequency presentation, thus include time and frequency as its definition. So, indication "Time and spectrogram" in title is wrong. The same is in next slide.

4. In summary the first sentence is “ We hear sound - in a vacuum (in space) there would be no fluid or gas so no sound! (**Some hearing is by bone conduction.**)” This simply that in vacuum there is no sound, but som ething can be heard by bone conduction! !! That is omitted in Serbian translation, which means that interpreter recognized the problem in original presentation.

C. Weaknesses of pptx presentation translation from English to Serbian

1. For the word “annoyance” in Serbian documents word “uznemiravanje”, and not “nerviranje” is used.
2. “Large range of pressure amplitudes ” have to be translated as “veoma veliki **opseg** amplitude pritiska ”, and not “veoma veliki **spektar** amplitude pritiska ”.
3. Copy/paste error produces “ buka unutar nepokretnog vozila na 120 km/h” which in Serbian means “noise inside a stationary vehicle at 120 km/h”. That is simple copy/paste mista ke

EVALUATION

Occupational Safety Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?		X			
Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?			X		
Is the content of the L&T materials appropriate for the topic ?	X				

Does the content of L&T materials have the appropriate scope and content ?		X			
Is the content of the L&T materials up-to date ?	X				
Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			
Are L&T materials realized at the appropriate technical level ?		X			

Environmental Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?		X			
Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?			X		
Is the content of the L&T materials appropriate for the topic ?	X				
Does the content of L&T materials have the appropriate scope and content?		X			
Is the content of the L&T materials up-to date ?	X				

Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			
Are L&T materials realized at the appropriate technical level ?		X			

Mechanical Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?		X			
Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?			X		
Is the content of the L&T materials appropriate for the topic ?	X				
Does the content of L&T materials have the appropriate scope and content?		X			
Is the content of the L&T materials up-to date ?	X				
Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			

Are L&T materials realized at the appropriate technical level ?		X			
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Electrical Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?				X	
Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?				X	
Is the content of the L&T materials appropriate for the topic ?		X			
Does the content of L&T materials have the appropriate scope and content?				X	
Is the content of the L&T materials up-to date ?		X			
Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			
Are L&T materials realized at the appropriate technical level ?		X			

Traffic Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
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Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?		X			
Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?			X		
Is the content of the L&T materials appropriate for the topic?	X				
Does the content of L&T materials have the appropriate scope and content?		X			
Is the content of the L&T materials up-to date ?	X				
Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			
Are L&T materials realized at the appropriate technical level ?		X			

Civil Engineering	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Will the L&T materials be valuable for the students/teachers?		X			
Is the content of the L&T materials appropriate for the level of the undergraduate study?		X			

Is the content of the L&T materials relevant to the learning outcomes of the engineering departments ?		X			
Is the content of the L&T materials detailed enough ?			X		
Is the content of the L&T materials appropriate for the topic ?	X				
Does the content of L&T materials have the appropriate scope and content?		X			
Is the content of the L&T materials up-to date ?	X				
Does the content of the L&T materials have a logical structure		X			
Does the content of the L&T materials avoid repetition and includes introduction to the irrelevant the topics?		X			
Are L&T materials realized at the appropriate technical level ?		X			

Place, date:
Belgrade, 1.05.2022.

Name and signature:

Miomir Mijić


Evaluation report template

Erasmus + Project No598241-EPP-1-2018-1-RS-EPPKA2-CBHE-JP

Strengthening educational capacities by building competences and cooperation in the field of Noise and Vibration Engineering

SENVIBE

Author:	Professor Aleksandar Pavic
Executive summary	This document provides the review of the SENVIBE Glossary – Part I developed during the SENVIBE project
External /Internal Evaluation Methodology	What has been done and how? The review of the SENVIBE Glossary – Part I was written based on almost 30 years of work in an English speaking country (UK) specifically with terms relating to vibration. I am a Professor of Vibration Engineering (one of two or three in the whole country) and I am also a native speaker of Serbian language. These provided me with opportunity to competently evaluate the Glossary.
Work Packages	
Deliverable/ Activity Ref. No	4.3 SENVIBE Glossary 7.2. Internal and external reviews processes and outcomes.
Review of the SENVIBE Glossary	
This is an excellent attempt to produce this kind of Glossary as Serbian language traditionally lacks specialised technical terms to equip it to be able to serve the engineering and technical community in the country. The Glossary is really badly needed.	

With careful copyediting this Glossary will become a good reference to be used in the future.

I am very pleased with the outcome.

I suggested improvements using the Word version of the Glossary and the track changes tool so every correction/suggestion can be tracked and analysed.

SENVIBE Glossary EVALUATION

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Does the publication as a whole meet the international standards?		x			
Is the publication original?	x				
Will the publication be valuable for the readers?	x				
Is its content appropriate?		x			
Is the publication realized at the appropriate technical level?		x			

Evaluation report template

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**Strengthening educational capacities by building competences and cooperation
in the field of Noise and Vibration Engineering**

SENVIBE

Author:	Momir Prašćević
Executive summary	This document provides the review of the SENVIBE Glossary – Part II developed during the SENVIBE project.
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p>The review of the SENVIBE Glossary – Part II was written based on the analysis of the SENVIBE Glossary – Part II (version 09: 02:2021) and the International and Serbian regulation in noise and vibration area concerning living and working environment.</p>
Work Packages	
Deliverable/ Activity Ref. No	<p>4.3 SENVIBE Glossary</p> <p>7.2. Internal and external reviews processes and outcomes.</p>
Review of the SENVIBE Glossary – Part II	
<p>The Glossary contains an overview of international and national legislation in the field of noise and vibration in the working and living environment. The legislation is hierarchically arranged - from international to national regulations and from higher legal regulations to lower ones. An overview of international and national legislation is provided in Serbian and English with an accompanying link to the text of the regulation with the date of accession on November 1, 2020. For each of the regulations, a brief description of the content and scope is given.</p> <p>The Glossary contains an overview of 47 international and national regulations, of which 24 are regulations in the field of living environment and 23 in the field of working environment.</p>	

The Glossary is very original and will be of great importance to the reader because the presented list of all current regulations in the field of noise and vibration gives the insight into all important regulations in this area. Introducing the reader to the regulations in this way enables the successful management of noise and vibration in the working and living environment.

The content of the Glossary is comprehensive and at a very high technical level.

Suggestions for improvements:

The title of the publication, as well as the introduction in both parts of the glossary, which is given only in Serbian, should be given bilingually.

SENVIBE Glossary EVALUATION

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
Does the publication as a whole meet the international standards?	✓				
Is the publication original?	✓				
Will the publication be valuable for the readers?	✓				
Is its content appropriate?	✓				
Is the publication realized at the appropriate technical level?	✓				

Evaluation report template

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Strengthening educational capacities by building competences and cooperation in the field of Noise and Vibration Engineering

SENVIBE

Reviewer:	Internal reviewer-SUPEP, Zorana Georgijev
Executive summary	This document provides the review of the WP 4, Development of LLL (Life long learning) courses, for Work packages 4.1. Development of LLL courses and Work packages 4.4. Implementation of LLL courses.
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p><i>The review was written based on available documents from the project web page https://senvibe.uns.ac.rs/lll-courses/</i></p> <p>According to Detailed description of the Senvibe project, two types of LLL courses have been developed:</p> <ol style="list-style-type: none"> 1) Environmental & Occupational Noise and Human Vibration Risk Assessment; 2) Environmental Noise Management <p>Every type has separated section on the web page LLL courses with detailed informations about it. Additionally, during the LLL courses learning material is available on the webpage e-senvibe https://www.e-senvibe.senvibe.uns.ac.rs/login/index.php</p> <p>Based on the Senvibe project application, for Work Package 4.4 - Implementation of LLL courses, the end date of the LLL courses is defined (until the number of participants is 90):14.10.2021. This goal has not been met.</p>

	<p>1) LLL type 1 (Environmental & Occupational Noise and Human Vibration Risk Assessment): 2 terms of this course were held online via Microsoft Teams platform during 2 days at 17-18th May 2021, and 28-29th March 2022 The course was held by 11 lecturers. 45 participants in total have been attended the LLL courses, which is 50% of the planned participants. Certificates have been prepared for participants. <u>Relevant document:</u> <i>Report from Workshop 1 on LLL course, UNI SENVIBE Days, 12-14 July 2021 in senvibe cloud.</i></p> <p>2) LLL type 2 (Environmental Noise Management) course has not been held yet. It is planned to held in June 2022. Learning goals and outcomes have been defined and available on the webpage under LLL2 course</p> <p><i>(short explanation of the documents available/used)</i> PLEASE COMPLETE</p>
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Work Packages

Deliverable/ Activity Ref. No	<p>4.4. Implementation LLL courses LLL COURSES – SENVIBE (uns.ac.rs)</p> <p>7.2. Internal and external reviews processes and outcomes.</p> <p>PLEASE DO NOT CHANGE</p>
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LLL courses

PLEASE WRITE HERE YOUR OPINION IN A DESCRIPTIVE FORM IN ENGLISH:

According to Detailed description of the Senvibe project, two types of LLL courses have been developed with learning goals, material and knowledge test. Every participant who pass the test get certificate and SENVIBE Glossary.

In this review only LLL course type 1 has been evaluated:

The content of the LLL course covers all the necessary topics and each topic was clearly covered and presented.

Participants rated the course with a high score indicating the high quality of the course's content, as well as its presentations. First type of LLL course is separated in 3 thematic areas: Vibrations that affect man, occupational noise and environmental noise. Vibration and noise are evenly distributed and each topic is presented with examples from the practice.

The length of the presentation was appropriate according to exposed material, but there were complaints about tight schedule of lectures and difficulties with maintaining concentration. The accompanying documentation is of appropriate volume, and available on the e-senvibe page where each participant had access with their credentials.

Every type of courses has separated sections on the web page <https://senvibe.uns.ac.rs/lll-courses/> LLL courses with detailed information about it.

Suggestions for improvements: *PLEASE COMPLETE*

First term of LLL type 1 course was the test for organizers and lecturers for material optimization according to target group of participants.

Participants emphasized that there should be more practical examples in video format and lecturers should prepare concrete examples of solutions for the implementation of legal regulations, etc.

Perceived deficiencies have been addressed in order to get the best quality and fulfilled the main goal of knowledge improvement in noise and vibration area.

EVALUATION

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The content of the LLL course covers all the necessary topics.	x				
Vibration and noise are evenly distributed.	x				
Each topic was clearly covered and presented.	x				
The LLL course enables the expansion of the previous knowledge fund.	x				

The length of the presentation was appropriate		x			
Relevant examples from practice are explained.	x				
The knowledge test was of the appropriate level.	x				
The total duration of the LLL course is appropriate to the amount of material exposed.	x				
The accompanying documentation is of appropriate volume.	x				

Place, date:

Novi Sad, 9.05.2022.

Name and signature:

Zorana Georgijev