

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 WP6**

**Activity 7.2**

**Date: 04/11/2022**

## 1. DESCRIPTION OF THE WORK PACKAGE (WP)

The WP6 Establishing the No&Vib Hub is the fourth development WP. Its purpose is to strengthen cooperation among the stakeholders through a newly established No&Vib Hub. This corresponds to the fourth specific objective of the SENViBe project and relies on the outcomes of WP1 (Task 1.6. and Task 1.7.) and comprises all the activities related to establishment of the No&Vib Hub and it is also the network of all activities in the project. It includes defining a framework for cooperation in terms of a signed document – Agreement on the Establishment of a Common No&Vib Hub Virtual Platform for Cooperation in the Field of Noise and Vibration, specification of activities, programmes and services aimed at students and at wider society, defining the No&Vib Hub space, roles and responsibilities and finally its establishment through the realisation of activities, programmes and services.

## 2. ACTIVITIES AND THEIR REALIZATION

### 2.1. Assessment per task

SENViBe activities		State		
No.	Title	Fully Completed	Partially Completed	Not Completed
WP.6.1.	Define a framework for cooperation between the stakeholders	✓		
WP.6.2.	Specification of activities, programmes and services aimed at students and at wider society	✓		
WP.6.3.	Defining the No&Vib Hub space, roles and responsibilities	✓		
WP.6.4.	Establishment of the No&Vib Hub	✓		

### 2.2. Description of the implemented activities

The cooperation platform [No&Vib Hub](#) is an organizational unit for creating a network between academic and non-academic institutions that are interested in noise and vibration. No&Vib Hub was founded at the University of Novi Sad on 10 November 2020. [Agreement on Establishing a Single Virtual Cooperation Platform in the Field of Noise and Vibration](#) was an initial instrument for the establishing No&Vib Hub. The work of No&Vib Hub is directed by the Coordination Body headed by Professor Ivana Kovacic, coordinator of the SENViBe project, and logistical support for the platform is provided by the Centre for Vibro-acoustic Systems and Signal Processing (CEVAS) of the Faculty of Technical Sciences of the University of Novi Sad. So far, 45 members from the governmental, academic, research, economic, professional and non-governmental sector (NGO) have joined the platform. Joining can be done [online](#) via the No&Vib Hub webpage.

After its establishment, No&Vib Hub realized plenty of activities, all of which are listed on this link:

<https://senvibe.uns.ac.rs/aktivnosti-huba/>

They are of different types and target different audiences. Among them, are:

- [Presentations and promotions on the occasion of the International Noise Awareness Day](#)
- [Proposals for changes and additions to legal national regulations](#)
- Creation of three publications, which had not existed at the national level before: '[Occupational Noise-Guide for Employees and Employers](#)', '[Occupational Vibration-Guide for Employees and Employers](#)' and '[Guide for the Local Self-Government Units-Environmental Noise](#)'
- Conducting noise and vibration surveys among the general population and NGO's 'Public Opinion on Environmental Noise Issues'
- Production of educational video materials for You Tube '[Environmental noise](#)', '[Occupational Noise](#)', '[Sense of Hearing and Health Effects Caused by Noise](#)', '[Noise Pollution](#)'
- Creation of a leaflet about noise for a wider [community](#) '[What is noise? – a reminder of what we should know about it](#)'
- [E-leaflet about No&Vib Hub](#)

#### **2.2.1. Involvement of people with fewer opportunities**

Not applicable.

#### **2.2.2. Refugees**

Not applicable.

#### **2.2.3. Innovation**

- Three publications of national interest: Guides for Local Self-Government Units and for Employees and Employers;
- First ever conducted in Serbia: Survey 'Public opinion on Environmental noise issues';
- First ever unit for cooperation in the field of noise and vibration in Serbia - No&Vib Hub.

### **2.3. Impact**

- Strengthening the institutional and personnel capacities of state and professional institutions for implementing legal obligations in the noise and vibration area; environmental monitoring and active participation in the creation of national policy in the area of noise and vibrations <https://senvibe.uns.ac.rs/aktivnosti-huba/>
- Promotions, prompt and wide dissemination activities aimed to raise public awareness about noise & vibrations – distributing brochures to all LSGU's and

professional institutions in Serbia; e-published leaflets 'No&Vib Hub', survey 'Public opinion on Environmental noise issues', fairs,

- Developing mechanism of cooperation through student internships

### 2.3.1. Unexpected outcomes/ spin-off effects

Not applicable.

## 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.)

NA

### 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

25

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

20

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

30

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

3000

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## 4. QUALITY ASSURANCE MEASURES

### 4.1. Reviews conducted in a descriptive form

Reviewed activity	Internal/External review	Reviewer	Description
WP 6.4. Establishment of the No&Vib Hub	Internal	UPV	<p>The review was written based on:</p> <ol style="list-style-type: none"> <li>1. The Report for the Activity 6.3.: Defining the No&amp;Vib Hub space, roles and responsibilities (approved: 09.11.2020.)</li> <li>2. The Report for the Activity 6.4.: Establishment of the No&amp;Vib Hub (approved: 11.03.2021.)</li> <li>3. Documents available on the NO&amp;VIB HUB web site (<a href="https://senvibe.uns.ac.rs/novibhub-srb/">https://senvibe.uns.ac.rs/novibhub-srb/</a>) in three parts: <ul style="list-style-type: none"> <li>- Framework for Cooperation_Partnership Agreement (Memorandum of Understanding);</li> <li>- NO &amp;VIB HUB Structure and Members;</li> <li>- NO &amp;VIB HUB Activities;</li> </ul> </li> <li>4. Documents available on the Senvibe-Cloud for section Hub;</li> <li>5. Documents available on e-Senvibe, section Hub</li> </ol>
WP 6.4. Establishment of the No&Vib Hub	External	Valentina Golubović Bugarski	<p>This review was written based upon the documents available on the NO &amp;VIB HUB web site (<a href="https://senvibe.uns.ac.rs/novibhub-srb/">https://senvibe.uns.ac.rs/novibhub-srb/</a>). There are three sections on the web site, with the following content:</p> <p>Framework for Cooperation_Partnership Agreement (Memorandum of Understanding): In this section, a procedure for joining to No&amp;Vib HUB is described. The application form is posted on-line. Also, the "Agreement on the establishment of a unique virtual platform for cooperation in the field of noise and vibration" is available on the site. Finally, there is a form for on-line registration of contact person for a new member of the HUB.</p> <p>NO &amp;VIB HUB Structure and Members: In this section, the structure of the No&amp;Vib Hub is described. No&amp;Vib HUB Coordination Body is presented, consisting of one representative from each Erasmus + SENVIBE project partner from Serbia (7 members). Also, the Head of the Coordination Body is presented. All 39 current members of the HUB are listed (9 from the Public sector, 5 from the Educational and scientific</p>

			<p>sector, 14 from the Real sector, 6 from the Professional sector, 5 members from the NG sector) NO &amp;VIB HUB Activities: In this section, one can find the List of HUB activities for the period April - December 2021 and the List of HUB activities for the period December 2021 - April 2022. Next, a Calendar of upcoming HUB activities is available. Finally, information about former meetings and workshops can also be found.</p>
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Within WP6, a framework for cooperation between the stakeholders was established for the first time in Serbia. No&Vib Hub space, roles and responsibilities were defined. The No&Vib Hub was established. 45 members from the governmental, academic, research, economic, professional and non-governmental sector (NGO) have joined the platform, while in the proposal ~15 signees were estimated initially. Various activities aimed at students, wider society, business sector (employers and employees) as well as governmental sector were undertaken.

**The tasks in this WP are fully completed. The number of members of No&Vib Hub considerably overcomes the one planned in the proposal: ~15 was planned, while 45 joined the Hub. This illustrates a great interest for the existence of such unit. The programme of the Hub was reach at aimed at different types of audience.**

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

Not applicable

#### **4.3. Other measures**

None

**Prepared by Zorana Georgijev  
Novi Sad, 09/11/2022**

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

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

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*"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. ANEXX 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:	Valentina Golubović Bugarski
Executive summary	This document provides the review of the <b>Noise and Vibration Hub (structure and programme)</b>  <i>PLEASE DO NOT CHANGE</i>
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p>This review was written based upon the documents available on the NO &amp;VIB HUB web site (<a href="https://senvibe.uns.ac.rs/novib-hub-srb/">https://senvibe.uns.ac.rs/novib-hub-srb/</a>). There are three sections on the web site, with the following content:</p> <p><b>Framework for Cooperation Partnership Agreement (Memorandum of Understanding):</b> In this section, a procedure for joining to No&amp;Vib HUB is described. The application form is posted on-line. Also, the “Agreement on the establishment of a unique virtual platform for cooperation in the field of noise and vibration” is available on the site. Finally, there is a form for on-line registration of contact person for a new member of the HUB.</p> <p><b>NO &amp;VIB HUB Structure and Members:</b> In this section, the structure of the No&amp;Vib Hub is described. No&amp;Vib HUB Coordination Body is presented, consisting of one representative from each Erasmus + SENViBE project partner from Serbia (7 members). Also, the Head of the Coordination Body is presented. All 39 current members of the HUB are listed (9 from the Public sector, 5 from the Educational and scientific sector, 14 from the Real sector, 6 from the Professional sector, 5 members from the NG sector)</p> <p><b>NO &amp;VIB HUB Activities:</b> In this section, one can find the List of HUB activities for the period April - December 2021 and the List of HUB activities for the period December 2021 - April 2022. Next, a Calendar of upcoming HUB activities is available. Finally, information about former meetings and workshops can also be found.</p>



Work Packages	
Deliverable/ Activity Ref. No	<p>6.3. No&amp;Vib Hub space, roles and responsibilities</p> <p>6.4. Establishment of the No&amp;Vib Hub</p> <p>7.2. Internal and external reviews processes and outcomes.</p> <p><i>PLEASE DO NOT CHANGE</i></p>
<p><b>Noise and Vibration Hub (structure and programme)</b></p>	
<p><i>PLEASE WRITE HERE YOUR OPINION IN A DESCRIPTIVE FORM IN ENGLISH:</i></p> <p>The Mission of No&amp;Vib Hub is clearly defined: to develop effective mechanisms for cooperation between stakeholders engaged in No&amp;Vib fields. To fulfill this goal, No&amp;Vib Hub is established as a virtual platform at the University of Novi Sad, joining 39 members till today, from academic and non-academic sectors (9 from the Public sector, 5 from the Educational and scientific sector, 14 from the Real sector, 6 from the Professional sector, 5 members from the NG sector).</p> <p>The program are set up to meet the needs of all stakeholders: Student internship program; Industrial scholarship/fellowship program; Providing practical subjects for students' MSc theses; Realization of joint projects; Exchange of knowledge on the related topics and legislation; Monitoring of reform policies; Presenting results of noise and vibration monitoring; Development and implementation of professional training courses, seminars and workshops for various types of trainees; Educational activities for wider community; Dissemination activities; New issues, etc.</p> <p>All activities which have been done until now correspond to the program activities. Realised activities are listed on the web site (<a href="https://senvibe.uns.ac.rs/aktivnosti-huba/">https://senvibe.uns.ac.rs/aktivnosti-huba/</a>), and some of them are documented in form of PP-presentation or video-presentation available on you-tube. (<a href="https://www.youtube.com/channel/UCK2bwC1a_e8TIjyutD0Ga7A">https://www.youtube.com/channel/UCK2bwC1a_e8TIjyutD0Ga7A</a>).</p> <p>Also, all finished activities are shown in the "Open Matters" section, which can be found on the status line of the SENVIBE web site (<a href="https://senvibe.uns.ac.rs/blog/">https://senvibe.uns.ac.rs/blog/</a>).</p> <p>In my opinion, the structure of the No&amp;Vib HUB and the program activities fully correspond to the mission of this HUB. I find especially valuable the Long Life Learning courses intended to professionals in the field of noise and vibrations, since this issue is insufficiently represented in the syllabuses of mechanical and other engineering studies, while the graduated engineers are often faced with the N&amp;V problems in their practice. Information about it one can finds in the "LLL courses" section, on the status line of the project.</p> <p>I find that publications "Occupational noise – guide for employees and employers" and "Occupational vibration – guide for employees and employers", created as the outcomes activity within the No&amp;Vib HUB, are very useful to the professionals. This activity was led by</p>	

the Union of Employers of Vojvodina, as a member of HUB from Real sector, reflecting the mission of the HUB - closer cooperation between higher education institutions and business entities. In addition, Provincial Secretariat for Urban Planning and Environmental Protection, as one of the partners in the SENViBE project from the Public sector, has started implementing the activity 'Raising public awareness in the field of environmental noise', through the Questionnaire (<https://senvibe.uns.ac.rs/2022/03/11/senvibe-questionnaire-public-opinion-on-environmental-noise-issues-9-march-2022/>).

**Suggestions for improvements:**

Realized program activities excellently cover occupational and environmental noise and vibration problems.

It would be good, through the activities of No&Vib HUB, to expand LLL courses to the field of vibration in industry and solving noise and vibration problems in industrial systems.

I think that HEI from the region would also be interested in getting involved in activities of No&Vib HUB, to trained current teachers on the new courses, methodologies and equipment, as well as to learn how to transfer the knowledge to the key stakeholders engaged in the field of noise and vibration, and finally to develop a common study program or LLL courses with some of them.

**EVALUATION**

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The web-page has been regularly updated.	✓				
Organizational structure of the No&Vib Hub is established to fulfilled all the demands with high quality.	✓				
The Centre for Vibro-Acoustic Systems and Signal Processing (CEVAS) at the Faculty of Technical Sciences, University of Novi Sad will take over all financial and technical and organizational obligations of maintaining the virtual platform and provide the sustainability of the No&Vib HUB.	✓				

Activities are well planned and realized for each sectorial group.	✓				
Strong link between the education-scientific, administrative, business and non-governmental sector is established through the No&Vib HUB.	✓				

Place, date:  
03. 05. 2022.

Name and signature:  
Valentina Golubović-Bugarški




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**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:	UPV
Executive summary	This document provides the review of the <b>Noise and Vibration Hub (structure and programme)</b> <i>PLEASE DO NOT CHANGE</i>
External /Internal Evaluation Methodology	<p>What has been done and how?</p> <p><i>The review was written based on... (short explanation of the documents available/used) PLEASE COMPLETE</i></p> <p>The review was written based on:</p> <ol style="list-style-type: none"> <li>1. The Report for the Activity 6.3.: Defining the No&amp;Vib Hub space, roles and responsibilities (approved: 09.11.2020.)</li> <li>2. The Report for the Activity 6.4.: Establishment of the No&amp;Vib Hub (approved: 11.03.2021.)</li> <li>3. Documents available on the NO&amp;VIB HUB web site (<a href="https://senvibe.uns.ac.rs/novibhub-srb/">https://senvibe.uns.ac.rs/novibhub-srb/</a>) in three parts: <ul style="list-style-type: none"> <li>- Framework for Cooperation_Partnership Agreement (Memorandum of Understanding);</li> <li>- NO &amp;VIB HUB Structure and Members;</li> <li>- NO &amp;VIB HUB Activities;</li> </ul> </li> <li>4. Documents available on the Senvibe-Cloud for section Hub;</li> <li>5. Documents available on e-Senvibe, section Hub</li> </ol>

**Work Packages**

Deliverable/ ActivityRef. No	6.3. No&Vib Hub space, roles and responsibilities 6.4. Establishment of the No&Vib Hub 7.2. Internal and external reviews processes and outcomes.  <i>PLEASE DO NOT CHANGE</i>
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**Noise and Vibration Hub (structure and programme)**

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

**No&Vib hub** is a central unit established as a virtual platform at the University of Novi Sad as a bilingual website (Serbian and English) at <https://senvibe.uns.ac.rs/novib-hub/>.

The website can be accessed through the homepage of SENVIBE project, where the status line contains an option No&Vib HUB. (*NOTE: The official project site cannot be accessed by typing project acronyms into a search engine, but only by searching through a browser or via a link provided in a text.*)

Three sections of No&Vib HUB(Framework for Cooperation\_Partnership Agreement Memorandum of Understanding; NO&VIB HUB Structure and Members; and NO &VIB HUB Activities - contains all the necessary information about the structure and activities of HUB.

Also, all finished activities are shown in the "Open Matters" section, (<https://senvibe.uns.ac.rs/blog/>).

I praise the fact that all important information about HUB is also available on the e-Senvibe ICT platform <https://www.e-senvibe.senvibe.uns.ac.rs/> - (*The e-SENVIBE platform is a digital library of various educational content in the field of noise and vibrations) for Hub members, students and to participants of lifelong learning courses (LLL courses).*

Partnership Agreement (Memorandum of Understanding) on the Establishment of a Common No&Vib HUB virtual Platform for Cooperation in the Field of Noise and Vibration defined the framework for cooperation among the key stakeholders engaged in Noise&Vibration (No&Vib) fields from the following academic and non-academic sectors:

- Education and research sector;
- Government sector;
- Business sector;
- Professional sector and expert services groups;
- Non-governmental sector.

Text of Agreement and all important information about form for on-line registration of a new member of the HUB are available on web site (<https://senvibe.uns.ac.rs/novibhub-srb/>) Framework for Cooperation\_Partnership Agreement (Memorandum of Understanding);

In this moment, Hub has 42 members which is an impressive number (9 from the Public sector, 6 from the Educational and scientific sector, 13 from the Real sector, 9 from the Professional sector, 5 members from the NG sector).

The Coordination Body, as the governing body of Hub, coordinates, manages and disseminates all project activities. According to "Agreement" it consists of 7 representatives of each partner of ERASMUS + SENVIBE Institutions from Serbia and it is led by the SENVIBE project coordinator, prof dr Ivana Kovačić.

The Coordination Body had 4 on-line meetings: 10.11.2020; 26.11.2021; 17.01.2022. and 19.04.2022, in order to ensure a timely exchange of information about all the activities planned and implemented.

The most impressive are a lot of significant activities listed on the web site (<https://senvibe.uns.ac.rs/aktivnosti-huba/>).

I find especially very useful as the outcomes:

- Publication: „**Occupational noise – guide for employees and employers**“ and „**Occupational vibration – guide for employees and employers**“ (februar 2022);
- An educational **Film on noise pollution** (may 4, 2022). The film popularizes the importance of noise that affects the flora and fauna and draws attention to the Law on Environmental Noise Protection;

and expecting:

- **Guide with methodology for environmental noise management for local self-government units** in order to increase administrative capacity in the public sector;
- **Digital leaflet about noise for wider community** that contains themes about noise definition and strength, influence of noise on human health, working capability and environment, as well as various recommendations on legislation, allowed noise levels and measures for noise protection.

The structure and the program activities of the No&Vib HUB fully correspond to the mission of this HUB!

In order to ensure its sustainability, The Centre for Vibro-Acoustic Systems and Signal Processing (CEVAS) at the Faculty of Technical Sciences, University of Novi Sad will take over after the project period all financial and technical and organizational obligations of maintaining the virtual platform. It is managed by Prof. Ivana Kovačić, PhD. - Statement by Prof. Ivana Kovačić, PhD on securing the sustainability of the virtual platform for cooperation in the field of noise and vibration.

Suggestions for improvements:

- Increase site visibility on leading search engines.
- The basic mission of the No & Vib Hub is to build and further develop mechanisms for various forms of cooperation of all stakeholders. It is necessary to save this link between the education-scientific, administrative, business and non-governmental sector and also to increase the number of members and thus ensure the existence of a central point in the field of noise and vibration in the Republic of Serbia.
- Given that Hub has proven its sustainability - the suggestion for the future period is to focus on the application of acquired knowledge and solving noise and vibration problems in the business, public sector and wider community.

## EVALUATION

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
The web-page has been regularly updated.		❖			
Organizational structure of the No&Vib Hub is established to fulfilled all the demands with high quality.	❖				
The Centre for Vibro-Acoustic Systems and Signal Processing (CEVAS) at the Faculty of Technical Sciences, University of Novi Sad will take over all financial and technical and	❖				

organizational obligations of maintaining the virtual platform and provide the sustainability of the No&Vib HUB.					
Activities are well planned and realized for each sectorial group.	❖				
Strong link between the education-scientific, administrative, business and non-governmental sector is established through the No&Vib HUB.	❖				

Place, date:

Name and signature:

Novi Sad, 01.07.2022.

Miljana Stojšić Stojanovska