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„Gheorghe Asachi” Technical University of Iasi, Romania

Faculty of Electrical Engineering

Improving the cross-border public transportation using electric buses supplied with
renewable energy - ELBUS

Project EMS-ENI, code 2SOFT/3.1/54

Work visit at the Technical University of Moldova, Chisinau on-line format

*Activity A.3.6, Work visit at Technical University of Moldova, Chisinau, Republic of
Moldova*

Project manager, conf.dr.ing. Costică Nițucă

Thursday, 25.02.2021



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Meeting agenda:

- Presentation and exchange of information, technical, financial and scientific on the evolution of the ELBUS project:
 - A presentation on project management, procurement, financial issues, information and communication plan, up-to-date implementation; **from TUIASI, Project manager, conf.dr.ing. Costică Nițucă;**
 - A presentation on project management, procurement, financial issues, information and communication plan, up-to-date implementation, **from UTM, Project manager, conf.dr.ing. Ilie Nucă.**
 - A presentation on the implementation of the scientific and research activities **from TUIASI, s.l.dr.ing. Gabriel Chiriac;**
 - A presentation on the implementation of the scientific and research activities from UTM, **lect.univ.dr.ing. Vadim Cazac;**
- Analysis and discussions on the implementation plan of future activities within the ELBUS project; **Project manager, conf.dr.ing. Costică Nițucă;**
- Various presentations.



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Presentation I

A presentation on project management, procurement, financial issues, information and communication plan, up-to-date implementation

and

Presentation II

Analysis and discussions on the implementation plan of future activities within the ELBUS project



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Activity A.3.6:

Work visit at Technical University of Moldova, Chisinau, Republic of Moldova.

Planned: Start month 2; **End month 9.**

Executed: Start month 2; **In progress.**

No	Deliverable	Target value	Achieved
D3.6.1	Work visit at Technical University of Moldova, Chisinau, Republic of Moldova	1	In progress
D3.6.2	Report on the work visit	1	In progress
D3.6.3	Press release published	1	In progress



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Notification letter no.

2

From: *“The visit will be held on two days: Into the first day: accommodation and receiving the guest at the UTM. Also will be discussions over the project between the partners. At the second day: presentations and other discussions over the project details. After the work visit will be published a press release. For the event visibility will be publish on the web site of the project the report on the work visit.”*

To: *“The visit to the Technical University of Moldova, Chisinau, will be held in one day and in on-line format, with data and information exchanging between the partners, with presentations and discussions on the project details. After the on-line visit, will be published a press communicate on the ELBUS project site at the address <http://www.elbus.ieeia.tuiasi.ro/>. Also, for the project visibility, will be published some aspects from the Report of the visit on the address <http://www.elbus.ieeia.tuiasi.ro/>.”*



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List of sources of verification issued during/after the event:

- **Invitation** to participate on the working visit in on-line format;
- **Agenda** of the Work visit at Technical University of Moldova, Chisinau, Republic of Moldova, in on-line format;
- **Short Video recording** of the on-line event;
- **Report** regarding the Work visit at Technical University of Moldova, Chisinau, Republic of Moldova, in on-line format;
- **Press release** published on the address:
<http://www.elbus.ieeia.tuiasi.ro/>



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Project management

G.A.No.1. Project management

Activity A.1.1:

Organizing the teams project and implementation of the project.

Planned: Start month 1; End month 1.

Executed: Start month 1; End month 3.

No	Deliverable	Target value	Achieved
D1.1.1	Appointment decision for the team of the project TUIASI	1	1
D1.1.2	Appointment decision for the team of the project UTM	1	1
D1.1.3	5 Individual work contracts with its 5 annexes at the individual work contract TUIASI	5	5
D1.1.4	6 Individual work contracts with its 6 annexes at the individual work contract UTM	6	6
D1.1.5	Minute regarding the first work meeting at TUIASI	1	1
D1.1.6	Minute regarding the first work meeting at UTM	1	1
D1.1.7	Working plans (1 TUIASI; 1 UTM)	2	2



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Activity A.1.2:

Monitoring, evaluation, technical report and financial report into the project.

Planned: Start month 1; End month 18.

Executed: Start month 1; **In progress.**

No	Deliverable	Target value	Achieved
D1.2.1	Monitoring time sheets, TUIASI	90	41
D1.2.2	Monitoring time sheets, UTM	108	49
D1.2.3	Progress report no. 1	1	1
D1.2.4	Progress report no. 2	1	In progress
D1.2.5	Intermediate internal report	1	In progress
D1.2.6	Final Report	1	In progress
D1.2.7	Audit – UTM	1	No started
D1.2.8	Practical guideline	1	In progress



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Activity A.1.3:

Equipments acquisition and promotional materials.

Planned: Start month 2; End month 8. – 17*

Executed: Start month 4; **In progress.**

No	Deliverable	Target value	Achieved
D1.3.1	List of the acquired equipment, TUIASI	1	In progress
D1.3.2	List of the acquired equipment, UTM	1	In progress
D1.3.3	List of the promotional materials - visibility, TUIASI	1	In progress
D1.3.4	List of the promotional materials - visibility, UTM	1	In progress



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G.A.No.2. Information and Communication plan

Activity A.2.1:

Design and update of a web site, to disseminate the project progress and results.

Planned: Start month 1; End month 18.

Executed: Start month 1; **In progress.**

No	Deliverable	Target value	Achieved
D2.1.1	Web page	1	1



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Activity A.2.2:

***Final scientific project seminars (communication) organized at „Gheorghe Asachi”
Technical University of Iasi, Romania.***

Planned: Start month 10; End month 18.

Executed: Start month - No started; End month - No started.

Activity A.2.3:

***Workshops organized at Technical University of Moldova, Chisinau, Republic of
Moldova.***

Planned: Start month 10; End month 18.

Executed: Start month - No started; End month - No started.



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Activity A.2.4:

Elaboration and dissemination of visibility materials.

Planned: Start month 1; End month 18.

Executed: Start month - 1; **In progress.**

No	Deliverable	Target value	Achieved
D2.4.1	250 flyers disseminated - TUIASI	250	In progress
D2.4.2	2 press releases published - TUIASI	2	In progress
D2.4.3	3 banner-rollup displayed - TUIASI	3	In progress
D2.4.4	50 portfolio disseminated - TUIASI	50	In progress
D2.4.5	250 flyers disseminated - UTM	250	In progress
D2.4.6	3 press releases published - UTM	3	In progress
D2.4.7	100 stickers for equipments - UTM	100	In progress
D2.4.8	15 portfolio disseminated - UTM	15	In progress
D2.4.9	1 short video about the project displayed - UTM	1	In progress
D2.4.10	1 article „telling the project’s story” published - UTM	1	In progress
D2.4.11	130 brochures disseminated - UTM	130	In progress



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G.A.No.3. Analysis of the electric bus optimal functionality

Activity A.3.1:

Analysis of the electric buses.

Planned: Start month 1; End month 4.

Executed: Start month 2; **End month 5.**

No	Deliverable	Target value	Achieved
D3.1.1	Technical report related to the using of the electric buses	1	1



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Activity A.3.2:

Analysis of the auxiliary loads.

Planned: Start month 5; **End month 9.**

Executed: Start month 6; **In progress.**

No	Deliverable	Target value	Achieved
D3.2.1	Automation system for auxiliary loads	1	In progress



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Activity A.3.3:

Thermal model of the indoor climatic environment.

Planned: Start month 10; End month 13.

Executed: Start month - **No started**; End month - **No started**.

Activity A.3.4:

Renewable energy for the batteries.

Planned: Start month 14; End month 18.

Executed: Start month - **No started**; End month - **No started**.



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Activity A.3.5:

Elaborating a practical guideline regarding the improve of the energetical performances for an electric bus.

Planned: Start month 4; End month 18.

Executed: Start month 4; **In progress.**

No	Deliverable	Target value	Achieved
D3.5.1	Guideline regarding the improve of the energetical performances for an electric bus elaborated	1	In progress
D3.5.2	Guideline regarding the improve of the energetical performances for an electric bus disseminated	40	No started
D3.5.3	List with the persons that received the guideline	1	No started



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Activity A.3.6

Activity A.3.7:

Work visit at „Gheorghe Asachi” Technical University of Iasi, Romania.

Planned: Start month 6; End month 18.

Executed: Start month 6; **In progress.**

No	Deliverable	Target value	Achieved
D3.7.1	Work visit at „Gheorghe Asachi” Technical University of Iasi, Romania	1	In progress
D3.7.2	Report on the work visit	1	In progress
D3.7.3	Press release published	1	In progress



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Outputs and results

Outputs and results during the report period (01.04.2020, 02.06.2020 – 25.02.2021)

Project outputs

Outputs	Output indicator (value)	Achieved
Output 3.1. Increasing the energy efficiency of the auxiliary loads	1	In progress
Output 3.2. Increasing the overall energy efficiency of the electric bus	1	No started

Project results

Project results	Target value	Achieved
1.Improved automation system for auxiliary loads of the electric bus	1	In progress
2.Advanced thermal model related to the climatic environment within the electric bus	1	No started



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Programme outputs according to the description in the project proposal

Programme outputs	Description	Value	Achieved
Programme output1	3.1.4 Number of environmentally friendly (carbon-proofed) cross-border transport initiatives developed	4	2 Achieved 2 in progress

In the project description were highlighted 4 initiatives, which fold on the programme outputs, as folloing

Initiatives developed	Value	Achieved
1.Optimization of electric energy consumption	1	1
2.Increasing of power efficiency	1	1
3.Decreasing of the thermal losses	1	No started
4.Theoretical solution for using the renewable energy as an ecological solution for recharging the batteries of the electric bus from a system with photovoltaic panel	1	No started



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The procurement

TUIASI-LB:

Equipment	Pieces	Purchase value with VAT [Lei]	Supply Contract	Equipment supplier
Laptop	1	4.275,75	23836/16.11.2020//GC 0859/19.11.2020	Giros Company SRL
Multifunction laserjet printer	1	2.245,53	23836/16.11.2020//GC 0859/19.11.2020	Giros Company SRL
Programmable Logic Controllers (PLC)	2	9.667,56	22656/03.11.2020	Siemens SRL

The procurement procedure at TUIASI is in progress.



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UTM-B1:

Equipment	Pieces	Purchase value with VAT [Lei MD]	Supply Contract	Equipment supplier
Computer	1	In progress	In progress	In progress
Printer	1	8 002.50	In progress	BTS-PRO SRL
Keyboard and mouse	1	92.50	In progress	BTS-PRO SRL
AC/DC TRMS A Clamp Meters	5	In progress	In progress	In progress
Tree-Phase Power Quality and Energy Analyzer	1	In progress	In progress	In progress
Scope Meter Portable Oscilloscope	1	129 305.00	256/23.11.2020	LOKAMERA SRL

The procurement procedure at UTM is in progress.



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Visibility. Dissemination of visibility materials

The procurement

250 flyers disseminated - TUIASI	250
2 press releases published - TUIASI	2*
3 banner-rollup displayed - TUIASI	3
50 portfolio disseminated - TUIASI	50
250 flyers disseminated - UTM	250
3 press releases published - UTM	3
100 stickers for equipments - UTM	100
15 portfolio disseminated - UTM	15
1 short video about the project displayed - UTM	1
1 article „telling the project’s story" published – UTM	1
130 brochures disseminated – UTM	130



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Financial issues

Word documents



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Presentation II

“Analysis and discussions on the implementation plan of future activities within the ELBUS project”

Activity A.2.2:

Final scientific project seminars (communication) organized at „Gheorghe Asachi” Technical University of Iasi, Romania.

Planned: Start month 10; End month 18.

Executed: Start month - No started; End month - No started.

Activity A.2.3:

Workshops organized at Technical University of Moldova, Chisinau, Republic of Moldova.

Planned: Start month 10; End month 18.

Executed: Start month - No started; End month - No started.



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Activity A.3.3: Thermal model of the indoor climatic environment.

Planned: Start month 10; End month 13.

Executed: Start month - No started; End month - No started.

Activity A.3.4: Renewable energy for the batteries.

Planned: Start month 14; End month 18.

Executed: Start month - No started; End month - No started.



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Analysis, discussions, various presentations



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Dear friends, thank you!